# Project NETN FOM v2.0

NETN FOM v2.0

# Table of contents

# 1. Module NETN-Base_v1.0.2

## Information

| | |
|---|---|
| **Name:** | NETN-Base |
| **Type:** | FOM |
| **Version:** | 1.0 |
| **Modification Date:** | 2013-10-24 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | Base module for NETN FOM v2 modules. Mainly datatypes for use in other NETN FOM modules |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 4705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | RPR-Base_v2.0 |

## Use History

| |
|---|
| Datatypes is collected from FOM modules in NETN FOM v1.<br>NETN_AggDeagg_v1.07_2010<br>NETN_Service_Consumer_Provider_v1.0.3_2010<br>NETN_Logistics_v1.1.2_2010 |
| v1.0.0 - First version in NETN FOM v2 |
| v1.0.1 - Added array data type: ArrayOfWorldLocation3 (moved from NETN_Aggregate FOM module) |

v1.0.2 - Renamed data type, new name: ArrayOfWorldLocationStruct3.
Updated References, Dependency

## Dependencies

| |
|---|
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

## *1.1. Datatypes*

## *1.1.1. Simple Datatypes*

### TimeSecInt64

| | |
|---|---|
| Representation: | HLAinteger64BE |
| Units: | Second |
| Resolution: | 1 |
| Accuracy: | NA |
| Semantics: | Number of seconds since 1 January 1970 |

### CounterInt32

| | |
|---|---|
| Representation: | HLAinteger32BE |
| Units: | NA |
| Resolution: | 1 |
| Accuracy: | NA |
| Semantics: | A counter |

### QuantityFloat32

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | NA |
| Resolution: | NA |
| Accuracy: | NA |
| Semantics: | The number of units |

# 1.1.2. Enumerated Datatypes

## ActiveStatusEnum8

Representation:   HLAoctet

Semantics:   *An inactive object should not be shown on C4I systems and can not move or interact with other objects.*

| Enumerator | Value |
|---|---|
| Other | 0 |
| Active | 1 |
| Inactive | 2 |

## AggregateMissionEnum16

Representation:   HLAinteger16BE

Semantics:   *The specific value that represents the general class or nature of activity (from JC3IEDM action-event-category-code)*

| Enumerator | Value |
|---|---|
| Abdication | 1 |
| Accident | 2 |
| AccidentAircraftGround | 3 |
| Accident_Mine | 4 |
| Accident_Traffic | 5 |
| Accident_Weapon | 6 |
| Accident_Workplace | 7 |
| Advancing | 8 |
| AerialEngagement | 9 |
| AerialShootDown | 10 |
| AirAssault | 11 |
| AirborneAssault | 12 |
| AircraftCrash | 13 |

| Enumerator | Value |
|---|---|
| AircraftLanding | 14 |
| AircraftLaunchActivity | 15 |
| AircraftLoss | 16 |
| AirspaceViolation | 17 |
| AlertCancellation | 18 |
| Ambush | 19 |
| AmphibiousOperation | 20 |
| ArmsProduction | 21 |
| ArmsTrade | 22 |
| Arresting_Legal | 23 |
| ArrestingOrObstructing | 24 |
| Arson | 25 |
| ArtilleryFire | 26 |
| Assassination | 27 |
| Assembling | 28 |
| AssistingACriminal | 29 |
| AtmosphericPollution | 30 |
| Attack_Deliberate | 31 |
| Attack_Diversion | 32 |
| Attack_Electronic | 33 |
| Attack_Hasty | 34 |
| Attack_Main | 35 |
| Attack_NotOtherwiseSpecified | 36 |
| Attack_Supporting | 37 |
| AttemptedMurder | 38 |
| AttemptedRape | 39 |
| AttemptedRobbery | 40 |

| Enumerator | Value |
| --- | --- |
| AttemptedSuicide | 41 |
| Avoiding | 42 |
| BellyLanding | 43 |
| Blocking | 44 |
| Bombing | 45 |
| Bombing_Accidental | 46 |
| Bombing_Deliberate | 47 |
| BoobyTrapDiscovery | 48 |
| BorderCrossing_Escorted | 49 |
| BorderCrossing_Forced | 50 |
| BorderCrossing_Illegal | 51 |
| BorderCrossing_Not-Planned | 52 |
| BorderCrossing_Planned | 53 |
| BorderCrossing_Surveilled | 54 |
| BorderIncursion | 55 |
| BorderRaid | 56 |
| Breaching | 57 |
| Build-Up | 58 |
| BurnedOutObject | 59 |
| Bypass | 60 |
| Canalise | 61 |
| Capture | 62 |
| CarrierLaunch | 63 |
| CarrierRecovery | 64 |
| CBRN-EVENT | 65 |
| CeremonyOrParade | 66 |
| CivilDemonstration_Illegal | 67 |

| Enumerator | Value |
|---|---|
| CivilDemonstration_Legal | 68 |
| CivilDisobedience | 69 |
| CivilUnrest | 70 |
| CivilWar | 71 |
| Clearing_Air | 72 |
| Clearing_LandCombat | 73 |
| Clearing_Obstacle | 74 |
| Clearing_RadioNet | 75 |
| CodewordExecution | 76 |
| Collision_Mid-Air | 77 |
| Collision_Obstacle | 78 |
| CommunicationsActivation | 79 |
| CommunicationsDeactivation | 80 |
| CommunicationsDisruption | 81 |
| CommunicationsInterception | 82 |
| CommunicationsOutage | 83 |
| CommunicationsRestoration | 84 |
| ConductingConference | 85 |
| ConductingForwardPassageOfLines | 86 |
| ConductingMediaInterview | 87 |
| ConductingPreparatoryFire | 88 |
| ConductingRearwardPassageOfLines | 89 |
| ConductingRecreationalActivities | 90 |
| ConductingRoadService | 91 |
| ConductingSocialEvents | 92 |
| ConductingSportingEvents | 93 |
| Confiscation | 94 |

| Enumerator | Value |
|---|---|
| ConsolidatingOfAPosition | 95 |
| Constructing | 96 |
| Containing | 97 |
| Cooperating | 98 |
| CounterAttack | 99 |
| CounterAttackByFire | 100 |
| Counter-BatteryFire | 101 |
| CoupDetat | 102 |
| Covering | 103 |
| CrimeAgainstHumanity | 104 |
| CriminalIncident | 105 |
| Crossing | 106 |
| Dazzle | 107 |
| Death_NaturalCauses | 108 |
| DeathOfChiefOfState | 109 |
| DeathOfSpiritualLeader | 110 |
| Deception | 111 |
| Deception_Electronic | 112 |
| Defeat | 113 |
| Defending | 114 |
| Deflecting | 115 |
| Delaying | 116 |
| Demolition | 117 |
| Demonstration | 118 |
| Denying | 119 |
| Deploying | 120 |
| Destroying | 121 |

| Enumerator | Value |
|---|---|
| Disease | 122 |
| Disengaging | 123 |
| Disrupting | 124 |
| Distributing | 125 |
| Diversion | 126 |
| Drive-ByShooting | 127 |
| Drought | 128 |
| DrugConsumption_Illegal | 129 |
| DrugDistribution_Illegal | 130 |
| DrugManufacturing_Illegal | 131 |
| DrugOperation | 132 |
| DrugStorage | 133 |
| DrugTransportation | 134 |
| EarlyWarningAlert | 135 |
| Earthquake | 136 |
| ElectionAssociatedViolence | 137 |
| ElectronicEmission | 138 |
| ElectronicWarfare | 139 |
| EnemyContact | 140 |
| Engaging | 141 |
| Enveloping | 142 |
| Epidemic | 143 |
| EquipmentFailure | 144 |
| Escaping | 145 |
| Escorting | 146 |
| Evacuating | 147 |
| Execution | 148 |

| Enumerator | Value |
|---|---|
| Exploitation | 149 |
| Explosion | 150 |
| Famine | 151 |
| Fire | 152 |
| Firefighting | 153 |
| Fix | 154 |
| Fix_Acoustic | 155 |
| Fix_Electromagnetic | 156 |
| Fix_Electro-Optical | 157 |
| Flood | 158 |
| FollowingAndAssuming | 159 |
| FollowingAndSupporting | 160 |
| ForcedLanding | 161 |
| FriendlyFire | 162 |
| GeneratingChemicalSmoke | 163 |
| Genocide | 164 |
| GovernmentalCollapse | 165 |
| Guarding | 166 |
| Gunnery_Air-To-Air | 167 |
| Harassing | 168 |
| Hiding | 169 |
| Hijacking_Boat | 170 |
| Hijacking_LandVehicle | 171 |
| Hijacking_NotOtherwiseSpecified | 172 |
| Hijacking_Plane | 173 |
| Hold_Defensive | 174 |
| Hold_Offensive | 175 |

| Enumerator | Value |
|---|---|
| HostageTaking | 176 |
| HumanRightsViolation | 177 |
| Hunting | 178 |
| Identifying | 179 |
| Illumination | 180 |
| IndirectFire | 181 |
| IndiscriminateShooting | 182 |
| IndustrialEspionageIncident | 183 |
| Infiltration | 184 |
| Interception | 185 |
| Interdiction | 186 |
| Intimidation | 187 |
| Invasion | 188 |
| Isolation | 189 |
| IssuingMediaArticle | 190 |
| IssuingMediaDocumentary | 191 |
| IssuingPressRelease | 192 |
| Jamming | 193 |
| Kidnapping | 194 |
| LabourStrike | 195 |
| Leaguer | 196 |
| LetterBombExplosion | 197 |
| LetterBombIncident | 198 |
| LocalElection | 199 |
| Locating | 200 |
| Looting | 201 |
| Maintaining | 202 |

| Enumerator | Value |
|---|---|
| Marking | 203 |
| MartialLawImplementation | 204 |
| MassingOfForces | 205 |
| MassiveDeportationOrBanishment | 206 |
| MedicalEvacuation | 207 |
| MilitaryMobilisation | 208 |
| Mine-Laying | 209 |
| MissingIndividual | 210 |
| MissionStaging | 211 |
| MortarFire | 212 |
| Moving | 213 |
| Murder | 214 |
| MutualAssistancePactAgreement | 215 |
| NationalElection | 216 |
| NationalHoliday | 217 |
| NationalStateOfEmergency | 218 |
| NaturalDisaster | 219 |
| NavalGunFire | 220 |
| NavalPlatformFlightOperations | 221 |
| NetworkSeizure | 222 |
| Neutralize_Chemical | 223 |
| Neutralize_Combat | 224 |
| Neutralize_Explosive | 225 |
| Obscure | 226 |
| Observing | 227 |
| Occupying | 228 |
| Oceans_SeasOrWaterPollution | 229 |

| Enumerator | Value |
|---|---|
| OffensiveOrCounteroffensive | 230 |
| OrganisedCrime | 231 |
| OutbreakOfRacialOrTribalOrEthnicWarfare | 232 |
| Patrolling | 233 |
| PeaceConference | 234 |
| PeaceTreatyAgreement | 235 |
| Penetrating | 236 |
| Pestilence | 237 |
| PetroleumProductSpills | 238 |
| Picketing | 239 |
| Poisoning | 240 |
| PoliticalDemonstration | 241 |
| PoliticalExecution | 242 |
| POWReturn | 243 |
| PrisonerExchange | 244 |
| Procuring | 245 |
| Protection_Electronic | 246 |
| ProvidingAccommodation | 247 |
| ProvidingAgriculturalSupport | 248 |
| ProvidingBedding | 249 |
| ProvidingCamps | 250 |
| ProvidingConstructionServices | 251 |
| ProvidingDecontaminationServices | 252 |
| ProvidingEducationServices | 253 |
| ProvidingHealthcareServices | 254 |
| ProvidingHostNationSupport | 255 |
| ProvidingInfrastructure | 256 |

| Enumerator | Value |
|---|---|
| ProvidingLaundryServices | 257 |
| ProvidingRepairServices | 258 |
| ProvidingSecurityServices | 259 |
| ProvidingShelter | 260 |
| ProvidingStorageServices | 261 |
| ProvidingTranshipmentServices | 262 |
| Proxy-Bombing | 263 |
| PsychologicalOperation | 264 |
| PublishingMediaArticle | 265 |
| PublishingMediaDocumentary | 266 |
| PublishingPressRelease | 267 |
| Pursuing | 268 |
| Rape | 269 |
| Reconnaissance | 270 |
| ReconnaissanceInForce | 271 |
| Reconstituting | 272 |
| Recovering | 273 |
| Recuperating | 274 |
| Redeployment | 275 |
| RefugeeMovement | 276 |
| Reinforcing | 277 |
| ReliefInPlace | 278 |
| ReligiousDemonstration | 279 |
| ReligiousViolence | 280 |
| ReligiousWarfare | 281 |
| Rendezvous | 282 |
| Reorganising | 283 |

| Enumerator | Value |
|---|---|
| Repairing | 284 |
| Resting | 285 |
| Resupplying | 286 |
| Retain | 287 |
| Retire | 288 |
| Revolution | 289 |
| Riot | 290 |
| Robbery | 291 |
| RocketFire | 292 |
| Sabotage | 293 |
| Screening | 294 |
| SecessionOfPortionOfCountry | 295 |
| Securing | 296 |
| SecurityCompromise | 297 |
| SecurityViolation | 298 |
| Seizing | 299 |
| ServingAsABreakoutForce | 300 |
| ServingAsABridgeheadForce | 301 |
| ServingAsAFlankGuard | 302 |
| ServingAsAMainBody | 303 |
| ServingAsAnAdvanceGuard | 304 |
| ServingAsAnIn-PlaceForce | 305 |
| ServingAsARearGuard | 306 |
| ServingAsAReserve | 307 |
| SettingUp | 308 |
| Shooting | 309 |
| SniperAttack | 310 |

| Enumerator | Value |
|---|---|
| SpaceAccident | 311 |
| Spying | 312 |
| StateOfWar | 313 |
| Strafing_Aerial | 314 |
| Strike | 315 |
| Suicide | 316 |
| Supporting | 317 |
| Suppressing | 318 |
| Surrender | 319 |
| Surveillance_Electronic | 320 |
| SuspensionOfHostilities | 321 |
| Terrorism | 322 |
| Threaten | 323 |
| Torture | 324 |
| Transporting | 325 |
| Traversing | 326 |
| TreatyViolation | 327 |
| Troublemaking_Agitating | 328 |
| Troublemaking_Bullying | 329 |
| Troublemaking_Harassing | 330 |
| Troublemaking_Hooliganism | 331 |
| Troublemaking_Inciting | 332 |
| Troublemaking_Intimidating | 333 |
| Turning | 334 |
| UnexplodedOrdnanceDiscovery | 335 |
| VandalismOrRapeOrLootOrRansackOrPlunderOrSack | 336 |
| Verifying | 337 |

| Enumerator | Value |
|---|---|
| VesselSinking | 338 |
| VolcanicEruption | 339 |
| WarOrCrisisAlert | 340 |
| WarOrMilitaryConference | 341 |
| WarCrime | 342 |
| WeaponFiring | 343 |
| Withdrawal | 344 |
| WithdrawalUnderPressure | 345 |
| Witnessing | 346 |
| NotOtherwiseSpecified | 347 |

## DamageStatusEnhancedEnum32

Representation:    HLAinteger32BE

Semantics:        *The damage status of an object*

| Enumerator | Value |
|---|---|
| NoDamage | 0 |
| SlightDamage | 1 |
| ModerateDamage | 2 |
| SignificantDamage | 3 |
| Destroyed | 4 |

## 1.1.3. Array Datatypes

**Callsign**

Element Type: HLAunicodeChar

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Unique identifier for an entity. A more user friendly identifier than UUID, used in Logistics protocol for Consumer and Provider.*

**NETN_ArrayOfEntityTypeStruct**

Element Type: EntityTypeStruct

Cardinality: [1..2147483647]

Encoding: HLAvariableArray

Semantics: *One or more entity types.*

**UuidArrayOfHLAbyte16**

Element Type: HLAbyte

Cardinality: 16

Encoding: HLAfixedArray

Semantics: *16 bytes in the UUID.*

*A universally unique identifier (UUID), standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE).*

*A UUID is a 16-byte (128-bit) number. In its canonical form, a UUID is represented by 32 hexadecimal digits, displayed in five groups separated by hyphens, in the form 8-4-4-4-12 for a total of 36 characters (32 digits and four hyphens). For example: 550e8400-e29b-41d4-a716-446655440000*

**ArrayOfUuid**

Element Type: UuidArrayOfHLAbyte16

Cardinality: Dynamic

Encoding:      HLAvariableArray

Semantics:     *Array with UUIDs*

## NETN_ArrayOfSupplyStruct

Element Type:  NETN_SupplyStruct

Cardinality:    Dynamic

Encoding:      HLAvariableArray

Semantics:     *Array with NETN SupplyStructs*

## ArrayOfWorldLocationStruct3

Element Type:  WorldLocationStruct

Cardinality:    [3..2147483647]

Encoding:      HLAvariableArray

Semantics:     *3 or more locations, specifying a region (area)*

## *1.1.4. Fixed Record Datatypes*

### NETN_EventIdentifier

Encoding:     HLAfixedRecord

Semantics:     *Uniquely identifies an event from an entity.*

| Name | Type | Semantic |
|------|------|----------|
| EventCount | CounterInt32 | *EventCount shall be set to one for each exercise and incremented by one for NETN event. In the case where all possible values are exhausted, the numbers may be reused beginning again at one.* |
| IssuingObjectIdentifier | Callsign | *Callsign for the  entity which issued the event.* |

### NETN_SupplyStruct

Encoding:     HLAfixedRecord

Semantics:     *Same definition as RPR2 SupplyStruct.*

| Name | Type | Semantic |
|------|------|----------|
| SupplyType | EntityTypeStruct | *The type of supply (as described in the Bit Encoded Values for Use with Protocols for Distributed Interactive Simulation Applications)* |
| Quantity | QuantityFloat32 | *The number of units of the supply type.  The unit measure depends on the supply type and shall use the SI units of measurement used for such supplies.* |

# 2. Module NETN-Aggregate_v1.0.4

## Information

| | |
|---|---|
| **Name:** | NETN-Aggregate |
| **Type:** | FOM |
| **Version:** | 1.0 |
| **Modification Date:** | 2014-10-16 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | Object class from NETN FOM v1, module: AggDeagg |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 4705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-Base_v1.0 |
| **Dependency** | RPR-Aggregate_v2.0 |

## Use History

| |
|---|
| v1.0.0 - Initial, object class and datatypes from NETN_AggDeagg_v1.0.7_2010 FOM module in NETN FOM v1 |
| V1.0.1 - Changed name on basic data types from RPR2 Base |
| v1.0.2 - Moved array data type ArrayOfWorldLocation3 to NETN-Base FOM module |
| v1.0.3 - Updated References, Dependency |
| v1.0.4 - Fixed misspellings in sematics |

## Dependencies

| |
|---|
| RPR-Aggregate_v2.0 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *2.1. Object Classes*



### 2.1.1. **NETN_Aggregate**

Full Name: HLAobjectRoot.BaseEntity.AggregateEntity.NETN_Aggregate

Sharing: Publish/Subscribe

Semantics: *Aggregate extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **UnitPersonnel** | ArrayOfResourceStatus | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *This summarizes the health status of personnel comprising the aggregate.* | | | | | |
| **Callsign** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAunicodeString | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *N/A* | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **VisualSignature** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | VisualSignatureStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Describes the unit's susceptibility to electro-optical detection.* | | | | | |

| SourceUnit | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAunicodeString | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Aggregate from which this aggregate was spawned.* | | | | | |

| Mission | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MissionStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The operational task the aggregate has been ordered to perform.* | | | | | |

| Mounted | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | QuantityFloat64 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The percentage of aggregate personnel travelling on or in their organic transport.* | | | | | |

| UnitSupplies | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | NETN_ArrayOfSupplyStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and quantities of supplies available (on hand) to the unit.* | | | | | |

| HigherHeadquarters | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A pointer to the aggregate's superior unit or headquarters. The highest level unit or headquarters on each side will publish its own UniqueID as its HigherHeadquarters value.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **CombatValue** | CombatValueFloat64 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A summary value (in percent) of unit effectiveness based on level of training, leadership, moral, personnel and equipment operational status, etc.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **WeaponsControlOrder** | WeaponControlOrderEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Describes current Weapon Control Order Free, Tight, or Hold.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **SupportUnit** | SupportRelationshipStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identifies unit(s) which support the aggregate logistically, or with a specified combat or combat support relationship, e.g. a Direct Support or General Support Artillery unit.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Activity** | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The current activity of the aggregate. This may differ from the mission due to casualties, readiness, etc.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Symbol** | HLAunicodeString | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The APP6A code for the aggregate.* | | | | | |

| CaptureStatus | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CaptureStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The status of an aggregate with respect to its control or influence over its own activities.* | | | | | |

| UnitEquipment | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfResourceStatus | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *This summarizes the health status of the equipment comprising the aggregate.* | | | | | |

| Echelon | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EchelonEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *N/A* | | | | |
| | Semantics | | | | | |
| | *The level of command of the aggregate.* | | | | | |

| HUMINTSignature | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HUMINTSignatureStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Describes the unit's susceptibility to human intelligence (HUMINT), i.e. information collected and provided by human sources.* | | | | | |

| ElectronicSignature | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ElectronicSignatureStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Describes the aggregate's susceptibility to electronic detection both as a summary value and by identifying aggregate sensors together with their operational status.* | | | | | |

| **Footprint** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfWorldLocationStruct3 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The region occupied by the aggregate. the region is defined as that bounded by line segments connecting the listed world locations.* | | | | | |

| **CoverStatus** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CoverStatusStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Describes the unit's protection from the effects of weapons fire.* | | | | | |

| **EntityList** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityListVariableLengthStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Provides data on entities comprising the aggregate.* | | | | | |

| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |

| **UniqueID** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **EmbeddedUnitList** | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The list of objects carried by this aggregate.* | | | | | |
| **AggregateMarking**<br><br>*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | AggregateMarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the aggregate from other aggregates.* | | | | | |
| **AggregateState**<br><br>*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | AggregateStateEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *An indicator of the extent of association of objects form an operating group.* | | | | | |
| **Dimensions**<br><br>*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | DimensionStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *AggSizeChange* | | | | |
| | **Semantics** | | | | | |
| | *The size of the area covered by the units in the aggregate.* | | | | | |
| **EntityIdentifiers**<br><br>*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RTIobjectIdArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of entities that are contained within the aggregate.* | | | | | |

| ForceIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the aggregate belongs to.* | | | | | |

| Formation | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | FormationEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The category of positional arrangement of the entities within the aggregate.* | | | | | |

| NumberOfSilentEntities | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The number of elements in the SilentEntities list.* | | | | | |

| NumberOfVariableDatums | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UnsignedInteger32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The number of records in the VariableDatums structure.* | | | | | |

| SilentAggregates | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SilentAggregateStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The numbers and types, of silent aggregates contained in the aggregate. Silent aggregates are sub-aggregates that are in the aggregate, but that are not separately represented in the virtual world.* | | | | | |

| SilentEntities

*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SilentEntityStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The numbers and types, of silent entities in the aggregate. Silent entities are entities that are in the aggregate, but that are not separately represented in the virtual world.* | | | | | |

| SubAggregateIdentifiers

*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RTIobjectIdArray | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The identifications of aggregates represented in the virtual world that are contained in the aggregate.* | | | | | |

| VariableDatums

*Inherited from AggregateEntity in RPR-Aggregate_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VariableDatumStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Extra data that describes the aggregate.* | | | | | |

| EntityType

*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Static | | *NA* | | | |
| | Semantics | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier

*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Static | | *NA* | | | |
| | Semantics | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## *2.2. Datatypes*

## *2.2.1. Simple Datatypes*

**FacingDegreesFloat32**

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | degrees |
| Resolution: | NA |
| Accuracy: | perfect |
| Semantics: | |

**RangeFloat32**

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | meters |
| Resolution: | NA |
| Accuracy: | perfect |
| Semantics: | Range of sensor |

**CombatValueFloat64**

| | |
|---|---|
| Representation: | HLAfloat64BE |
| Units: | percent |
| Resolution: | NA |
| Accuracy: | NA |
| Semantics: | Percent of unit effectiveness |

**QuantityFloat64**

| | |
|---|---|
| Representation: | HLAfloat64BE |
| Units: | NA |
| Resolution: | NA |
| Accuracy: | NA |

Semantics:      The number of units

## PercentageUint32

Representation:   RPRunsignedInteger32BE
Units:           percent
Resolution:       1
Accuracy:        perfect
Semantics:      A simple datatype using units of percent.

# 2.2.2. Enumerated Datatypes

## WeaponControlOrderEnum8

Representation:    HLAoctet

Semantics:        *The enumerations for weapon control*

| Enumerator | Value |
|---|---|
| WeaponsFree | 1 |
| WeaponsHold | 3 |
| Other | 0 |
| WeaponsTight | 2 |

## CaptureStatusEnum8

Representation:    HLAoctet

Semantics:        *The status of a person or unit with respect to their control or influence over their own activities*

| Enumerator | Value |
|---|---|
| Not-Captured | 1 |
| Captured | 2 |
| AttemptingSurrender | 3 |
| Other | 0 |

## EchelonEnum8

Representation:    HLAoctet

Semantics:        *The specific value that represents the relative size of the commonly accepted configuration of military formations (from JC3IEDM echelon-size-code)*

| Enumerator | Value |
|---|---|
| Army | 1 |
| ArmyGroup | 2 |
| Battalion | 3 |

| Enumerator | Value |
|---|---|
| BattalionGroup | 4 |
| BattleGroup | 5 |
| Brigade | 6 |
| BrigadeGroup | 7 |
| Company | 8 |
| CompanyGroup | 9 |
| Corps | 10 |
| Division | 11 |
| Fleet | 12 |
| Flight | 13 |
| Platoon | 14 |
| Regiment | 15 |
| Region | 16 |
| Section | 17 |
| Squad | 18 |
| SquadronAir | 19 |
| SquadronMaritime | 20 |
| TaskElementNavy | 21 |
| TaskForceNavy | 22 |
| TaskGroupNavy | 23 |
| TaskUnitNavy | 24 |
| TeamFireteamCrew | 25 |
| Wing | 26 |
| NotKnown | 27 |
| NotOtherwiseSpecified | 28 |

# SupportRelationshipEnum8

Representation:   HLAoctet

Semantics:   *Enumeration of different support relationships*

| Enumerator | Value |
|---|---|
| Engineering | 5 |
| GeneralSupportArtillery | 4 |
| Logistics | 1 |
| Other | 0 |
| DirectSupportArtillery | 2 |
| DirectSupportReinforcingArtillery | 3 |

## CoverEnum8

Representation:   HLAoctet

Semantics:   *The type of cover utilized by an aggregate*

| Enumerator | Value |
|---|---|
| StrongPoints | 5 |
| FightingPositionsWithOverheadCover | 4 |
| CrewServedWeaponsPositions | 3 |
| Other | 0 |
| HastyFightingPositions | 1 |
| IndividualFightingPositions | 2 |

## EntityCategoryEnum32

Representation:   RPRunsignedInteger32BE

Semantics:   *Category of entity*

| Enumerator | Value |
|---|---|
| Invalid | 0 |
| EquipmentEntity | 1 |
| PersonnelEntity | 2 |

| Enumerator | Value |
|---|---|
| EmitterEntity | 3 |
| RadioEntity | 4 |

## ConcealmentEnum32

Representation: RPRunsignedInteger32BE

Semantics: *The reason for the objects concealment*

| Enumerator | Value |
|---|---|
| Invalid | 0 |
| InOpen | 1 |
| MountedInternally | 2 |
| MountedExternally | 3 |
| UnderNet | 4 |
| UnderGround | 5 |
| InsideStructure | 6 |
| FightingPositionCovered | 7 |
| FightingPositionUncovered | 8 |

## UpdateTypeEnum32

Representation: RPRunsignedInteger32BE

Semantics: *Used to create, change, or delete an EntityList.*

| Enumerator | Value |
|---|---|
| Invalid | 0 |
| Create | 1 |
| Update | 2 |
| Addition | 3 |
| Delete | 4 |

## SensorStateEnum32

Representation:   RPRunsignedInteger32BE

Semantics:   *The emission states of aggregate sensors*

| Enumerator | Value |
|---|---|
| OnButNotEmitting | 2 |
| Off | 1 |
| Other | 0 |
| OnAndEmitting | 3 |

## *2.2.3. Array Datatypes*

**ArrayOfResourceStatus**

Element Type: ResourceStatusNumberStruct

Cardinality: [1..2147483647]

Encoding: HLAvariableArray

Semantics: *The array of health states for a named resource.*

**ArrayOfEntityStruct**

Element Type: EntityStruct

Cardinality: [1..2147483647]

Encoding: HLAvariableArray

Semantics: *Data for one or more entities that comprise an entity list.*

**ArrayOfSensorStruct**

Element Type: SensorStruct

Cardinality: [1..2147483647]

Encoding: HLAvariableArray

Semantics: *Array with definitio0ns of sensors, 1+ cardinality*

## 2.2.4. Fixed Record Datatypes

### VisualSignatureStruct

Encoding:     HLAfixedRecord

Semantics:

| Name | Type | Semantic |
|---|---|---|
| DVOSignaturePercent | PercentageUint32 | *A summary percentage of an aggregates susceptibility to detection by direct view optics, i.e. the human eye, binoculars, or telescopes. A unit with zero percent signature would be concealed from DVO detection.* |
| I2SignaturePercent | PercentageUint32 | *A summary percentage of an aggregates susceptibility to detection by Image Intensifying sensors. A unit with zero percent signature would be invisible to image intensifiers (I2).* |
| ThermalSignaturePercent | PercentageUint32 | *A summary percentage of an aggregates susceptibility to detection by thermal sensors. A unit with zero percent signature would be invisible to thermal sensors.* |

### MissionStruct

Encoding:     HLAfixedRecord

Semantics:     *The operational task the aggregate has been ordered to perform, the time the mission was assigned, and the estimated completion time.*

| Name | Type | Semantic |
|---|---|---|
| StartTime | TimeSecInt64 | *An optional field providing the mission start time* |
| EndTime | TimeSecInt64 | *An optional field providing the mission estimated end time* |
| MissionEnum | AggregateMissionEnum16 | *The mission assigned to the aggregate* |

### SupportRelationshipStruct

Encoding:     HLAfixedRecord

Semantics:     *Identifies unit(s) which support the aggregate logistically, or with a specified combat or combat support relationship, e.g. a Direct Support or General Support Artillery unit.*

| Name | Type | Semantic |
|---|---|---|
| SupportConsumer | UuidArrayOfHLAbyte16 | *The unique ID of the consumer of the support.* |

| Name | Type | Semantic |
|---|---|---|
| SupportProvider | UuidArrayOfHLAbyte16 | *The unique ID of the provider of the support.* |
| SupportType | SupportRelationshipEnum8 | *The type of support provided by the supporting unit.* |

## HUMINTSignatureStruct

Encoding:     HLAfixedRecord

Semantics:    *Describes the unit's susceptibility to human intelligence (HUMINT), i.e. information collected and provided by human sources.*

| Name | Type | Semantic |
|---|---|---|
| HUMINTSignaturePercent | PercentageUint32 | *A summary percentage of an aggregates susceptibility to detection by human intelligence collectors. Zero percent signature means an aggregate is impervious to HUMINT.* |

## ElectronicSignatureStruct

Encoding:     HLAfixedRecord

Semantics:    *A summary percentage of an aggregates susceptibility to detection of its electronic emissions. Zero percent means that the aggregate has no electronic emissions.*

| Name | Type | Semantic |
|---|---|---|
| ElectronicSignaturePercent | PercentageUint32 | *A summary percentage of an aggregates susceptibility to detection of its electronic emissions. Zero percent means that the aggregate has no electronic emissions.* |
| SensorArray | ArrayOfSensorStruct | *A list of sensors owned by the aggregate together with their respective operational status and range* |

## CoverStatusStruct

Encoding:     HLAfixedRecord

Semantics:

| Name | Type | Semantic |
|---|---|---|
| CoverStatusPercent | PercentageUint32 | *The percentage of protection enjoyed by an aggregate. A unit with 100 percent cover would be impervious to the effects of weapons fire* |
| CoverTypeEnum | CoverEnum8 | *An optional field describing the type of cover employed by the aggregate* |

## EntityListVariableLengthStruct

Encoding:    HLAfixedRecord

Semantics:    *Provides data on one or more entities comprising the aggregate. This includes the initial list of all entities and subsequent updates as entities on the list experience change.*

| Name | Type | Semantic |
|---|---|---|
| UpdateType | UpdateTypeEnum32 | *Indicates whether this update creates the list or modifies its' values* |
| EntityList | ArrayOfEntityStruct | *Data about one or more entities comprising the list.* |

## ResourceStatusNumberStruct

Encoding:    HLAfixedRecord

Semantics:    *The name of a resource and the number of instances of that resource by health status.*

| Name | Type | Semantic |
|---|---|---|
| NumberHealthyOrIntact | QuantityFloat64 | *The number of healthy or intact resources* |
| NumberSlightlyDamaged | QuantityFloat64 | *The number of slightly damaged resources* |
| NumberModeratelyDamaged | QuantityFloat64 | *The number of moderately damaged resources* |
| NumberSignificantlyDamaged | QuantityFloat64 | *The number of significantly damaged resources* |
| NumberDestroyed | QuantityFloat64 | *The number of destroyed or consumed resources* |
| ResourceName | HLAunicodeString | *The name of the resource* |

## EntityStruct

Encoding:    HLAfixedRecord

Semantics:    *An entity represented to the federation as part of the aggregate object which owns it.*

| Name | Type | Semantic |
|---|---|---|
| Callsign | HLAunicodeString | *The unique identifier of the object.* |
| EntityCategory | EntityCategoryEnum32 | *Indicates whether the entity is equipment, person, emitter, etc.* |
| EntityStatus | DamageStatusEnhancedEnum32 | *The damage state of the entity.* |
| IsDistinctObject | RPRboolean | *OPTIONAL. A BaseEntity object has been created to represent this entity (true) or not (false). Default is false.* |

| Name | Type | Semantic |
|------|------|----------|
| IsUnavailable | RPRboolean | *OPTIONAL. This entity is in use by another object (true) or not (false). Default is false.* |
| Facing | FacingDegreesFloat32 | *OPTIONAL. Direction is measured in degrees clockwise from orientation of unit. Default is 0.* |
| Concealment | ConcealmentEnum32 | *OPTIONAL. Indicates whether the entity is concealed and, if so, how* |
| OffsetLocation | RelativePositionStruct | *The entity location given as an offset from the location of the aggregate unit in meters.* |

## SensorStruct

Encoding:     HLAfixedRecord

Semantics:     *Defines a sensor,operational status, damage status, coverage and ID*

| Name | Type | Semantic |
|------|------|----------|
| SensorStateEnum | SensorStateEnum32 | *The operational status of the sensor* |
| SensorDamageState | DamageStatusEnum32 | *The damage status of the sensor* |
| SensorCoverage | RangeFloat32 | *The maximum range of the sensor* |
| SensorID | HLAunicodeString | *A sensor owned by the aggregate* |

# 3. Module NETN-Physical_v1.1.2

## Information

| | |
|---|---|
| **Name:** | NETN-Physical |
| **Type:** | FOM |
| **Version:** | v1.1.2 |
| **Modification Date:** | 2014-09-25 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | Object class inherit from RPR Physical.<br>Object classes and datatypes from NETN FOM v1, module: AggDeagg |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 4705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-Base_v1.1 |
| **Dependency** | RPR2-Physical_v2.0 |

## Use History

| |
|---|
| v1.0.0 - Initial, object classes and datatypes from FOM modules in NETN FOM v1 |
| v1.1.0 - Added object class NETN_CulturalFeature |
| v1.1.1 - Updated References, Dependency |
| v1.1.2 - Update of semantics, spell corrections |

## Dependencies

| |
|---|
| RPR-Physical_v2.0 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *3.1. Object Classes*
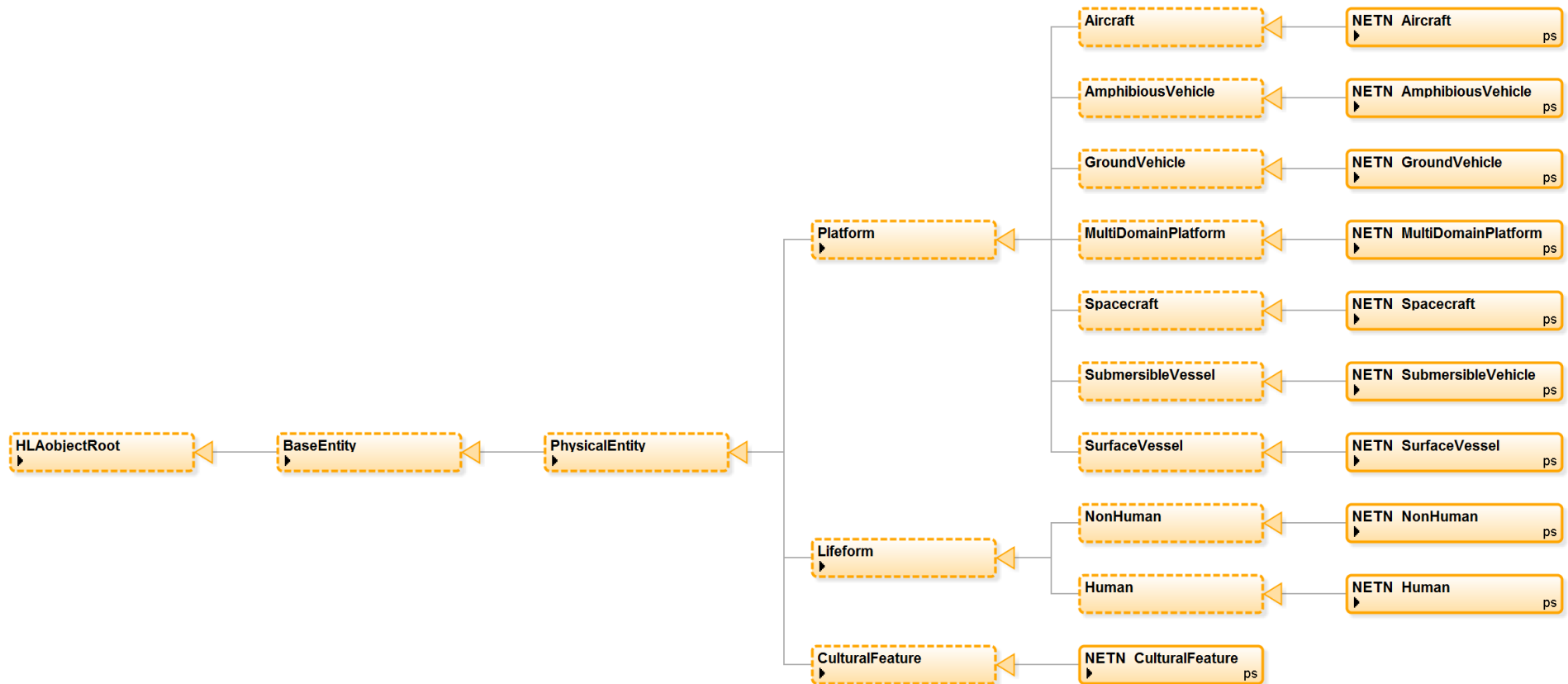


## 3.1.1. **NETN_Aircraft**

Full Name:    HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.Aircraft.NETN_Aircraft

Sharing:    Publish/Subscribe

Semantics:    *Extensions for NETN*

Attributes:

| Callsign | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | HLAunicodeString | | PS | | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *N/A* | | | | | |
| | **Semantics** | | | | | | | |
| | *The name of the object.* | | | | | | | |
| **Status** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
| | ActiveStatusEnum8 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* | | | | | |
| | **Semantics** | | | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | | | |
| **Activity** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
| | AggregateMissionEnum16 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* | | | | | |
| | **Semantics** | | | | | | | |
| | *The activity of the object.* | | | | | | | |
| **EmbeddedUnitList** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
| | ArrayOfUuid | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* | | | | | |
| | **Semantics** | | | | | | | |
| | *List of unique IDs of on-board elements.* | | | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.* *Required value.* *If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| AfterburnerOn  *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn  *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn  *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| **InteriorLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| **LandingLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| **LauncherRaised**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| **NavigationLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| **RampDeployed**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ArticulatedParametersArray** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **CamouflageType** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **DamageState** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **EngineSmokeOn** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FirePowerDisabled** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| FlamesPresent<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| ForceIdentifier<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| HasAmmunitionSupplyCap<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| HasFuelSupplyCap<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| HasRecoveryCap<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| **HasRepairCap** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| **Immobilized** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| **InfraredSignatureIndex** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| **IsConcealed** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| **LiveEntityMeasuredSpeed** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
|---|---|---|---|---|---|---|---|---|
| | IsPartOfStruct | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* | | | | | |
| | **Semantics** | | | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | | | |
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
| | SpatialVariantStruct | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | | |
| | **Semantics** | | | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | | | |
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
| | SpatialVariantStruct | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | | |
| | **Semantics** | | | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | | | |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | | **Dimensions** |
| | HLAtoken | | PS | DA | TS | HLAreliable | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *NA* | | | | | |
| | **Semantics** | | | | | | | |
| | | | | | | | | |

## 3.1.2. **NETN_AmphibiousVehicle**

Full Name:     HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.AmphibiousVehicle.NETN_AmphibiousVehicle

Sharing:        Publish/Subscribe

Semantics:    *Extensions for NETN*

Attributes:

| | | | | | | |
|---|---|---|---|---|---|---|
| **Callsign** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| AfterburnerOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |
| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |
| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |
| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| DamageState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| FirePowerDisabled | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FlamesPresent** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| **ForceIdentifier** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasAmmunitionSupplyCap** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasFuelSupplyCap** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasRecoveryCap** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| HLAprivilegeToDeleteObject | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

### 3.1.3. **NETN_GroundVehicle**

Full Name:     HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.GroundVehicle.NETN_GroundVehicle

Sharing:       Publish/Subscribe

Semantics:     *Extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Static | | NA | | | | |
| | Semantics | | | | | | |
| | The unique identifier of the object.<br>Required value.<br>If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value. | | | | | | |

| AfterburnerOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | On change | | | | |
| | Semantics | | | | | | |
| | Whether the entity's afterburner is on or not. | | | | | | |

| AntiCollisionLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | On change | | | | |
| | Semantics | | | | | | |
| | Whether the entity's anti-collision lights are on or not. | | | | | | |

| BlackOutBrakeLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | On change | | | | |
| | Semantics | | | | | | |
| | Whether the entity's black out brake lights are on or not. | | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| DamageState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| FirePowerDisabled | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlamesPresent**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ForceIdentifier**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasAmmunitionSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasFuelSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasRecoveryCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| **HasRepairCap** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| **Immobilized** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| **InfraredSignatureIndex** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| **IsConcealed** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| **LiveEntityMeasuredSpeed** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TentDeployed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| **TrailingEffectsCode**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| **VectoringNozzleSystemData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| **IsPartOf** | **Semantics** | | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **Spatial** | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **RelativeSpatial** | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| **HLAprivilegeToDeleteObject** | Static | *NA* | | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

## 3.1.4. **NETN_MultiDomainPlatform**

Full Name: HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.MultiDomainPlatform.NETN_MultiDomainPlatform

Sharing: Publish/Subscribe

Semantics: *Extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *NA* | | | | | |
| | **Semantics** | | | | | | | |
| | *The unique identifier of the object.* *Required value.* *If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | | | |

| AfterburnerOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RunningLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |
| **SpotLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |
| **TailLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |
| **AcousticSignatureIndex**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| **AlternateEntityType**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ArticulatedParametersArray** | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **CamouflageType** | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **EngineSmokeOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FirePowerDisabled** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| **FlamesPresent** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| **ForceIdentifier** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| **HasAmmunitionSupplyCap** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| **HasFuelSupplyCap** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| **HasRecoveryCap** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| **TentDeployed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| **TrailingEffectsCode**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| **VectoringNozzleSystemData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | *Relative spatial state stored in one variant record attribute.* | | | | | |

| HLAprivilegeToDeleteObject | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| *Inherited from HLAobjectRoot in MIM* | | | | | | |

## 3.1.5. **NETN_Spacecraft**

Full Name:     HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.Spacecraft.NETN_Spacecraft

Sharing:     Publish/Subscribe

Semantics:     *Extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList** | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Static | | *NA* | | | | | |
| | Semantics | | | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | | | |

| AfterburnerOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | | | |

| AntiCollisionLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | | | |

| BlackOutBrakeLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| **ArticulatedParametersArray** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | | |

| **CamouflageType** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | CamouflageEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The type of camouflage in use (if any).* | | | | | | |

| **DamageState** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The state of damage of the entity.* | | | | | | |

| **EngineSmokeOn** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | | |

| **FirePowerDisabled** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlamesPresent**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| **ForceIdentifier**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| **HasAmmunitionSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| **HasFuelSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| **HasRecoveryCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Marking** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **PowerPlantOn** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **PropulsionSystemsData** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RadarCrossSectionSignatureIndex** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **SmokePlumePresent** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TentDeployed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| **TrailingEffectsCode**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| **VectoringNozzleSystemData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 3.1.6. **NETN_SubmersibleVehicle**

Full Name:    HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.SubmersibleVessel.NETN_SubmersibleVehicle

Sharing:    Publish/Subscribe

Semantics:    *Extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | NA | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList** | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Static | | NA | | | | |
| | Semantics | | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | | |

| AfterburnerOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | *On change* | | | | |
| | Semantics | | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | | |

| AntiCollisionLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | *On change* | | | | |
| | Semantics | | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | | |

| BlackOutBrakeLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | *On change* | | | | |
| | Semantics | | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| **ArticulatedParametersArray** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| **CamouflageType** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| **DamageState** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The state of damage of the entity.* | | | | | |

| **EngineSmokeOn** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| **FirePowerDisabled** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FlamesPresent** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| **ForceIdentifier** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasAmmunitionSupplyCap** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasFuelSupplyCap** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasRecoveryCap** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasRepairCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Immobilized** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **InfraredSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsConcealed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **LiveEntityMeasuredSpeed** | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Marking** | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PowerPlantOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PropulsionSystemsData** | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| **RadarCrossSectionSignatureIndex** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **SmokePlumePresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TentDeployed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TrailingEffectsCode** | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **VectoringNozzleSystemData** | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **EntityType** | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **EntityIdentifier** | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

### 3.1.7. **NETN_SurfaceVessel**

Full Name:  HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.SurfaceVessel.NETN_SurfaceVessel

Sharing:  Publish/Subscribe

Semantics:  *Extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | NA | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **UniqueID** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **AfterburnerOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **AntiCollisionLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **BlackOutBrakeLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| DamageState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| FirePowerDisabled | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlamesPresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasAmmunitionSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasFuelSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasRecoveryCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Marking**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| **PowerPlantOn**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| **PropulsionSystemsData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| **RadarCrossSectionSignatureIndex**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| **SmokePlumePresent**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| HLAprivilegeToDeleteObject | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

## 3.1.8. **NETN_NonHuman**

Full Name:    HLAobjectRoot.BaseEntity.PhysicalEntity.Lifeform.NonHuman.NETN_NonHuman

Sharing:    Publish/Subscribe

Semantics:    *Extensions for NETN*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | NA | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| **Activity** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **UniqueID** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | NA | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlashLightsOn**<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the lifeform's flash lights are on or not.* | | | | | |
| **StanceCode**<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | StanceCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The stance of the lifeform.* | | | | | |
| **PrimaryWeaponState**<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | WeaponStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the soldier's primary weapon system.* | | | | | |
| **SecondaryWeaponState**<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | WeaponStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the soldier's secondary weapon system.* | | | | | |
| **ComplianceState**<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ComplianceStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The compliance of the lifeform.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **AcousticSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **AlternateEntityType** | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ArticulatedParametersArray** | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **CamouflageType** | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| FirePowerDisabled<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| FlamesPresent<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| ForceIdentifier<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| HasAmmunitionSupplyCap<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| **HasFuelSupplyCap** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | | |

| **HasRecoveryCap** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | | |

| **HasRepairCap** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | | |

| **Immobilized** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | | |

| **InfraredSignatureIndex** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | Integer16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsConcealed** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |
| **LiveEntityMeasuredSpeed** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |
| **Marking** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| **PowerPlantOn** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| **PropulsionSystemsData** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RadarCrossSectionSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **SmokePlumePresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **TentDeployed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **TrailingEffectsCode** | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **VectoringNozzleSystemData** | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Semantics | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Semantics | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Semantics | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Semantics | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | Semantics | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 3.1.9. **NETN_Human**

Full Name:   HLAobjectRoot.BaseEntity.PhysicalEntity.Lifeform.Human.NETN_Human

Sharing:      Publish/Subscribe

Semantics:   *Extensions for NETN*

Attributes:

| **Callsign** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |

| Activity | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| FlashLightsOn<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the lifeform's flash lights are on or not.* | | | | | |

| StanceCode<br><br>*Inherited from Lifeform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | StanceCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The stance of the lifeform.* | | | | | |

| PrimaryWeaponState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | WeaponStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the soldier's primary weapon system.* | | | | | |
| SecondaryWeaponState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | WeaponStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the soldier's secondary weapon system.* | | | | | |
| ComplianceState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ComplianceStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The compliance of the lifeform.* | | | | | |
| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ArticulatedParametersArray** | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **CamouflageType** | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EngineSmokeOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **FirePowerDisabled** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlamesPresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasAmmunitionSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasFuelSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasRecoveryCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Marking** | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| **PowerPlantOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| **PropulsionSystemsData** | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| **RadarCrossSectionSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| **SmokePlumePresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TentDeployed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **TrailingEffectsCode** | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **VectoringNozzleSystemData** | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EntityType** | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EntityIdentifier** | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 3.1.10. **NETN_CulturalFeature**

Full Name:     HLAobjectRoot.BaseEntity.PhysicalEntity.CulturalFeature.NETN_CulturalFeature

Sharing:        Publish/Subscribe

Semantics:     *Extensions for NETN*

Attributes:

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Static | | *NA* | | | | |
| | **Semantics** | | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | | |
| Callsign | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HLAunicodeString | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Static | | *NA* | | | | |
| | **Semantics** | | | | | | |
| | *Name of the object.* | | | | | | |
| Status | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | ActiveStatusEnum8 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *If an instance shall be taken into account by federates.* | | | | | | |
| Activity | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | AggregateMissionEnum16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The activity of the object.* | | | | | | |

| EmbeddedUnitList | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| --- | --- | --- | --- | --- | --- | --- |
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | List of unique IDs of on-board elements | | | | | |

| ExternalLightsOn<br><br>*Inherited from CulturalFeature in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| --- | --- | --- | --- | --- | --- | --- |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Whether the cultural feature's external lights are on or not. | | | | | |

| InternalHeatSourceOn<br><br>*Inherited from CulturalFeature in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| --- | --- | --- | --- | --- | --- | --- |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Whether the cultural feature's internal heat source is on or not. | | | | | |

| InternalLightsOn<br><br>*Inherited from CulturalFeature in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| --- | --- | --- | --- | --- | --- | --- |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Whether the cultural feature's internal lights are on or not. | | | | | |

| AcousticSignatureIndex<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| --- | --- | --- | --- | --- | --- | --- |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Index used to obtain the acoustics (sound through air) signature state of the entity. | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **AlternateEntityType** | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ArticulatedParametersArray** | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **CamouflageType** | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EngineSmokeOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| FirePowerDisabled | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| FlamesPresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| ForceIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| HasAmmunitionSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| HasFuelSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasRecoveryCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |
| **HasRepairCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |
| **Immobilized**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |
| **InfraredSignatureIndex**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |
| **IsConcealed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **LiveEntityMeasuredSpeed** <br><br> *Inherited from PhysicalEntity in RPR-Physical_v2.0* | VelocityDecimeterPerSecondInteger 16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |
| **Marking** <br><br> *Inherited from PhysicalEntity in RPR-Physical_v2.0* | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| **PowerPlantOn** <br><br> *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| **PropulsionSystemsData** <br><br> *Inherited from PhysicalEntity in RPR-Physical_v2.0* | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| **RadarCrossSectionSignatureIndex** <br><br> *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | | *NA* | | | |
| | Semantics | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HLAprivilegeToDeleteObject** *Inherited from HLAobjectRoot in MIM* | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| | **Semantics** | | | | | |
| | | | | | | |

# 4. Module NETN-SCP-Base_v1.1.3

## Information

| | |
|---|---|
| **Name:** | New Module |
| **Type:** | FOM |
| **Version:** | 1.1 |
| **Modification Date:** | 2014-05-26 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | Base for NETN Logistics FOM modules: Supply, Storage, Repair and Transport |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-Base_v1.0 |

## Use History

| |
|---|
| v1.0.0 - Initial, interaction and object classes and datatypes from FOM modules in NETN FOM v1 |
| v1.1.0 - Interaction class RejectOffer: Added parameter Reason.<br>Interaction class CancelService: added parameter Reason.<br>Moved fixed record AppointmentStruct from Transport module to this module. |
| v1.1.1 - Updated semantics |
| v1.1.2 - Updated References, Dependency |

v1.1.3 - Replaced the datatype in parameter ServiceID to NETN_ServiceIdentifier.
The format is the equal to the previous but names on fields is changed (buffer compatible).

## Dependencies

| |
|---|
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *4.1. Object Classes*



## 4.1.1. **SCP_Facility** <span style="color:red">COPY-rpr2base_7</span>

Full Name:    HLAobjectRoot.BaseEntity.SCP_Facility

Sharing:      Publish/Subscribe

Semantics:   *Logistics Facility dedicated for supplying, storaging, reparing, and other services.*

Attributes:

<table>
<tr><td rowspan="6"><b>DamageState</b></td><td colspan="2"><b>Datatype</b></td><td><b>Sharing</b></td><td><b>Ownership</b></td><td><b>Order</b></td><td><b>Transportation</b></td><td><b>Dimensions</b></td></tr>
<tr><td colspan="2">DamageStatusEnum32</td><td>PS</td><td>DA</td><td>RO</td><td>HLAbestEffort</td><td></td></tr>
<tr><td colspan="2"><b>Update type</b></td><td colspan="5"><b>Update Condition</b></td></tr>
<tr><td colspan="2">Conditional</td><td colspan="5"><i>On change</i></td></tr>
<tr><td colspan="7"><b>Semantics</b></td></tr>
<tr><td colspan="7"><i>Damage State of Facility</i></td></tr>
<tr><td rowspan="6"><b>Callsign</b></td><td colspan="2"><b>Datatype</b></td><td><b>Sharing</b></td><td><b>Ownership</b></td><td><b>Order</b></td><td><b>Transportation</b></td><td><b>Dimensions</b></td></tr>
<tr><td colspan="2">HLAunicodeString</td><td>PS</td><td></td><td>RO</td><td>HLAbestEffort</td><td></td></tr>
<tr><td colspan="2"><b>Update type</b></td><td colspan="5"><b>Update Condition</b></td></tr>
<tr><td colspan="2">Static</td><td colspan="5"><i>N/A</i></td></tr>
<tr><td colspan="7"><b>Semantics</b></td></tr>
<tr><td colspan="7"><i>Name of the Facility</i></td></tr>
</table>

| **IsOperational** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | HLAboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The operational status of the facility (true = is operational)* | | | | | | |

| **ForceIdentifier** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Force identifier of owner* | | | | | | |

| **StorageList** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | NETN_ArrayOfSupplyStruct | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *List of the material contained in the facility* | | | | | | |

| **PlatformList** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | ArrayOfUuid | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Descripltion of platforms located within the facility* | | | | | | |

| **UniqueID** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Static | | *N/A* | | | | |
| | **Semantics** | | | | | | |
| | *The unique identifier for the facility* | | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

# *4.2. Interaction Classes*

### 4.2.1. **HLAinteractionRoot**

Full Name: HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters: -

### 4.2.2. **SCP_Service**

Full Name: HLAinteractionRoot.SCP_Service

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *The SCP_Service interaction class is the base class for all NETN Service Consumer-Provider Pattern interactions. It contains the basic required parameters (not optional) that are always sent.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **ServiceID** | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer** | Callsign | *Entity that has requested the service* |
| **Provider** | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType** | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 4.2.3. **SCP_RequestService**

Full Name: HLAinteractionRoot.SCP_Service.SCP_RequestService

Sharing:
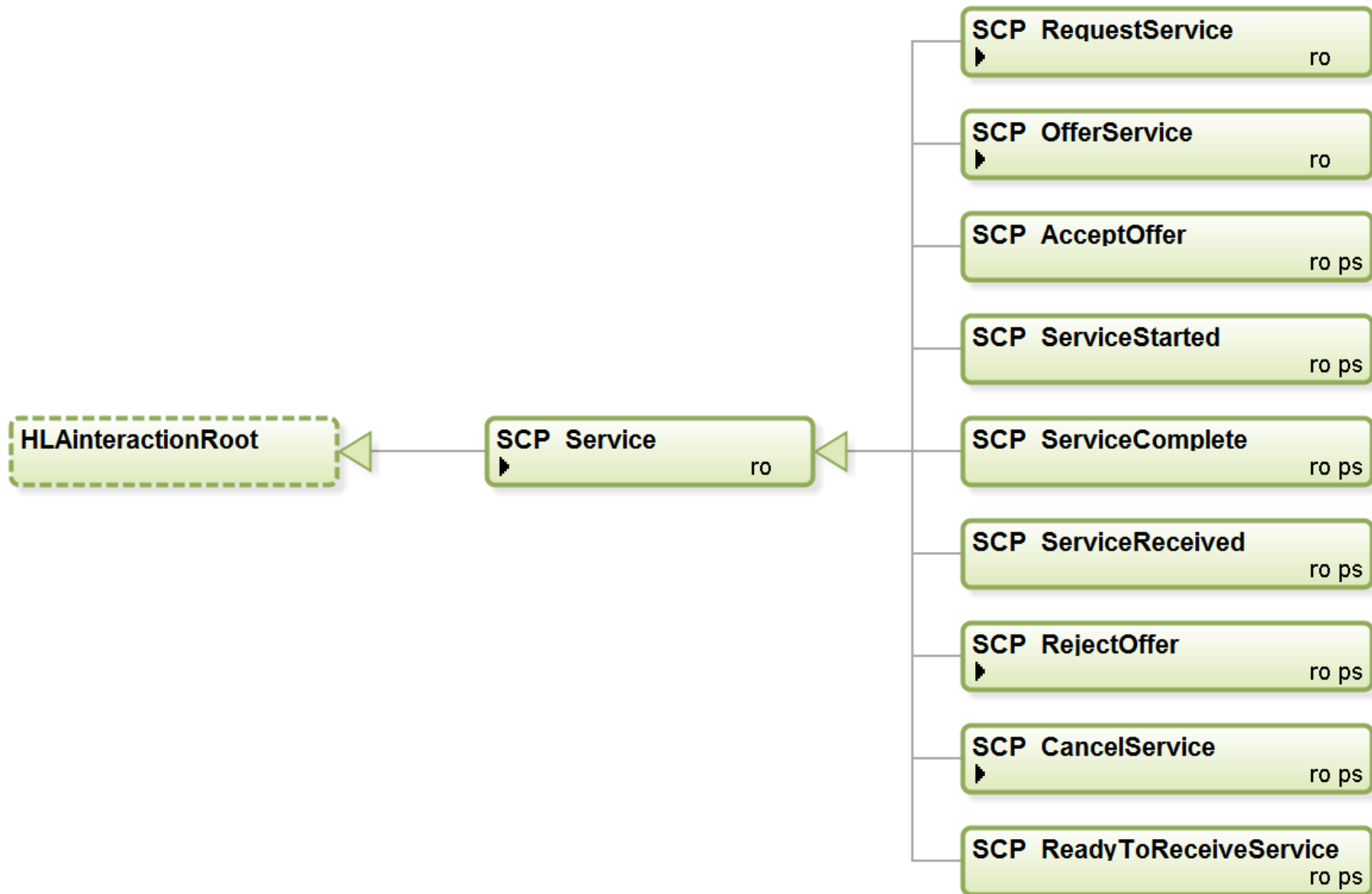
| | |
|---|---|
| Transportation type: | HLAreliable |
| Order: | Receive |
| Dimensions: | |
| Semantics: | *The request for a service is always initiated by a SCP_RequestService. Subclasses of this interaction for specific types of services may include parameters for detailing the requirements of this request. This may include information when, where and how the service is to be delivered.* |

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RequestTimeOut** | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 4.2.4. **SCP_OfferService**

| | |
|---|---|
| Full Name: | HLAinteractionRoot.SCP_Service.SCP_OfferService |
| Sharing: | |
| Transportation type: | HLAreliable |
| Order: | Receive |
| Dimensions: | |
| Semantics: | *The SCP_OfferService is usually a response to a SCP_RequestService and contains information with respect to the providing entities ability to deliver the requested service. This ability is expressed as either an offer to provide the service or no offer. Subclasses of this interaction for specific types of offers should contain more detailed description of the offer. This may include information about when, where, how the service can be delivered.* |

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **IsOffering** | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |

| Name | Datatype | Semantics |
|---|---|---|
| **RequestTimeOut** | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 4.2.5. **SCP_AcceptOffer**

Full Name: HLAinteractionRoot.SCP_Service.SCP_AcceptOffer

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *The SCP_AcceptOffer is used to accept an offer made by a service providing entity as indicated in a SCP_OfferService interaction. By issuing a SCP_AcceptOffer interaction the service consuming entity enters a contract for service delivery with the service producing entity.*

*The SCP_AcceptOffer interaction does not define any additional parameters but subclasses may include parameters with additional information.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 4.2.6. SCP_ServiceStarted

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ServiceStarted

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:           Receive

Dimensions:

Semantics:       *The SCP_ServiceStarted interaction is issued by a service providing entity to inform about the start of service delivery. The time of service delivery start may be significantly later then receiving a indication from the consumer that the service delivery can start.*

                   *The SCP_ServiceStarted interaction does not define any additional parameters.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 4.2.7. SCP_ServiceComplete

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ServiceComplete

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:           Receive

Dimensions:

Semantics: *The SCP_ServiceCompleted interaction is used by a service providing entity to inform the service consuming entity that the service has been delivered.*

*The SCP_ServiceCompleted interaction does not define any additional parameters.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 4.2.8. **SCP_ServiceReceived**

Full Name:          HLAinteractionRoot.SCP_Service.SCP_ServiceReceived

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics: *The NETN_ServiceReceived interaction is used by a service consuming entity to inform the service providing entity that the service has been delivered.*

*The NETN_ ServiceReceived interaction does not define any additional parameters.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |

| Name | Datatype | Semantics |
|---|---|---|
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [Callsign](#) | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [SCP_ServiceTypeEnum8](#) | *Enumerated value describing the type of service* |

## 4.2.9. **SCP_RejectOffer**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_RejectOffer

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:            Receive

Dimensions:

Semantics:        *The SCP_RejectOffer is used to reject an offer made by a service providing entity as indicated in a SCP_OfferService interaction. By issuing a SCP_RejectOffer interaction the service consuming entity informs the providing entity that the offer has been rejected.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Reason** | HLAASCIIstring | *Allows to inform about the reason of the cancel (free text)* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [NETN_ServiceIdentifier](#) | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [Callsign](#) | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [Callsign](#) | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [SCP_ServiceTypeEnum8](#) | *Enumerated value describing the type of service* |

## 4.2.10. **SCP_CancelService**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_CancelService

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:            Receive

Dimensions:

Semantics: *The SCP_CancelService interaction is used by either a service consuming entity or a service providing entity to inform about early termination of the service delivery or in some cases termination of the service request before delivery has begun.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Reason** | HLAASCIIstring | *Allows to inform about the reason of the cancel (free text)* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 4.2.11. **SCP_ReadyToReceiveService**

Full Name: HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *The SCP_ReadyToReceiveService interaction is issued by a service consuming entity to indicate that the start of service delivery can start. The time of service delivery start may be significantly later then indicating ready for service delivery.*

*The SCP_ReadyToReceiveService interaction does not define any additional parameters.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |

| Name | Datatype | Semantics |
|---|---|---|
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## *4.3. Datatypes*

## *4.3.1. Enumerated Datatypes*

### SCP_ServiceTypeEnum8

Representation:    HLAoctet

Semantics:    *Description of NETN services, extension of RPR2 ServiceTypeEnum8*

| Enumerator | Value |
|---|---|
| Other | 0 |
| Resupply | 1 |
| Repair | 2 |
| Storage | 3 |
| Transport | 4 |
| CombatAdjudication | 5 |

### OfferTypeEnum32

Representation:    HLAinteger32BE

Semantics:    *Type of the offer (With restriction, positive, negative)*

| Enumerator | Value |
|---|---|
| RequestAcknowledgeWithRestriction | 0 |
| RequestAcknowledgePositive | 1 |
| RequestAcknowledgeNegative | 2 |

## 4.3.2. Array Datatypes

**ServiceDescription**

Element Type: HLAunicodeChar

Cardinality:   Dynamic

Encoding:      HLAvariableArray

Semantics:     *A name associated with the service, e.g. name of the service, the issiuing federate or entity (Callsign).*

## 4.3.3. Fixed Record Datatypes

### AppointmentStruct

Encoding:     HLAfixedRecord

Semantics:    *Date ; Time and Location of an appointment.*
*When date and time is set to zero (0), implies no date-time specification*

| Name | Type | Semantic |
|------|------|----------|
| DateTime | TimeSecInt64 | *Date time in second since 1 january 1970 for the appointment* |
| Location | WorldLocationStruct | *Location of the appointment* |

### NETN_ServiceIdentifier

Encoding:     HLAfixedRecord

Semantics:    *An ID associated with the service, shall be unique in the federation execution.*
*E.g. generate the federate id as a string and use this in the ServiceDescription.*

| Name | Type | Semantic |
|------|------|----------|
| EventCount | CounterInt32 | *EventCount shall start at one (1) and then incremented by one (1) for a new NETN Service Provider event and service specified in field Service.*<br><br>*In the case where all possible values are exhausted, the numbers may be reused beginning again at one.* |
| Service | ServiceDescription | *A name associated with the service, e.g. name of the service, the issiuing federate or entity (Callsign).* |

# *4.4. Notes*

**COPY-rpr2base_7**

Semantics: *Federates shall send the time at which the data is valid in the user defined tag with every attribute values update and interaction. The time shall be in the first 8 bytes (octets) of the user defined tag, using the DIS timestamp field format (see section 5.2.31 of IEEE 1278.1-1995) converted into hexadecimal ASCII character representation (0-9 and A-F). The ordering of the characters shall be in accordance with section 5.1.1 of IEEE 1278.1-1995, that is most significant octet first, with the most significant bits first (i.e. the character for bits 4-7 precedes the character for bits 0-3).*

*All federates shall transmit this field, even if they do not use it themselves, so that other federates can use its value to compensate for network transport delays.*

# 5. Module NETN-Repair_v1.2.1

## Information

| | |
|---|---|
| **Name:** | NETN-Repair |
| **Type:** | FOM |
| **Version:** | 1.2 |
| **Modification Date:** | 2014-05-26 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | NETN Logistics, Maintenance Pattern, Repair Service |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 4705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-SCP-Base_v1.1 |

## Use History

| |
|---|
| v1.0.0 - Initial, interaction classes and datatypes from FOM modules in NETN FOM v1 |
| v1.1.0 - Interaction class RequestRepair: Added parameter Appointment as an optional parameter.<br>Interaction class OfferRepair: Added parameter Appointment as an optional parameter. |
| v1.1.1 - Semantics updates |
| V1.2.1 - Added new interactions, ReadyToReceiveRepair and RepairComplete |

## Dependencies

| |
|---|
| NETN-SCP-Base_v1.1.3 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# 5.1. Interaction Classes
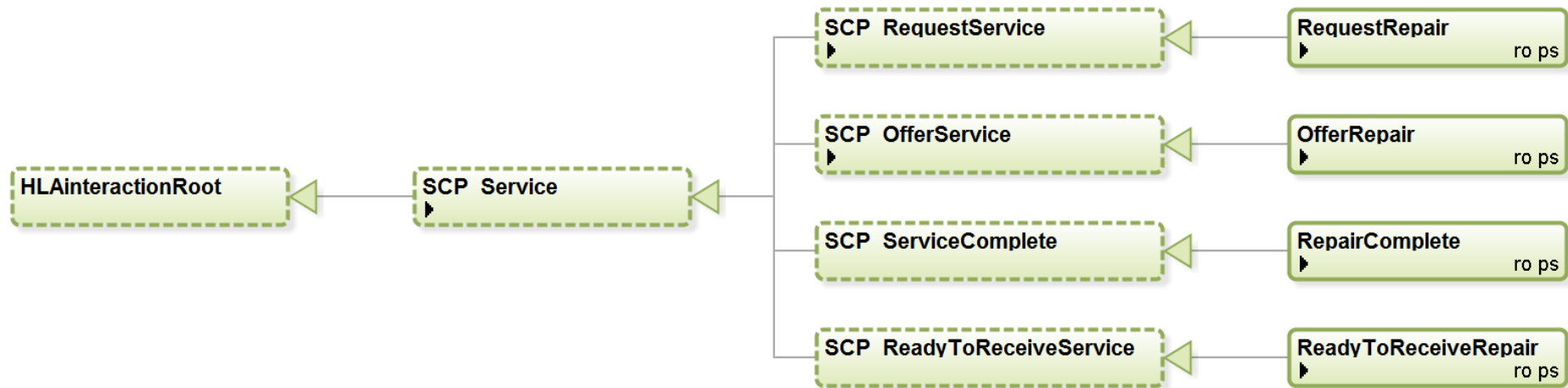


## 5.1.1. **HLAinteractionRoot**

Full Name: HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters: -

## 5.1.2. **SCP_Service**

Full Name: HLAinteractionRoot.SCP_Service

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 5.1.3. **SCP_RequestService**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_RequestService

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RequestTimeOut**<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 5.1.4. **RequestRepair**

Full Name: HLAinteractionRoot.SCP_Service.SCP_RequestService.RequestRepair

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Sent by the consumer when a repair for needed. Specifies entity and type of repair*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RepairData** | ArrayOfRepairStruct | *List of all requested repairs.* |
| **Appointment** | AppointmentStruct | *Time and location for the exchange of the service. Optional* |
| **RequestTimeOut**<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 5.1.5. **SCP_OfferService**

Full Name: HLAinteractionRoot.SCP_Service.SCP_OfferService

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 5.1.6. **OfferRepair**

Full Name:           HLAinteractionRoot.SCP_Service.SCP_OfferService.OfferRepair

Sharing:             Publish/Subscribe

Transportation type: HLAreliable

Order:               Receive

Dimensions:

Semantics:           *The OfferRepair interaction class shall be sent by a federate simulating the service providing entity in response to a RequestRepair interaction.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RepairData** | ArrayOfRepairStruct | *List of the type of repairs offered. May be different from the list of requested repairs. List of all offered repairs if isOffering = true otherwise Undefined* |
| **Appointment** | AppointmentStruct | *Time and location for the exchange of the service. Optional* |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 5.1.7. **SCP_ServiceComplete**

Full Name:   HLAinteractionRoot.SCP_Service.SCP_ServiceComplete

Sharing:

Transportation type: HLAreliable

Order:   Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **ServiceID**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 5.1.8. **RepairComplete**

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ServiceComplete.RepairComplete

Sharing:           Publish/Subscribe

Transportation type: HLAreliable

Order:             Receive

Dimensions:

Semantics:         *This interaction is sent by the provider when the repair service is delivered to the consumer*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RepairData** | ArrayOfRepairStruct | *List of the type of repairs done. May be different from the list of requested repairs.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 5.1.9. **SCP_ReadyToReceiveService**

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService

Sharing:

Transportation type: HLAreliable

Order:             Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 5.1.10. **ReadyToReceiveRepair**

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService.ReadyToReceiveRepair

Sharing:           Publish/Subscribe

Transportation type: HLAreliable

Order:             Receive

Dimensions:

Semantics:         *This interaction is sent when the consumer is ready to receive the repair service.*
                   *(At same location as the provider)*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RepairData** | ArrayOfRepairStruct | *The repairs, by type, that the consumer is able to accept at the time it declares ReadyToReceive.* |
| **ServiceID** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## *5.2. Datatypes*

## *5.2.1. Enumerated Datatypes*

### NETN_RepairTypeEnum16

Representation:    HLAinteger16BE

Semantics:       *Same enumeration as RPR2 RepairTypeEnum16.*

| Enumerator | Value |
|---|---|
| NoRepairsPerformed | 0 |
| AllRequestedRepairsPerformed | 1 |
| MotorOrEngine | 10 |
| Starter | 20 |
| Alternator | 30 |
| Generator | 40 |
| Battery | 50 |
| EngineCoolantLeak | 60 |
| FuelFilter | 70 |
| TransmissionOilLeak | 80 |
| EngineOilLeak | 90 |
| Pumps | 100 |
| Filters | 110 |
| Transmission | 120 |
| Brakes | 130 |
| SuspensionSystem | 140 |
| OilFilter | 150 |
| Hull | 1000 |
| Airframe | 1010 |
| TruckBody | 1020 |

| Enumerator | Value |
|---|---|
| TankBody | 1030 |
| TrailerBody | 1040 |
| Turret | 1050 |
| Propeller | 1500 |
| EnvironmentalFilters | 1520 |
| Wheels | 1540 |
| Tire | 1550 |
| Track | 1560 |
| GunElevationDrive | 2000 |
| GunStabilizationSystem | 2010 |
| GunnersPrimarySight_lt_GPS_gt_ | 2020 |
| CommandersExtensionToTheGPS | 2030 |
| LoadingMechanism | 2040 |
| GunnersAuxiliarySight | 2050 |
| GunnersControlPanel | 2060 |
| GunnersControlAssemblyHandle_slsh_Handles | 2070 |
| CommandersControlHandles_slsh_Assembly | 2090 |
| CommandersWeaponStation | 2100 |
| CommandersIndependentThermalViewer_lt_CITV_gt_ | 2110 |
| GeneralWeapons | 2120 |
| FuelTransferPump | 4000 |
| FuelLines | 4010 |
| Gauges | 4020 |
| GeneralFuelSystem | 4030 |
| ElectronicWarfareSystems | 4500 |
| DetectionSystems | 4600 |
| ElectronicWarfareRadioFrequency | 4610 |

| Enumerator | Value |
|---|---|
| ElectronicWarfareMicrowave | 4620 |
| ElectronicWarfareInfrared | 4630 |
| ElectronicWarfareLaser | 4640 |
| RangeFinders | 4700 |
| Range-OnlyRadar | 4710 |
| LaserRangeFinder | 4720 |
| ElectronicSystems | 4800 |
| ElectronicSystemsRadioFrequency | 4810 |
| ElectronicSystemsMicrowave | 4820 |
| ElectronicSystemsInfrared | 4830 |
| ElectronicSystemsLaser | 4840 |
| Radios | 5000 |
| CommunicationSystems | 5010 |
| Intercoms | 5100 |
| Encoders | 5200 |
| EncryptionDevices | 5250 |
| Decoders | 5300 |
| DecryptionDevices | 5350 |
| Computers | 5500 |
| NavigationAndControlSystems | 6000 |
| FireControlSystems | 6500 |
| AirSupply | 8000 |
| LifeSupportFilters | 8010 |
| LifeSupportWaterSupply | 8020 |
| RefrigerationSystem | 8030 |
| ChemicalBiologicalAndRadiologicalProtection | 8040 |
| WaterWashDownSystems | 8050 |

| Enumerator | Value |
|---|---|
| DecontaminationSystems | 8060 |
| HydraulicSystemWaterSupply | 9000 |
| CoolingSystem | 9010 |
| Winches | 9020 |
| Catapults | 9030 |
| Cranes | 9040 |
| Launchers | 9050 |
| LifeBoats | 10000 |
| LandingCraft | 10010 |
| EjectionSeats | 10020 |
| OtherAuxiliaryCraftToBeDefined | 10030 |

## *5.2.2. Array Datatypes*

**ArrayOfRepairStruct**

Element Type: [RepairStruct](RepairStruct)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *List of repair descriptions (equipment and type of repairs).*

**ArrayOfRepairTypeEnum**

Element Type: [NETN_RepairTypeEnum16](NETN_RepairTypeEnum16)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *List of repair types*

## 5.2.3. Fixed Record Datatypes

**RepairStruct**

Encoding:    HLAfixedRecord

Semantics:    *Repairs associated with a specific material*

| Name | Type | Semantic |
|------|------|----------|
| MaterialID | UuidArrayOfHLAbyte16 | *UUID for the material.* |
| Repairs | ArrayOfRepairTypeEnum | *List of the types of repair associated with the material.* |

# 6. Module NETN-Storage_v1.2.2

## Information

| | |
|---|---|
| **Name:** | NETN-Storage |
| **Type:** | FOM |
| **Version:** | 1.2 |
| **Modification Date:** | 2013-10-24 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | NETN Logistics, Supply Pattern, Storage Service |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 4705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-SCP-Base_v1.1 |

## Use History

| |
|---|
| v1.0.0 - Initial, Interaction classes from NETN FOM v1, NETN_Logistics_v1.1.2 |
| v1.1.0 - Removed interaction StorageStarted.<br>Interaction class RequestStorage: Added parameter Appointment as an optional parameter.<br>Interaction class OfferStorage: Added parameter Appointment as an optional parameter. |
| v1.2.0 - Added two intaractions, StorageComplete and ReadyToReceiveStorage |
| v1.2.1 - Updated semantics |
| v1.2.2 - Updated References, Dependency |

## Dependencies

| |
|---|
| NETN-SCP-Base_v1.1.3 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *6.1. Interaction Classes*
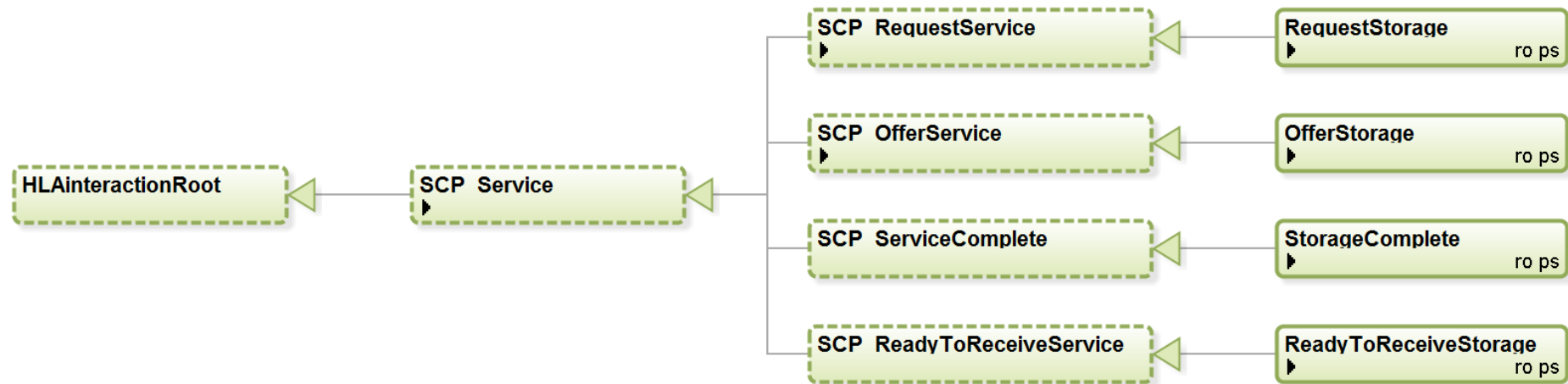


## 6.1.1. **HLAinteractionRoot**

| | |
|---|---|
| Full Name: | HLAinteractionRoot |
| Sharing: | |
| Transportation type: | HLAreliable |
| Order: | Receive |
| Dimensions: | |
| Semantics: | |
| Parameters: | - |

## 6.1.2. **SCP_Service**

| | |
|---|---|
| Full Name: | HLAinteractionRoot.SCP_Service |
| Sharing: | |
| Transportation type: | HLAreliable |
| Order: | Receive |

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
| --- | --- | --- |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 6.1.3. **SCP_RequestService**

Full Name:       HLAinteractionRoot.SCP_Service.SCP_RequestService

Sharing:

Transportation type:  HLAreliable

Order:        Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
| --- | --- | --- |
| **RequestTimeOut**<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |

| Name | Datatype | Semantics |
|---|---|---|
| ServiceType<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 6.1.4. **RequestStorage**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_RequestService.RequestStorage

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:        *RequestStorage is used by a consumer to initiate a request for storage of supplies. The amount and type of material is included in the request.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| SuppliesData | NETN_ArrayOfSupplyStruct | *Specifies the supply (type and quantity)* |
| LoadingDoneByProvider | HLAboolean | *Proposes whether the service provider (LoadingDoneByProvider = true) or the service consumer (LoadingDoneByProvider = false) takes care of the (un)loading of the material. Default value is true.* |
| Appointment | AppointmentStruct | *The time and location for the exchange of the service. Optional* |
| RequestTimeOut<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| ServiceID<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| Consumer<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| Provider<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| ServiceType<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 6.1.5. **SCP_OfferService**

Full Name: HLAinteractionRoot.SCP_Service.SCP_OfferService

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 6.1.6. **OfferStorage**

Full Name: HLAinteractionRoot.SCP_Service.SCP_OfferService.OfferStorage

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *OfferStorage is used by a storage service provider to indicate which (amount and type) of the requested material can be stored.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SuppliesData** | NETN_ArrayOfSupplyStruct | *Specifies the supply (type and quantity)* |
| **LoadingDoneByProvider** | HLAboolean | *Determines whether the service provider (LoadingDoneByProvider = true) or the service consumer (LoadingDoneByProvider = false) takes care of the (un)loading of the material. Default value is true.* |
| **Appointment** | AppointmentStruct | *The time and location for the exchange of the service. Optional* |
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 6.1.7. **SCP_ServiceComplete**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_ServiceComplete

Sharing:

Transportation type: HLAreliable

Order:          Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |

| Name | Datatype | Semantics |
|---|---|---|
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 6.1.8. **StorageComplete**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_ServiceComplete.StorageComplete

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:        *This interaction is sent by the provider when the supply is delivered to the provider*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SuppliesData** | NETN_ArrayOfSupplyStruct | *This interaction is sent by the provider when all supply is received by the provider* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 6.1.9. **SCP_ReadyToReceiveService**

Full Name:        HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 6.1.10. **ReadyToReceiveStorage**

Full Name: HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService.ReadyToReceiveStorage

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *This interaction is sent when the consumer is ready to deliver the supply (receive storage). (At same location as the provider)*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SuppliesData** | NETN_ArrayOfSupplyStruct | *This interaction is sent when the consumer is ready to transfer the supply. (At same location as the provider)* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

# 7. Module NETN-Supply_v1.1.2

## Information

| | |
|---|---|
| **Name:** | NETN-Supply |
| **Type:** | FOM |
| **Version:** | 1.1 |
| **Modification Date:** | 2013-10-24 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | NETN Logistics, Supply Pattern, Supply Service. Replaces RPR Supply logistics |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 4705506 |
| **Email:** | lennart.olsson@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-SCP-Base_v1.1 |

## Use History

| |
|---|
| v1.0.0 - Initial, interaction classes and datatypes from FOM modules in NETN FOM v1 |
| v1.1.0 - Interaction class RequestSupply: Added parameter Appointment as an optional parameter. Interaction class OfferSupply: Added parameter Appointment as an optional parameter. |
| v1.1.1 - Update of semantics |
| v1.1.2 - Updated References, Dependency |

## Dependencies

| |
|---|
| NETN-SCP-Base_v1.1.3 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# 7.1. Interaction Classes
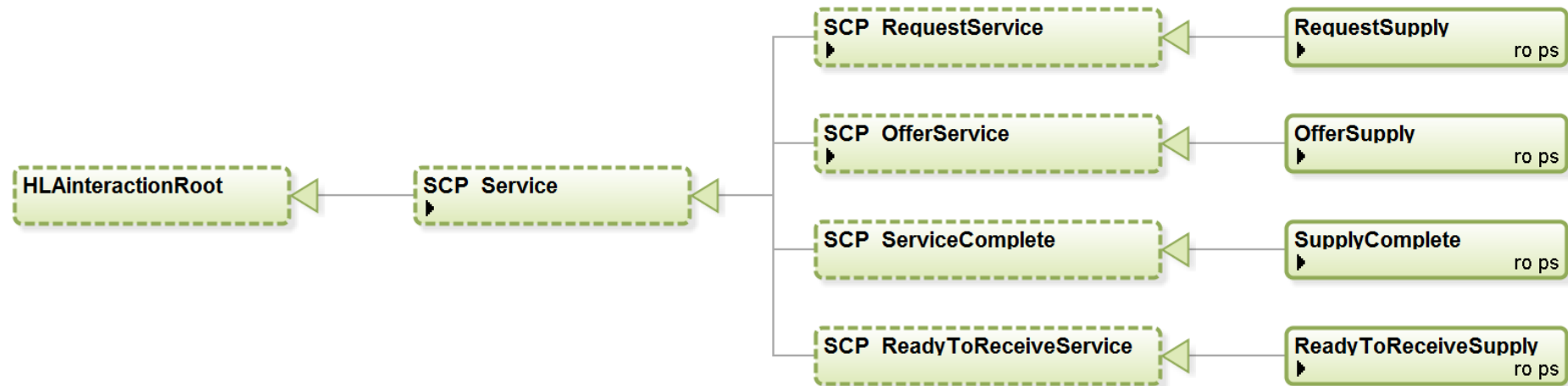


## 7.1.1. HLAinteractionRoot

Full Name:          HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:       -

## 7.1.2. SCP_Service

Full Name:          HLAinteractionRoot.SCP_Service

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 7.1.3. **SCP_RequestService**

Full Name:         HLAinteractionRoot.SCP_Service.SCP_RequestService

Sharing:

Transportation type: HLAreliable

Order:                Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RequestTimeOut**<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |

| Name | Datatype | Semantics |
|---|---|---|
| ServiceType<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 7.1.4. **RequestSupply**

Full Name: HLAinteractionRoot.SCP_Service.SCP_RequestService.RequestSupply

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *RequestSupply is used by a consumer to initiate a request for supply from a supply service provider. The amount and type of material is included in the request. In this request the consumer propose whether the loading is done by the provider or by the consumer.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| SuppliesData | NETN_ArrayOfSupplyStruct | *List of type and quantity of supplies requested.* |
| LoadingDoneByProvider | HLAboolean | *Proposes whether the service provider (LoadingDoneByProvider = true) or the service consumer (LoadingDoneByProvider = false) takes care of the (un)loading of the material. Default value is true.* |
| Appointment | AppointmentStruct | *Time and location for the exchange of the service. Optional* |
| RequestTimeOut<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| ServiceID<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| Consumer<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| Provider<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| ServiceType<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 7.1.5. **SCP_OfferService**

Full Name:          HLAinteractionRoot.SCP_Service.SCP_OfferService

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **IsOffering** <br><br> *Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut** <br><br> *Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID** <br><br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer** <br><br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider** <br><br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType** <br><br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 7.1.6. **OfferSupply**

Full Name:          HLAinteractionRoot.SCP_Service.SCP_OfferService.OfferSupply

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics: *OfferSupply is used by a supply service provider to indicate which of the requested materials (amount and type) can be offered. In this request the consumer decides whether the loading is done by the provider or by the consumer.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SuppliesData** | NETN_ArrayOfSupplyStruct | *List of type and quantity of supplies offered. May be different from the list of requested supplies. All offered supplies if isOffering = true otherwise Undefined* |
| **LoadingDoneByProvider** | HLAboolean | *Determines whether the service provider (LoadingDoneByProvider = true) or the service consumer (LoadingDoneByProvider = false) takes care of the (un)loading of the material. Default value is true.* |
| **Appointment** | AppointmentStruct | *Time and location for the exchange of the service. Optional* |
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 7.1.7. **SCP_ServiceComplete**

Full Name: HLAinteractionRoot.SCP_Service.SCP_ServiceComplete

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 7.1.8. **SupplyComplete**

Full Name:  HLAinteractionRoot.SCP_Service.SCP_ServiceComplete.SupplyComplete

Sharing:  Publish/Subscribe

Transportation type: HLAreliable

Order:  Receive

Dimensions:

Semantics:  *This interaction is sent by the provider when the supply is delivered to the consumer*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SuppliesData** | NETN_ArrayOfSupplyStruct | *The amount of supplies, by type, that were transferred from provider to consumer.* |
| **ServiceID**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 7.1.9. **SCP_ReadyToReceiveService**

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService

Sharing:

Transportation type: HLAreliable

Order:            Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 7.1.10. **ReadyToReceiveSupply**

Full Name:         HLAinteractionRoot.SCP_Service.SCP_ReadyToReceiveService.ReadyToReceiveSupply

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:            Receive

Dimensions:

Semantics:     *This interaction is sent when the consumer is ready to receive the supply. (At same location as the provider)*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SuppliesData** | NETN_ArrayOfSupplyStruct | *The amount of supplies, by type, that the consumer is able to accept at the time it declares ReadyToReceive.* |

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

# 8. Module NETN-Transport_v1.1.2

## Information

| | |
|---|---|
| **Name:** | NETN-Transport |
| **Type:** | FOM |
| **Version:** | 1.1 |
| **Modification Date:** | 2013-10-24 |
| **Security Classification:** | unclassified |
| **Purpose:** | |
| **Application Domain:** | Training |
| **Description:** | NETN Logistics, Transport Pattern |
| **Use Limitation:** | |
| **Other:** | |

## References

| | |
|---|---|
| **Dependency** | NETN-SCP-Base_v1.1 |

## Use History

| |
|---|
| v1.0.0 - Initial, interaction classes and datatypes from FOM modules in NETN FOM v1 |
| v1.0.1 - Updated datatypes DataEDStruct and DataTStruct, switch order on fields. |
| v1.1.0 - Removed Interaction Classes: RejectOfferTransport and CancelTransport. Moved fixed record AppointmentStruct to module NETN-SCP-Base |
| v1.1.1 - Update of semantics |
| v1.1.2 - Updated References, Dependency |

## Dependencies

| |
|---|
| NETN-SCP-Base_v1.1.3 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |

RPR-Foundation_v2.0

# 8.1. Interaction Classes
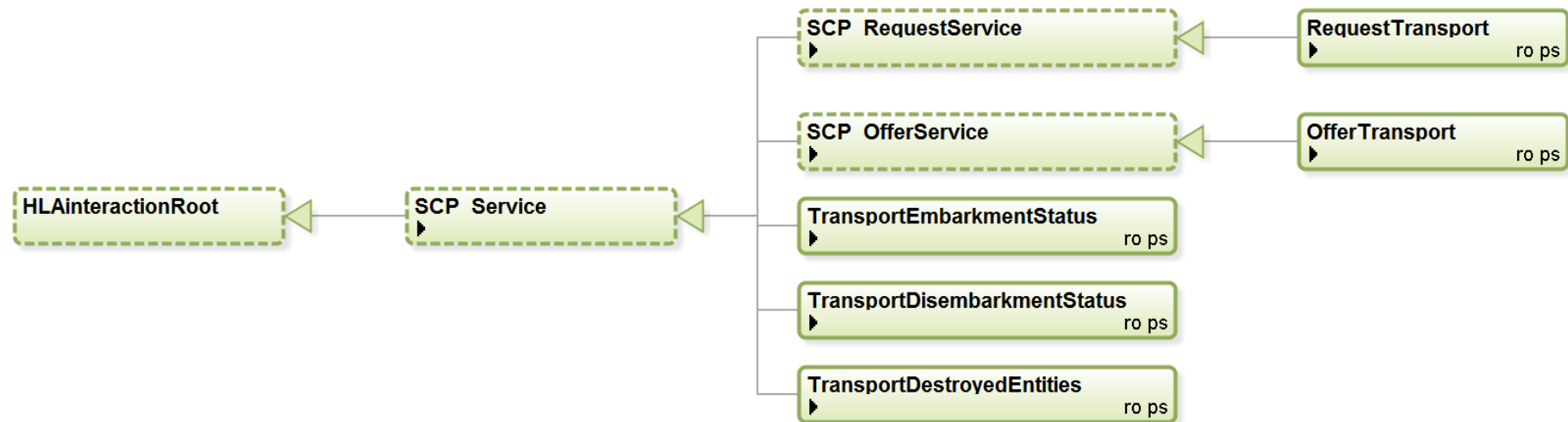


## 8.1.1. **HLAinteractionRoot**

Full Name:          HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:         -

## 8.1.2. **SCP_Service**

Full Name:          HLAinteractionRoot.SCP_Service

Sharing:

Transportation type: HLAreliable

Order:                    Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 8.1.3. **SCP_RequestService**

Full Name:              HLAinteractionRoot.SCP_Service.SCP_RequestService

Sharing:

Transportation type: HLAreliable

Order:                    Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **RequestTimeOut**<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |

| Name | Datatype | Semantics |
|---|---|---|
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [Callsign](Callsign) | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [SCP_ServiceTypeEnum8](SCP_ServiceTypeEnum8) | *Enumerated value describing the type of service* |

## 8.1.4. **RequestTransport**

Full Name: HLAinteractionRoot.SCP_Service.SCP_RequestService.RequestTransport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *A request for a Transport support.*
*The request to transport, embark or disembark a platform is initiated by a RequestTransport interaction;*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **TransportData** | [TransportStruct](TransportStruct) | *Data for the transport. Transported units and appointment data* |
| **RequestTimeOut**<br><br>*Inherited from SCP_RequestService in NETN-SCP-Base_v1.1.3* | [TimeSecInt64](TimeSecInt64) | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [NETN_ServiceIdentifier](NETN_ServiceIdentifier) | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [Callsign](Callsign) | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [Callsign](Callsign) | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | [SCP_ServiceTypeEnum8](SCP_ServiceTypeEnum8) | *Enumerated value describing the type of service* |

## 8.1.5. **SCP_OfferService**

Full Name: HLAinteractionRoot.SCP_Service.SCP_OfferService

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 8.1.6. **OfferTransport**

Full Name:          HLAinteractionRoot.SCP_Service.SCP_OfferService.OfferTransport

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:          *An Offer for a Transport support.*
*The OfferTransport interaction shall be sent by the service providing federate in response to a RequestTransport interaction.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **TransportData** | TransportStruct | *Data for the transport* |
| **OfferType** | OfferTypeEnum32 | *Provide high level information about the acceptance of the request (Partial, Full)* |
| **Transporters** | ArrayOfUuid | *Platform list with transporters* |
| **IsOffering**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | HLAboolean | *Defines if the requested service is offered (=true) or not (=false). (Not Optional)* |
| **RequestTimeOut**<br><br>*Inherited from SCP_OfferService in NETN-SCP-Base_v1.1.3* | TimeSecInt64 | *Wallclock time. The timeout time in seconds after 1 January 1970.* |
| **ServiceID**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br><br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 8.1.7. **TransportEmbarkmentStatus**

Full Name:        HLAinteractionRoot.SCP_Service.TransportEmbarkmentStatus

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:        *The TransportEmbarkmentStatus interaction shall be sent by the service provider federate, to inform the service consumer of the embarkment state, after the SCP_ServiceStarted interaction*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **EmbarkedObjects** | ArrayOfUuid | *Allows to follow the elements managed by the provider* |
| **TransportUnitIdentifier** | UuidArrayOfHLAbyte16 | *Callsign of transporter* |

| Name | Datatype | Semantics |
|---|---|---|
| **ServiceID**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## 8.1.8. **TransportDisembarkmentStatus**

Full Name:            HLAinteractionRoot.SCP_Service.TransportDisembarkmentStatus

Sharing:               Publish/Subscribe

Transportation type: HLAreliable

Order:                 Receive

Dimensions:

Semantics:            *The TransportDisembarkmentStatus interaction shall be sent by the service provider federate, to inform the service consumer of the disembarkment state, after the SCP_ServiceStarted interaction*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **DisembarkedObjects** | ArrayOfUuid | *Allows to follow the elements managed by the provider* |
| **TransportUnitIdentifier** | UuidArrayOfHLAbyte16 | *Callsign of transporter* |
| **ServiceID**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType**<br>*Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

### 8.1.9. **TransportDestroyedEntities**

Full Name:          HLAinteractionRoot.SCP_Service.TransportDestroyedEntities

Sharing:             Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:         *The TransportDestroyedEntities interaction is used by the service provider federate to give information on managed element to the consumer. This interaction is used only if the provider simulate the destruction of elements managed*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **DestroyedObjects** | ArrayOfUuid | *Allows to follow the elements managed by the provider* |
| **ServiceID** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | NETN_ServiceIdentifier | *Unique identifier for a service* |
| **Consumer** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Entity that has requested the service* |
| **Provider** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | Callsign | *Providing or intended provider entity. If no provider is specified and the request is a common request shall en empty string be used as the Callsign.* |
| **ServiceType** <br> *Inherited from SCP_Service in NETN-SCP-Base_v1.1.3* | SCP_ServiceTypeEnum8 | *Enumerated value describing the type of service* |

## *8.2. Datatypes*

## *8.2.1. Enumerated Datatypes*

### TransportTypeEnum32

Representation:    HLAinteger32BE

Semantics:        *Type of action, transport, embark or disembark*

| Enumerator | Value |
|---|---|
| Transport | 0 |
| Embarkment | 1 |
| Disembarkment | 2 |

## 8.2.2. Fixed Record Datatypes

### DataEDStruct

Encoding:    HLAfixedRecord

Semantics:    *Defines the entities to transport, where and when for embarkment or disembarment*

| Name | Type | Semantic |
|---|---|---|
| ObjectsToManage | ArrayOfUuid | *List with the units to be landing or boarding* |
| Appointment | AppointmentStruct | *Expected location for the landing or boarding* |

### DataTStruct

Encoding:    HLAfixedRecord

Semantics:    *Defines the entities to transport, where and when for pickup and dropoff*

| Name | Type | Semantic |
|---|---|---|
| ObjectsToManage | ArrayOfUuid | *List with the units to be Transport* |
| Appointment | AppointmentStruct | *Expected location for the boarding* |
| FinalAppointment | AppointmentStruct | *Expected location for the landing* |

## 8.2.3. *Variant Record Datatypes*

**TransportStruct**

Encoding: HLAvariantRecord
Discriminant name: TransportType
Discriminant type: TransportTypeEnum32
Semantics: *Transport data*

| Name | Enumerator | Type | Semantics |
|---|---|---|---|
| DataTransport | Transport | DataTStruct | *Data for transport* |
| DataEmbarkment | Embarkment | DataEDStruct | *Data for embarkment* |
| DataDisembarkment | Disembarkment | DataEDStruct | *Data for Disembarkment* |

# 9. Module CBRN_v1.1.9

## Information

| Name: | CBRN |
|---|---|
| Type: | FOM |
| Version: | v1.1.9 |
| Modification Date: | 2014-12-17 |
| Security Classification: | Unclassified |
| Purpose: | |
| Application Domain: | Training |
| Description: | The CBRN FOM module specifies objects and interactions necessary to enable CBRN modelling. |
| Use Limitation: | |
| Other: | |

## Primary author Point Of Contact

| Name: | Hazard Assessment Simulation and Prediction (HASP) Group |
|---|---|
| Organization: | Defence Science and Technology Laboratory (dstl) |
| Telephone: | +44 (0) 1980 613121 |
| Email: | centralenquiries@dstl.gov.uk |

## References

| Dependency | NETN-Base_v1.0 |
|---|---|
| Dependency | NETN-Physical_v1.1 |
| Dependency | RPR-Base_v2.0 |
| Dependency | RPR-Physical_v2.0 |

## Use History

| |
|---|
| v1.0.0 - Initial; object, interaction classes and datatypes. |
| v1.0.1 - Added semantics. |
| v1.0.2 - Added missing QuantityUInt32 simple data type, fixed IPEEnum values. |

| |
|---|
| v1.1.0 - Added new attributes to ATP45HazardArea, CBRN_Sensor and CBRN_Detector. Added parent interaction type to COLPROUpdate and DecontaminationStationUpdate. Re-used existing RPR and NETN simple data types. Renamed several data types and attribute names. |
| v1.1.1 - Added references to dependencies. |
| v1.1.2 - Added ValidityTime attribute to ATP45HazardArea. |
| v1.1.3 - Updated the description. |
| v1.1.4 - Added CBRN_PlatformUpdate interaction. |
| v1.1.5 - Updated semantics. |
| v1.1.6 - Standardised on Agent for agent name. Used correct naming convention for CBRN_FacilityUpdate. |
| v1.1.7 - Changed update conditions for certain attributes. Added UniqueID attributes to hazard contours. |
| v1.1.8 - Added TIC agents to AgentTypeEnum16. |
| v1.1.9 - Added POC information. |

## Dependencies

| |
|---|
| NETN-Aggregate_v1.0.4 |
| NETN-Physical_v1.1.2 |
| RPR-Aggregate_v2.0 |
| NETN-Base_v1.0.2 |
| RPR-Physical_v2.0 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *9.1. Object Classes*
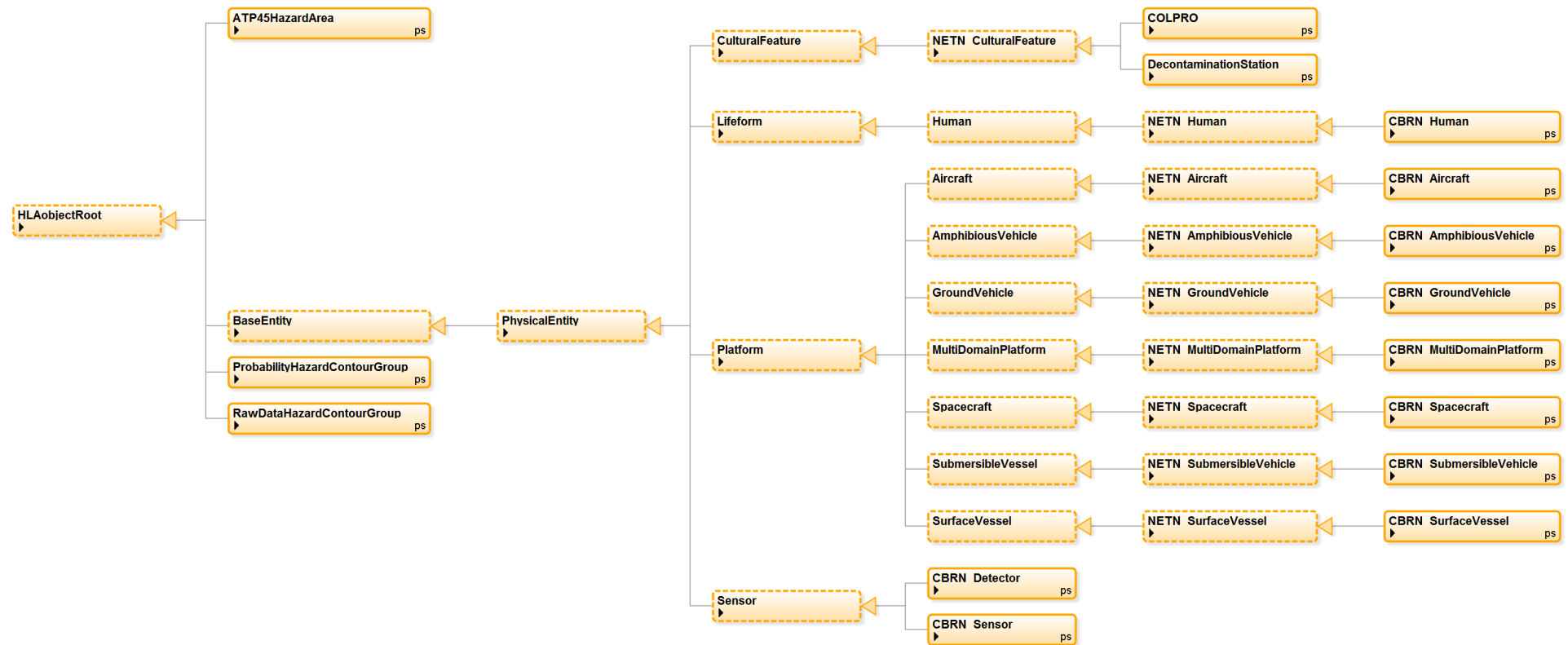


## 9.1.1. **ATP45HazardArea**

Full Name:    HLAobjectRoot.ATP45HazardArea

Sharing:      Publish/Subscribe

Semantics:    *Represents the footprint generated by a CBRN warning and reporting simulation. This follows the NATO ATP-45 doctrine to generate a hazard area.*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Time** | TimeSecInt64 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Simulation time at which this hazard area was generated.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **ValidityTime** | TimeSecondInteger32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Duration (in seconds) from the Time attribute that this hazard area prediction is valid.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **Locations** | ArrayOfWorldLocationStruct3 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Array of locations that define the hazard area* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **ATP45HazardAreaType** | ATP45HazardAreaTypeEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *This hazard area's type* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **AgentClass** | AgentClassEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *The agent class* | | | | | |

<table>
<tr><td rowspan="4"><b>UniqueID</b></td><td><b>Datatype</b></td><td><b>Sharing</b></td><td><b>Ownership</b></td><td><b>Order</b></td><td><b>Transportation</b></td><td><b>Dimensions</b></td></tr>
<tr><td>UuidArrayOfHLAbyte16</td><td>PS</td><td>DA</td><td>RO</td><td>HLAbestEffort</td><td></td></tr>
<tr><td><b>Update type</b></td><td colspan="5"><b>Update Condition</b></td></tr>
<tr><td>Static</td><td colspan="5"><i>N/A</i></td></tr>
</table>

| Semantics |
|---|
| *Unique representation of the area's ID.* |

| **HLAprivilegeToDeleteObject** *Inherited from HLAobjectRoot in MIM* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

### 9.1.2. **COLPRO**

Full Name:    HLAobjectRoot.BaseEntity.PhysicalEntity.CulturalFeature.NETN_CulturalFeature.COLPRO

Sharing:    Publish/Subscribe

Semantics:    *Represents a feature that provides Collective Protection (COLPRO) against a CBRN threat.*

Attributes:

| **NumberEntities** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | QuantityUInt32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *The number of entities that this COLPRO can handle.* | | | | | |

| **Protection** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | ArrayOfProtectionEffectivenessStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *The effectiveness that this COLPRO offers for each agent.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **UniqueID** | UuidArrayOfHLAbyte16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | NA | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | |
| | The unique identifier of the object. Required value. If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value. | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Callsign** | HLAunicodeString | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | NA | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | |
| | Name of the object. | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Status** | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | On change | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | |
| | If an instance shall be taken into account by federates. | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Activity** | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | On change | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | |
| | The activity of the object. | | | | | |

| EmbeddedUnitList | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | [ArrayOfUuid](#) | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| ExternalLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from CulturalFeature in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the cultural feature's external lights are on or not.* | | | | | |

| InternalHeatSourceOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from CulturalFeature in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the cultural feature's internal heat source is on or not.* | | | | | |

| InternalLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from CulturalFeature in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the cultural feature's internal lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| DamageState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FirePowerDisabled** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FlamesPresent** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| **ForceIdentifier** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasAmmunitionSupplyCap** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasFuelSupplyCap** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| HasRecoveryCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger 16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | | |

| Marking | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | MarkingStruct | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | | |

| PowerPlantOn | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | | |

| PropulsionSystemsData | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | | |

| RadarCrossSectionSignatureIndex | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | Integer16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **SmokePlumePresent**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |
| **TentDeployed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| **TrailingEffectsCode**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| **VectoringNozzleSystemData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| HLAprivilegeToDeleteObject | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| *Inherited from HLAobjectRoot in MIM* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 9.1.3. DecontaminationStation

Full Name:    HLAobjectRoot.BaseEntity.PhysicalEntity.CulturalFeature.NETN_CulturalFeature.DecontaminationStation

Sharing:      Publish/Subscribe

Semantics:    *Represents a feature that provides treatment for CBRN exposure.*

Attributes:

| NumberEntities | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | QuantityUInt32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *N/A* | | | | |
| | Semantics | | | | | |
| | *The number of entities that this decontamination station can handle.* | | | | | |
| DecontaminationPeriod | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | TimeSecondInteger32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *N/A* | | | | |
| | Semantics | | | | | |
| | *Duration in seconds it takes to decontaminate an entity.* | | | | | |
| Treatments | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfTreatmentStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The types of treatment that this decontamination station currently offers.* | | | | | |

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *NA* | | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | | | |
| | *The unique identifier of the object.* *Required value.* *If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | | | |

| Callsign | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | HLAunicodeString | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *NA* | | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | | | |
| | *Name of the object.* | | | | | | | |

| Status | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | ActiveStatusEnum8 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* | | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | | | |
| | *If an instance shall be taken into account by federates.* | | | | | | | |

| Activity | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Conditional | | *On change* | | | | | |
| *Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Semantics** | | | | | | | |
| | *The activity of the object.* | | | | | | | |

| EmbeddedUnitList<br><br>*Inherited from NETN_CulturalFeature in NETN-Physical_v1.1.2* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | ArrayOfUuid | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *List of unique IDs of on-board elements* | | | | | | |

| ExternalLightsOn<br><br>*Inherited from CulturalFeature in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the cultural feature's external lights are on or not.* | | | | | | |

| InternalHeatSourceOn<br><br>*Inherited from CulturalFeature in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the cultural feature's internal heat source is on or not.* | | | | | | |

| InternalLightsOn<br><br>*Inherited from CulturalFeature in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the cultural feature's internal lights are on or not.* | | | | | | |

| AcousticSignatureIndex<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | Integer16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| DamageState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FirePowerDisabled** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **FlamesPresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasAmmunitionSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasFuelSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasRecoveryCap** | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasRepairCap** | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **Immobilized** | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| **InfraredSignatureIndex** | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **IsConcealed** | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **LiveEntityMeasuredSpeed** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | VelocityDecimeterPerSecondInteger 16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |
| **Marking** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| **PowerPlantOn** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| **PropulsionSystemsData** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | PropulsionSystemDataStructLengthl essArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| **RadarCrossSectionSignatureIndex** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| **HLAprivilegeToDeleteObject** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| *Inherited from HLAobjectRoot in MIM* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 9.1.4. **CBRN_Human**

Full Name: HLAobjectRoot.BaseEntity.PhysicalEntity.Lifeform.Human.NETN_Human.CBRN_Human

Sharing: Publish/Subscribe

Semantics: *Extension of NETN_Human to provide CBRN modelling.*

Attributes:

| **Exposures** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfCBRNExposureStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Array of agents to which this entity has been exposed to. Defaults to an empty array.* | | | | | |
| **Treatments** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfTreatmentStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The types of treatment that this entity has used. Defaults to an empty array.* | | | | | |
| **TriageLevel** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | CBRNDamageEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Triage level of this entity. Defaults to Uninjured.* | | | | | |

| IPEType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IPETypeEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Type of IPE that the entity has donned. Defaults to None.* | | | | | |

| Callsign<br><br>*Inherited from NETN_Human in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |

| Status<br><br>*Inherited from NETN_Human in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ActiveStatusEnum8 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |

| Activity<br><br>*Inherited from NETN_Human in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| *Inherited from NETN_Human in NETN-Physical_v1.1.2* | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| FlashLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the lifeform's flash lights are on or not.* | | | | | |

| StanceCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | StanceCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The stance of the lifeform.* | | | | | |

| PrimaryWeaponState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | WeaponStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The state of the soldier's primary weapon system.* | | | | | |

| SecondaryWeaponState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | WeaponStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the soldier's secondary weapon system.* | | | | | |

| ComplianceState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ComplianceStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Lifeform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The compliance of the lifeform.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **CamouflageType**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| **DamageState**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| **EngineSmokeOn**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |
| **FirePowerDisabled**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| **FlamesPresent**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **HasAmmunitionSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **HasFuelSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **HasRecoveryCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **HasRepairCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Immobilized** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| _Inherited from PhysicalEntity in RPR-Physical_v2.0_ | Conditional | _On change_ | | | | |
| | **Semantics** | | | | | |
| | _Whether the entity is immobilized or not._ | | | | | |
| **InfraredSignatureIndex** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| _Inherited from PhysicalEntity in RPR-Physical_v2.0_ | Conditional | _On change_ | | | | |
| | **Semantics** | | | | | |
| | _Index used to obtain the infra-red signature state of the entity._ | | | | | |
| **IsConcealed** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| _Inherited from PhysicalEntity in RPR-Physical_v2.0_ | Conditional | _On change_ | | | | |
| | **Semantics** | | | | | |
| | _Whether the entity is concealed or not._ | | | | | |
| **LiveEntityMeasuredSpeed** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| _Inherited from PhysicalEntity in RPR-Physical_v2.0_ | Conditional | _On change_ | | | | |
| | **Semantics** | | | | | |
| | _The entity's own measurement of speed (e.g. air speed for aircraft)._ | | | | | |
| **Marking** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| _Inherited from PhysicalEntity in RPR-Physical_v2.0_ | Conditional | _On change_ | | | | |
| | **Semantics** | | | | | |
| | _A unique marking or combination of characters used to distinguish the entity from other entities._ | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| **TrailingEffectsCode** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | | |
| **VectoringNozzleSystemData** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | VectoringNozzleSystemDataStructLengthlessArray | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | | |
| **EntityType** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityTypeStruct | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | | *NA* | | | | |
| | **Semantics** | | | | | | |
| | *The category of the entity.* | | | | | | |
| **EntityIdentifier** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityIdentifierStruct | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | | *NA* | | | | |
| | **Semantics** | | | | | | |
| | *The unique identifier for the entity instance.* | | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| **IsPartOf** | **Semantics** | | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **Spatial** | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **RelativeSpatial** | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| **HLAprivilegeToDeleteObject** | Static | *NA* | | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

## 9.1.5. **CBRN_Aircraft**

Full Name: HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.Aircraft.NETN_Aircraft.CBRN_Aircraft

Sharing: Publish/Subscribe

Semantics: *Extension of NETN_Aircraft to provide CBRN modelling.*

Attributes:

| Contamination | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfAgentMassStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | |

| Callsign

*Inherited from NETN_Aircraft in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *N/A* | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |

| Status

*Inherited from NETN_Aircraft in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |

| Activity

*Inherited from NETN_Aircraft in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |

| EmbeddedUnitList

*Inherited from NETN_Aircraft in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements.* | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| *Inherited from NETN_Aircraft in NETN-Physical_v1.1.2* | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| AfterburnerOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| **RunningLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |
| **SpotLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |
| **TailLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |
| **AcousticSignatureIndex** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| **AlternateEntityType** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| **ArticulatedParametersArray** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | | |

| **CamouflageType** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | CamouflageEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The type of camouflage in use (if any).* | | | | | | |

| **DamageState** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The state of damage of the entity.* | | | | | | |

| **EngineSmokeOn** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | | |

| **FirePowerDisabled** | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | | |

| FlamesPresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| ForceIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| HasAmmunitionSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| HasFuelSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| HasRecoveryCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Marking** | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| **PowerPlantOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| **PropulsionSystemsData** | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| **RadarCrossSectionSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| **SmokePlumePresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| **TentDeployed** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| **TrailingEffectsCode** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| **VectoringNozzleSystemData** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType** *Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier** *Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 9.1.6. **CBRN_AmphibiousVehicle**

Full Name:   HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.AmphibiousVehicle.NETN_AmphibiousVehicle.CBRN_AmphibiousVehicle

Sharing:      Publish/Subscribe

Semantics:   *Extension of NETN_AmphibiousVehicle to provide CBRN modelling.*

Attributes:

| Contamination | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | ArrayOfAgentMassStruct | | PS | DA | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | | | |

| Callsign<br><br>*Inherited from NETN_AmphibiousVehicle in NETN-Physical_v1.1.2* | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | HLAunicodeString | | PS | | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Static | | *N/A* | | | | | |
| | Semantics | | | | | | | |
| | *The name of the object.* | | | | | | | |

| Status<br><br>*Inherited from NETN_AmphibiousVehicle in NETN-Physical_v1.1.2* | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | ActiveStatusEnum8 | | PS | DA | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | | | |

| Activity<br><br>*Inherited from NETN_AmphibiousVehicle in NETN-Physical_v1.1.2* | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | | PS | DA | RO | HLAbestEffort | | |
| | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *The activity of the object.* | | | | | | | |

| **EmbeddedUnitList**<br><br>*Inherited from NETN_AmphibiousVehicle in NETN-Physical_v1.1.2* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| **UniqueID**<br><br>*Inherited from NETN_AmphibiousVehicle in NETN-Physical_v1.1.2* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| **AfterburnerOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| **AntiCollisionLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |
| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |
| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |
| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |
| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RampDeployed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RunningLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **SpotLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TailLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **AcousticSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| DamageState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of damage of the entity.* | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FirePowerDisabled** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlamesPresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasAmmunitionSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasFuelSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasRecoveryCap** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasRepairCap** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Immobilized** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **InfraredSignatureIndex** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsConcealed** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **LiveEntityMeasuredSpeed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | VelocityDecimeterPerSecondInteger 16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Marking**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PowerPlantOn**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PropulsionSystemsData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | PropulsionSystemDataStructLengthl essArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **RadarCrossSectionSignatureIndex**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| HLAprivilegeToDeleteObject | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| *Inherited from HLAobjectRoot in MIM* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 9.1.7. **CBRN_GroundVehicle**

Full Name:   HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.GroundVehicle.NETN_GroundVehicle.CBRN_GroundVehicle

Sharing:      Publish/Subscribe

Semantics:   *Extension of NETN_GroundVehicle to provide CBRN modelling.*

Attributes:

| Contamination | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfAgentMassStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | |
| **Callsign** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from NETN_GroundVehicle in NETN-Physical_v1.1.2* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The name of the object.* | | | | | |
| **Status** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from NETN_GroundVehicle in NETN-Physical_v1.1.2* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |

| Activity *Inherited from NETN_GroundVehicle in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The activity of the object.* | | | | | |

| EmbeddedUnitList *Inherited from NETN_GroundVehicle in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID *Inherited from NETN_GroundVehicle in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The unique identifier of the object.* *Required value.* *If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| AfterburnerOn *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **AntiCollisionLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **BlackOutBrakeLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **BlackOutLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **BrakeLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **FormationLightsOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| **AcousticSignatureIndex** | Integer16 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | | |
| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **AlternateEntityType** | EntityTypeStruct | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | | *NA* | | | | |
| | **Semantics** | | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | | |
| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **ArticulatedParametersArray** | ArticulatedParameterStructLengthlessArray | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | | |
| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **CamouflageType** | CamouflageEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The type of camouflage in use (if any).* | | | | | | |
| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **DamageState** | DamageStatusEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The state of damage of the entity.* | | | | | | |

| EngineSmokeOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| FirePowerDisabled | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| FlamesPresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| ForceIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| HasAmmunitionSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasFuelSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| **HasRecoveryCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |
| **HasRepairCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |
| **Immobilized**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |
| **InfraredSignatureIndex**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsConcealed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **LiveEntityMeasuredSpeed** | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Marking** | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PowerPlantOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PropulsionSystemsData** | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **RadarCrossSectionSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **SmokePlumePresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **TentDeployed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **TrailingEffectsCode** | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **VectoringNozzleSystemData** | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|---|
| **EntityType**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | EntityTypeStruct | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Static | | *NA* | | | | |
| | Semantics | | | | | | |
| | *The category of the entity.* | | | | | | |
| **EntityIdentifier**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityIdentifierStruct | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Static | | *NA* | | | | |
| | Semantics | | | | | | |
| | *The unique identifier for the entity instance.* | | | | | | |
| **IsPartOf**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
| | IsPartOfStruct | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | *On change* | | | | |
| | Semantics | | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | | |
| **Spatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | | |
| | Conditional | | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | Semantics | | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | | |

| **RelativeSpatial**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | Semantics | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 9.1.8. CBRN_MultiDomainPlatform

Full Name:   HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.MultiDomainPlatform.NETN_MultiDomainPlatform.CBRN _MultiDomainPlatform

Sharing:   Publish/Subscribe

Semantics:   *Extension of NETN_MultiDomainPlatform to provide CBRN modelling.*

Attributes:

| **Contamination** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfAgentMassStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | |
| **Callsign**<br><br>*Inherited from NETN_MultiDomainPlatform in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The name of the object.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Status** <br><br> *Inherited from NETN_MultiDomainPlatform in NETN-Physical_v1.1.2* | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Activity** <br><br> *Inherited from NETN_MultiDomainPlatform in NETN-Physical_v1.1.2* | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EmbeddedUnitList** <br><br> *Inherited from NETN_MultiDomainPlatform in NETN-Physical_v1.1.2* | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **UniqueID** <br><br> *Inherited from NETN_MultiDomainPlatform in NETN-Physical_v1.1.2* | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.* <br> *Required value.* <br> *If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| AfterburnerOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | | |
| HatchState<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HatchStateEnum32 | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | | |
| HeadLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | | |
| InteriorLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | | |
| LandingLightsOn<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn  *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex  *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType  *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Static | | *NA* | | | |
| | Semantics | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray  *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType  *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EngineSmokeOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **FirePowerDisabled** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **FlamesPresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasAmmunitionSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasFuelSupplyCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasRecoveryCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **HasRepairCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Immobilized** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| **PropulsionSystemsData** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| **RadarCrossSectionSignatureIndex** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| **SmokePlumePresent** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| **TentDeployed** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| **TrailingEffectsCode** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |
| **IsPartOf** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| **Spatial** *Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| **RelativeSpatial** *Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| **HLAprivilegeToDeleteObject** *Inherited from HLAobjectRoot in MIM* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 9.1.9. **CBRN_Spacecraft**

Full Name:     HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.Spacecraft.NETN_Spacecraft.CBRN_Spacecraft

Sharing:        Publish/Subscribe

Semantics:    *Extension of NETN_Spacecraft to provide CBRN modelling.*

Attributes:

| **Contamination** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | ArrayOfAgentMassStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | |

| **Callsign** | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | HLAunicodeString | | PS | | RO | HLAbestEffort | | |
| *Inherited from NETN_Spacecraft in NETN-Physical_v1.1.2* | Update type | | Update Condition | | | | | |
| | Static | | NA | | | | | |
| | Semantics | | | | | | | |
| | *The name of the object.* | | | | | | | |

| **Status** | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | ActiveStatusEnum8 | | PS | DA | RO | HLAbestEffort | | |
| *Inherited from NETN_Spacecraft in NETN-Physical_v1.1.2* | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | | | |

| **Activity** | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | AggregateMissionEnum16 | | PS | DA | RO | HLAbestEffort | | |
| *Inherited from NETN_Spacecraft in NETN-Physical_v1.1.2* | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *The activity of the object.* | | | | | | | |

| **EmbeddedUnitList** | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | ArrayOfUuid | | PS | DA | RO | HLAbestEffort | | |
| *Inherited from NETN_Spacecraft in NETN-Physical_v1.1.2* | Update type | | Update Condition | | | | | |
| | Conditional | | *On change* | | | | | |
| | Semantics | | | | | | | |
| | *List of unique IDs of on-board elements* | | | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **UniqueID**<br><br>*Inherited from NETN_Spacecraft in NETN-Physical_v1.1.2* | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |
| **AfterburnerOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |
| **AntiCollisionLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |
| **BlackOutBrakeLightsOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |

| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |

| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |

| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| **ArticulatedParametersArray** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| **CamouflageType** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| **DamageState** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| **EngineSmokeOn** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| **FirePowerDisabled** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FlamesPresent** | Update type | | Update Condition | | | |
| | Conditional | | On change | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| **ForceIdentifier** | Update type | | Update Condition | | | |
| | Conditional | | On change | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasAmmunitionSupplyCap** | Update type | | Update Condition | | | |
| | Conditional | | On change | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasFuelSupplyCap** | Update type | | Update Condition | | | |
| | Conditional | | On change | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasRecoveryCap** | Update type | | Update Condition | | | |
| | Conditional | | On change | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Marking** | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PowerPlantOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **PropulsionSystemsData** | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| **RadarCrossSectionSignatureIndex** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **SmokePlumePresent** | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TentDeployed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **TrailingEffectsCode** | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **VectoringNozzleSystemData** | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **EntityType** | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **EntityIdentifier** | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| **IsPartOf** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| **Spatial** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| **RelativeSpatial** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| **HLAprivilegeToDeleteObject** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

## 9.1.10. **CBRN_SubmersibleVehicle**

Full Name:   HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.SubmersibleVessel.NETN_SubmersibleVehicle.CBRN_Sub
            mersibleVehicle

Sharing:     Publish/Subscribe

Semantics:     *Extension of NETN_SubmersibleVehicle to provide CBRN modelling.*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Contamination** | ArrayOfAgentMassStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Callsign** | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from NETN_SubmersibleVehicle in NETN-Physical_v1.1.2* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The name of the object.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Status** | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from NETN_SubmersibleVehicle in NETN-Physical_v1.1.2* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **Activity** | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from NETN_SubmersibleVehicle in NETN-Physical_v1.1.2* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |

| EmbeddedUnitList | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from NETN_SubmersibleVehicle in NETN-Physical_v1.1.2* | Semantics | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| *Inherited from NETN_SubmersibleVehicle in NETN-Physical_v1.1.2* | Semantics | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |

| AfterburnerOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Semantics | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HeadLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |
| **InteriorLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |
| **LandingLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |
| **LauncherRaised** *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |
| **NavigationLightsOn** *Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **AlternateEntityType** | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **ArticulatedParametersArray** | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **CamouflageType** | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| **EngineSmokeOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FirePowerDisabled**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| **FlamesPresent**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| **ForceIdentifier**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| **HasAmmunitionSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| **HasFuelSupplyCap**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasRecoveryCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **HasRepairCap** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Immobilized** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **InfraredSignatureIndex** | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **IsConcealed** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| **LiveEntityMeasuredSpeed** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger 16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| **Marking** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| **PowerPlantOn** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| **PropulsionSystemsData** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthl essArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| **RadarCrossSectionSignatureIndex** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **SmokePlumePresent** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **TentDeployed** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| **TrailingEffectsCode** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| **VectoringNozzleSystemData** | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| **EntityType** | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| Spatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |

| **HLAprivilegeToDeleteObject** *Inherited from HLAobjectRoot in MIM* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 9.1.11. **CBRN_SurfaceVessel**

Full Name:   HLAobjectRoot.BaseEntity.PhysicalEntity.Platform.SurfaceVessel.NETN_SurfaceVessel.CBRN_SurfaceVessel

Sharing:      Publish/Subscribe

Semantics:   *Extension of NETN_SurfaceVessel to provide CBRN modelling.*

Attributes:

| **Contamination** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfAgentMassStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *CBRN hazardous agent inside vehicle due to embedded units.* | | | | | |
| **Callsign** *Inherited from NETN_SurfaceVessel in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAunicodeString | PS | | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | *NA* | | | | |
| | Semantics | | | | | |
| | *The name of the object.* | | | | | |
| **Status** *Inherited from NETN_SurfaceVessel in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ActiveStatusEnum8 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *If an instance shall be taken into account by federates* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **Activity**<br><br>*Inherited from NETN_SurfaceVessel in NETN-Physical_v1.1.2* | AggregateMissionEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The activity of the object.* | | | | | |
| **EmbeddedUnitList**<br><br>*Inherited from NETN_SurfaceVessel in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ArrayOfUuid | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *List of unique IDs of on-board elements* | | | | | |
| **UniqueID**<br><br>*Inherited from NETN_SurfaceVessel in NETN-Physical_v1.1.2* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | UuidArrayOfHLAbyte16 | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier of the object.*<br>*Required value.*<br>*If not assigned by the ORBAT specification or similar, shall a value be assigned, either randomized or generated from the Marking or EntityIdentifier attribute value.* | | | | | |
| **AfterburnerOn**<br><br>*Inherited from Platform in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's afterburner is on or not.* | | | | | |

| AntiCollisionLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's anti-collision lights are on or not.* | | | | | |

| BlackOutBrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out brake lights are on or not.* | | | | | |

| BlackOutLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's black out lights are on or not.* | | | | | |

| BrakeLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's brake lights are on or not.* | | | | | |

| FormationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's formation lights are on or not.* | | | | | |

| HatchState | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HatchStateEnum32 | PS | DA | RO | HLAbestEffort | |
| *Inherited from Platform in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The state of the entity's (main) hatch.* | | | | | |
| HeadLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from Platform in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's headlights are on or not.* | | | | | |
| InteriorLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from Platform in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's internal lights are on or not.* | | | | | |
| LandingLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from Platform in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's landing lights are on or not.* | | | | | |
| LauncherRaised | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| *Inherited from Platform in RPR-Physical_v2.0* | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's weapon launcher is in the raised position.* | | | | | |

| NavigationLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's navigation lights are on or not.* | | | | | |

| RampDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed a ramp or not.* | | | | | |

| RunningLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's running lights are on or not.* | | | | | |

| SpotLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's spotlights are on or not.* | | | | | |

| TailLightsOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from Platform in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's tail lights are on or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **AcousticSignatureIndex** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| **AlternateEntityType** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |
| **ArticulatedParametersArray** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |
| **CamouflageType** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| **DamageState** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **EngineSmokeOn** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FirePowerDisabled** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FlamesPresent** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| **ForceIdentifier** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasAmmunitionSupplyCap** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| HasFuelSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| HasRecoveryCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |
| **IsPartOf** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| **Spatial** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |

| RelativeSpatial *Inherited from BaseEntity in RPR-Base_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| HLAprivilegeToDeleteObject *Inherited from HLAobjectRoot in MIM* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 9.1.12. **CBRN_Detector**

Full Name: HLAobjectRoot.BaseEntity.PhysicalEntity.Sensor.CBRN_Detector

Sharing: Publish/Subscribe

Semantics: *Represents a CBRN detector. This object is used to pass information to a CBRN federate, which will model the detector internally and publish a CBRN_DetectorAlarm.*

Attributes:

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *Unique representation of the detector's ID.* | | | | | |
| ProcessingTime | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | TimeSecondInteger32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *Duration (in seconds) between the detector being exposed to a concentration of agent above its threshold and the detector raising an alarm.* | | | | | |

| AveragingTime | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TimeSecondInteger32 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | N/A | | | | |
| | Semantics | | | | | |
| | Duration (in seconds) over which the detector will collect samples. | | | | | |

| DetectableAgents | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfAgentConcentrationStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Static | N/A | | | | |
| | Semantics | | | | | |
| | Array of detectable agents and their thresholds. | | | | | |

| Alarm | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CBRNAlarmStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Data representing the alarm of this detector. Defaults to no alarm if the attribute is not set. | | | | | |

| AntennaRaised<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Whether the sensor/emitter's antenna is raised or not. | | | | | |

| BlackoutLightsOn<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | On change | | | | |
| | Semantics | | | | | |
| | Whether the sensor/emitter's blackout lights are on or not. | | | | | |

| LightsOn<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter's lights are on or not.* | | | | | |
| InteriorLightsOn<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter's interior lights are on or not.* | | | | | |
| MissionKill<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter has sustained damage that will prevent it carrying out its mission or not (e.g. damaged antenna).* | | | | | |
| AcousticSignatureIndex<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |
| AlternateEntityType<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ArticulatedParametersArray** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |
| **CamouflageType** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |
| **DamageState** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| **EngineSmokeOn** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |
| **FirePowerDisabled** *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **FlamesPresent** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| **ForceIdentifier** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasAmmunitionSupplyCap** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasFuelSupplyCap** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| **HasRecoveryCap** | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Semantics** | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **TentDeployed**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |
| **TrailingEffectsCode**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |
| **VectoringNozzleSystemData**<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |
| **EntityType**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |
| **EntityIdentifier**<br><br>*Inherited from BaseEntity in RPR-Base_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **IsPartOf** | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **Spatial** | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| **RelativeSpatial** | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| **HLAprivilegeToDeleteObject** | Static | *NA* | | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

## 9.1.13. **CBRN_Sensor**

Full Name:     HLAobjectRoot.BaseEntity.PhysicalEntity.Sensor.CBRN_Sensor

Sharing:     Publish/Subscribe

Semantics:    *Represents a CBRN sensor. This object is used to pass information to a CBRN federate, which will return sensor readings by publishing CBRN_SensorUpdate interactions.*

Attributes:

| UniqueID | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
|---|---|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *N/A* | | | | | |
| | **Semantics** | | | | | | | |
| | *Unique representation of the sensor's ID.* | | | | | | | |
| UpdateFrequency | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
| | TimeSecondInteger32 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *N/A* | | | | | |
| | **Semantics** | | | | | | | |
| | *Duration (in seconds) that this sensor would like between updated readings.* | | | | | | | |
| AveragingTime | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
| | TimeSecondInteger32 | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *N/A* | | | | | |
| | **Semantics** | | | | | | | |
| | *Duration (in seconds) over which the sensor will collect samples.* | | | | | | | |
| DetectableAgents | Datatype | | Sharing | Ownership | Order | Transportation | | Dimensions |
| | ArrayOfAgentTypeEnum | | PS | DA | RO | HLAbestEffort | | |
| | **Update type** | | **Update Condition** | | | | | |
| | Static | | *N/A* | | | | | |
| | **Semantics** | | | | | | | |
| | *Array of agents that this sensor wishes to detect.* | | | | | | | |

| SensorReadings | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfCBRNSensorReadingStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Latest sensor readings. Defaults to no readings if this attribute is not set.* | | | | | |
| **AntennaRaised**<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter's antenna is raised or not.* | | | | | |
| **BlackoutLightsOn**<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter's blackout lights are on or not.* | | | | | |
| **LightsOn**<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter's lights are on or not.* | | | | | |
| **InteriorLightsOn**<br><br>*Inherited from Sensor in RPR-Physical_v2.0* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter's interior lights are on or not.* | | | | | |

| MissionKill | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from Sensor in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the sensor/emitter has sustained damage that will prevent it carrying out its mission or not (e.g. damaged antenna).* | | | | | |

| AcousticSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Index used to obtain the acoustics (sound through air) signature state of the entity.* | | | | | |

| AlternateEntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of entity to be used when viewed by entities on the 'opposite' side.* | | | | | |

| ArticulatedParametersArray | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArticulatedParameterStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Identification of the visible parts, and their states, of the entity which are capable of independent motion.* | | | | | |

| CamouflageType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | CamouflageEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The type of camouflage in use (if any).* | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **DamageState** | DamageStatusEnum32 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The state of damage of the entity.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **EngineSmokeOn** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's engine is generating smoke or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FirePowerDisabled** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity's main weapon system has been disabled or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **FlamesPresent** | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Whether the entity is on fire (with visible flames) or not.* | | | | | |
| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **ForceIdentifier** | ForceIdentifierEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The identification of the force that the entity belongs to.* | | | | | |

| HasAmmunitionSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with ammunition.* | | | | | |

| HasFuelSupplyCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to supply other entities with fuel or not.* | | | | | |

| HasRecoveryCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to recover other entities or not.* | | | | | |

| HasRepairCap | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity has the capability to repair other entities or not.* | | | | | |

| Immobilized | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is immobilized or not.* | | | | | |

| InfraredSignatureIndex<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Index used to obtain the infra-red signature state of the entity.* | | | | | |

| IsConcealed<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity is concealed or not.* | | | | | |

| LiveEntityMeasuredSpeed<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VelocityDecimeterPerSecondInteger16 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *The entity's own measurement of speed (e.g. air speed for aircraft).* | | | | | |

| Marking<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | MarkingStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *A unique marking or combination of characters used to distinguish the entity from other entities.* | | | | | |

| PowerPlantOn<br><br>*Inherited from PhysicalEntity in RPR-Physical_v2.0* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Whether the entity's power plant is on or not.* | | | | | |

| PropulsionSystemsData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | PropulsionSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The basic operating data of the propulsion systems aboard the entity.* | | | | | |

| RadarCrossSectionSignatureIndex | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | Integer16 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Index used to obtain the radar cross section signature state of the entity.* | | | | | |

| SmokePlumePresent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity is generating smoke or not (intentional or unintentional).* | | | | | |

| TentDeployed | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | RPRboolean | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *Whether the entity has deployed tent or not.* | | | | | |

| TrailingEffectsCode | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | TrailingEffectsCodeEnum32 | PS | DA | RO | HLAbestEffort | |
| | Update type | | Update Condition | | | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | Conditional | | *On change* | | | |
| | Semantics | | | | | |
| | *The type and size of any trail that the entity is making.* | | | | | |

| VectoringNozzleSystemData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | VectoringNozzleSystemDataStructLengthlessArray | PS | DA | RO | HLAbestEffort | |
| *Inherited from PhysicalEntity in RPR-Physical_v2.0* | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *The basic operational data for the vectoring nozzle systems aboard the entity.* | | | | | |

| EntityType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityTypeStruct | PS | DA | RO | HLAbestEffort | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The category of the entity.* | | | | | |

| EntityIdentifier | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | EntityIdentifierStruct | PS | DA | RO | HLAbestEffort | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *The unique identifier for the entity instance.* | | | | | |

| IsPartOf | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | IsPartOfStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | **Semantics** | | | | | |
| | *Defines if the entity if a constituent part of another entity (denoted the host entity). If the entity is a constituent part of another entity then the HostEntityIdentifier shall be set to the EntityIdentifier of the host entity and the HostRTIObjectIdentifier shall be set to the RTI object instance ID of the host entity. If the entity is not a constituent part of another entity then the HostEntityIdentifier shall be set to 0.0.0 and the HostRTIObjectIdentifier shall be set to the empty string.* | | | | | |

| **Spatial** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | Semantics | | | | | |
| | *Spatial state stored in one variant record attribute.* | | | | | |
| **RelativeSpatial** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | SpatialVariantStruct | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| *Inherited from BaseEntity in RPR-Base_v2.0* | Conditional | *On change* RPRnoteBase10 RPRnoteBase11 RPRnoteBase12 RPRnoteBase13 RPRnoteBase14 | | | | |
| | Semantics | | | | | |
| | *Relative spatial state stored in one variant record attribute.* | | | | | |
| **HLAprivilegeToDeleteObject** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | Update type | Update Condition | | | | |
| *Inherited from HLAobjectRoot in MIM* | Static | *NA* | | | | |
| | Semantics | | | | | |
| | | | | | | |

## 9.1.14. **ProbabilityHazardContourGroup**

Full Name:  HLAobjectRoot.ProbabilityHazardContourGroup

Sharing:  Publish/Subscribe

Semantics:  *Represents the footprint covered by a CBRN hazard. This object covers the agent-specific effects which would be the output from a casualty model.*

Attributes:

| **Time** | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
| | TimeSecInt64 | PS | DA | RO | HLAbestEffort | |
| | Update type | Update Condition | | | | |
| | Conditional | *On change* | | | | |
| | Semantics | | | | | |
| | *Simulation time at which this contour group was generated.* | | | | | |

| Agent | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | AgentTypeEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *Agent reflected in this contour.* | | | | | |

| ExposureType | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ExposureTypeEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | *Type of exposure.* | | | | | |

| Contours | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfProbabilityHazardContourStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Array of contours. These should be ordered in a sequence of ascending PercentProbabilityLevel.* | | | | | |

| UniqueID | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | UuidArrayOfHLAbyte16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *Unique representation of the contour's ID.* | | | | | |

| HLAprivilegeToDeleteObject *Inherited from HLAobjectRoot in MIM* | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 9.1.15. **RawDataHazardContourGroup**

Full Name: HLAobjectRoot.RawDataHazardContourGroup

Sharing: Publish/Subscribe

Semantics: *Represents the footprint covered by a CBRN hazard. This object covers the raw data which would be the output from a dispersion model.*

Attributes:

| Time | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|------|----------|---------|-----------|-------|----------------|------------|
| | TimeSecInt64 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Simulation time at which this contour group was generated.* | | | | | |
| **Agent** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | AgentTypeEnum16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| | **Semantics** | | | | | |
| | *Agent reflected in this contour.* | | | | | |
| **HazardType** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HazardTypeEnum8 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| | **Semantics** | | | | | |
| | *Type of hazard.* | | | | | |
| **Contours** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | ArrayOfRawDataHazardContourStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | |
| | Conditional | | *On change* | | | |
| | **Semantics** | | | | | |
| | *Array of contours. These should be ordered in a sequence of ascending ExposureLevel.* | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **UniqueID** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | UuidArrayOfHLAbyte16 | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *N/A* | | | | |
| | **Semantics** | | | | | |
| | *Unique representation of the contour's ID.* | | | | | |
| **HLAprivilegeToDeleteObject**<br><br>*Inherited from HLAobjectRoot in MIM* | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 9.2. Interaction Classes



**CBRN  Casualty**
ro ps

**CBRN  DetectorAlarm**
ro ps

**CBRN  PlatformUpdate**
ro ps

**CBRN  Release**
ro ps

**HLAinteractionRoot**

**CBRN  SensorUpdate**
ro ps

**COLPROUpdate**
ro ps

**CBRN  FacilityUpdate**
ro

**DecontaminationStationUpdate**
ro ps

**IPECommand**
ro ps

**CBRN  TreatmentCommand**
ro ps
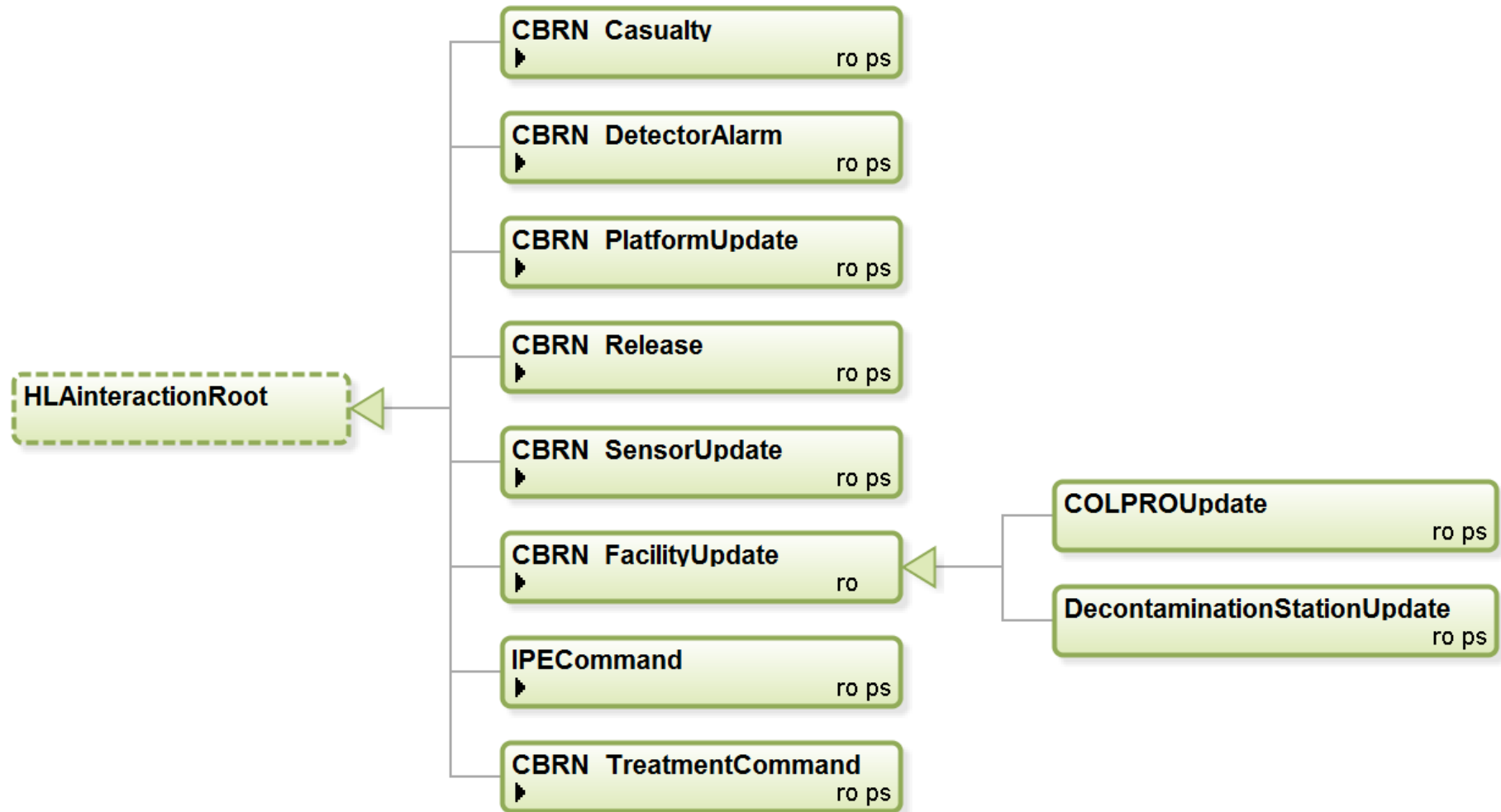
### 9.2.1. **HLAinteractionRoot**

Full Name:          HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:        -

### 9.2.2. **CBRN_Casualty**

Full Name:          HLAinteractionRoot.CBRN_Casualty

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:        *Represents a CBRN casualty caused by exposure. This is for use with federates that cannot support the TriageLevel attribute in CBRN_Human.*

Parameters:

| Name | Datatype | Semantics |
| --- | --- | --- |
| **UniqueID** | UuidArrayOfHLAbyte16 | *Unique representation of the entity's ID.* |
| **TriageLevel** | CBRNDamageEnum8 | *Triage level of this entity.* |
| **Exposures** | ArrayOfCBRNExposureStruct | *Array of agents to which this unit has been exposed.* |

### 9.2.3. **CBRN_DetectorAlarm**

Full Name:          HLAinteractionRoot.CBRN_DetectorAlarm

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:        *Represents the alarm trigger of a previously registered CBRN detector.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **DetectorID** | UuidArrayOfHLAbyte16 | *Unique representation of the detector's ID.* |
| **Alarm** | CBRNAlarmStruct | *Details of the alarm.* |

## 9.2.4. **CBRN_PlatformUpdate**

Full Name: HLAinteractionRoot.CBRN_PlatformUpdate

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Represents an update to the contaminating mass inside a vehicle due to embedded entities.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **PlatformID** | UuidArrayOfHLAbyte16 | *The unique ID of the platform.* |
| **Contamination** | ArrayOfAgentMassStruct | *New state of CBRN hazardous agent inside vehicle due to embedded units.* |

## 9.2.5. **CBRN_Release**

Full Name: HLAinteractionRoot.CBRN_Release

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Communicates information associated with the release of hazardous agent.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **UniqueID** | UuidArrayOfHLAbyte16 | *Unique representation of the release's ID.* |
| **Agent** | AgentTypeEnum16 | *The released agent.* |
| **Location** | WorldLocationStruct | *Initial location of the release in the geocentric location system.* |
| **Mass** | MassKilogramFloat32 | *Total released mass in kg.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Duration** | TimeSecondInteger32 | *Duration in seconds over which the release takes place.* |
| **ReleaseSize** | ReleaseSizeStruct | *Includes SourceSize (sigmas), mean and variance of released particulates.* |
| **ReleaseDynamics** | ReleaseDynamicsStruct | *Temperature and buoyancy of released mass.* |
| **ReleaseVelocity** | VelocityVectorStruct | *Velocity of the source term.* |

### 9.2.6. **CBRN_SensorUpdate**

Full Name: HLAinteractionRoot.CBRN_SensorUpdate

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Sends information about the current state of a previously registered CBRN sensor.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Time** | TimeSecInt64 | *Time of this sensor update* |
| **SensorID** | UuidArrayOfHLAbyte16 | *Unique representation of the sensor's ID.* |
| **Readings** | ArrayOfAgentConcentrationStruct | *Readings for this sensor* |

### 9.2.7. **CBRN_FacilityUpdate**

Full Name: HLAinteractionRoot.CBRN_FacilityUpdate

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Represents an order for the specified entities to enter or leave the CBRN facility.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **FacilityID** | UuidArrayOfHLAbyte16 | *The unique ID of the CBRN facility.* |
| **EmbeddedUnitList** | ArrayOfUuid | *List of unique IDs of the entities who will enter or exit the CBRN facility.* |

| Name | Datatype | Semantics |
|---|---|---|
| **IsEntry** | HLAboolean | *Determines whether the entities are entering (IsEntry = true) or exiting (IsEntry = false) the CBRN facility.* |

### 9.2.8. **COLPROUpdate**

Full Name: HLAinteractionRoot.CBRN_FacilityUpdate.COLPROUpdate

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Represents an order for the specified entities to enter or leave the COLPRO.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **FacilityID** <br> *Inherited from CBRN_FacilityUpdate in CBRN_v1.1.9* | UuidArrayOfHLAbyte16 | *The unique ID of the CBRN facility.* |
| **EmbeddedUnitList** <br> *Inherited from CBRN_FacilityUpdate in CBRN_v1.1.9* | ArrayOfUuid | *List of unique IDs of the entities who will enter or exit the CBRN facility.* |
| **IsEntry** <br> *Inherited from CBRN_FacilityUpdate in CBRN_v1.1.9* | HLAboolean | *Determines whether the entities are entering (IsEntry = true) or exiting (IsEntry = false) the CBRN facility.* |

### 9.2.9. **DecontaminationStationUpdate**

Full Name: HLAinteractionRoot.CBRN_FacilityUpdate.DecontaminationStationUpdate

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Represents an order for the specified entities to enter or leave the decontamination station.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **FacilityID** <br> *Inherited from CBRN_FacilityUpdate in CBRN_v1.1.9* | UuidArrayOfHLAbyte16 | *The unique ID of the CBRN facility.* |

| Name | Datatype | Semantics |
|---|---|---|
| **EmbeddedUnitList**<br><br>*Inherited from CBRN_FacilityUpdate in CBRN_v1.1.9* | ArrayOfUuid | *List of unique IDs of the entities who will enter or exit the CBRN facility.* |
| **IsEntry**<br><br>*Inherited from CBRN_FacilityUpdate in CBRN_v1.1.9* | HLAboolean | *Determines whether the entities are entering (IsEntry = true) or exiting (IsEntry = false) the CBRN facility.* |

## 9.2.10. **IPECommand**

Full Name:            HLAinteractionRoot.IPECommand

Sharing:              Publish/Subscribe

Transportation type: HLAreliable

Order:                Receive

Dimensions:

Semantics:            *Represents an order for the specified entities to don protective equipment.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **UnitList** | ArrayOfUuid | *List of unique IDs of the entities who will don IPE.* |
| **IPEType** | IPETypeEnum8 | *Type of IPE that the entities will don.* |

## 9.2.11. **CBRN_TreatmentCommand**

Full Name:            HLAinteractionRoot.CBRN_TreatmentCommand

Sharing:              Publish/Subscribe

Transportation type: HLAreliable

Order:                Receive

Dimensions:

Semantics:            *Represents an order for the specified entities to receive the list of treatments.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **UnitList** | ArrayOfUuid | *List of unique IDs of the entities who will receive the treatment.* |
| **Treatments** | TreatmentStruct | *Type of treatment to be applied to the entities.* |

## *9.3. Datatypes*

## *9.3.1. Simple Datatypes*

**ConcentrationKgPerMeterCubedFloat32**

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | Kg Per Meter Cubed |
| Resolution: | NA |
| Accuracy: | perfect |
| Semantics: | Concentration in SI units. |

**DensityRatioFloat32**

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | NA |
| Resolution: | NA |
| Accuracy: | perfect |
| Semantics: | Ratio of density of two materials in range [0, 1]. |

**DosageKgSecondPerMeterCubedFloat32**

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | Kg Second Per Meter Cubed |
| Resolution: | NA |
| Accuracy: | perfect |
| Semantics: | Dosage in SI units. |

**ExposureFloat32**

| | |
|---|---|
| Representation: | HLAfloat32BE |
| Units: | NA |
| Resolution: | NA |
| Accuracy: | perfect |

Semantics:       Data type for exposure.

## MeanMetersFloat32

Representation:   HLAfloat32BE
Units:           meters
Resolution:      NA
Accuracy:        perfect
Semantics:       Mean of a Gaussian distribution, based on SI unit meter, unit symbol m.

## QuantityUInt32

Representation:   RPRunsignedInteger32BE
Units:           NA
Resolution:      NA
Accuracy:        perfect
Semantics:       Quantity in range [0, 2^32-1]

## VarianceMetersSquaredFloat32

Representation:   HLAfloat32BE
Units:           meters squared
Resolution:      NA
Accuracy:        perfect
Semantics:       Variance of a Gaussian distribution, based on SI unit meter squared, unit symbol m2.

## *9.3.2. Enumerated Datatypes*

### AgentClassEnum8

Representation: HLAoctet

Semantics: *Class of Agent for an ATP-45 Hazard Area.*

| Enumerator | Value |
|------------|-------|
| Chemical | 0 |
| Biological | 1 |
| Radiological | 2 |
| Nuclear | 3 |

### AgentTypeEnum16

Representation: HLAinteger16BE

Semantics: *Type of CBRN hazardous agent.*

| Enumerator | Value |
|------------|-------|
| Chemical | 1000 |
| Choking | 1100 |
| CG | 1102 |
| Persistent_Nerve | 1200 |
| GA | 1201 |
| GB | 1202 |
| GD | 1203 |
| GF | 1204 |
| VX | 1205 |
| Non_Persistent_Nerve | 1300 |
| Vesicant | 1400 |
| HD | 1401 |
| Blood_Agent | 1500 |

| Enumerator | Value |
|---|---|
| AC | 1501 |
| CK | 1502 |
| Riot_Control | 1700 |
| Toxic_Industrial_Chemical | 1800 |
| TIC1 | 1801 |
| TIC2 | 1802 |
| Biological | 2000 |
| Bacterial | 2100 |
| Anthrax | 2101 |
| Plague | 2102 |
| Toxin | 2200 |
| Virus | 2300 |
| Radiological | 3000 |
| Alpha | 3100 |
| Beta | 3200 |
| Gamma | 3300 |
| Delta | 3400 |
| Nuclear | 4000 |

## ATP45HazardAreaTypeEnum8

Representation: HLAoctet

Semantics: *Type of ATP-45 Hazard Area (simple or detailed).*

| Enumerator | Value |
|---|---|
| Simple | 0 |
| Detailed | 1 |

## CBRNDamageEnum8

Representation:    HLAoctet

Semantics:    *Level of damage due to CBRN exposure.*

| Enumerator | Value |
|---|---|
| Uninjured | 0 |
| T3 | 1 |
| T2 | 2 |
| T1 | 3 |
| T4 | 4 |
| Dead | 5 |

## ExposureTypeEnum8

Representation:    HLAoctet

Semantics:    *Type of exposure represented in a contour group.*

| Enumerator | Value |
|---|---|
| Exposure | 0 |
| Incapacitation | 1 |
| Lethal | 2 |

## HazardTypeEnum8

Representation:    HLAoctet

Semantics:    *Type of dispersion output represented in a contour group.*

| Enumerator | Value |
|---|---|
| Concentration | 0 |
| Deposition | 1 |
| Dosage | 2 |
| RadiologicalDose | 3 |
| RadiologicalDoseRate | 4 |

## IPETypeEnum8

Representation:    HLAoctet

Semantics:        *Types of Individual Protective Equipment.*

| Enumerator | Value |
|------------|-------|
| None | 0 |
| One | 1 |
| OneR | 2 |
| Two | 3 |
| TwoR | 4 |
| Three | 5 |
| ThreeR | 6 |
| Four | 7 |
| FourR | 8 |

## 9.3.3. Array Datatypes

**ArrayOfAgentConcentrationStruct**

Element Type: AgentConcentrationStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of agents and their concentrations.*

**ArrayOfAgentMassStruct**

Element Type: AgentMassStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of agents and their masses.*

**ArrayOfAgentTypeEnum**

Element Type: AgentTypeEnum16

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of agents.*

**ArrayOfCBRNExposureStruct**

Element Type: CBRNExposureStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of agents and their dosages.*

**ArrayOfCBRNSensorReadingStruct**

Element Type: CBRNSensorReadingStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of sensor readings.*

## ArrayOfProbabilityHazardContourStruct

Element Type: [ProbabilityHazardContourStruct](ProbabilityHazardContourStruct)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of Probability Hazard Contours.*

## ArrayOfProtectionEffectivenessStruct

Element Type: [ProtectionEffectivenessStruct](ProtectionEffectivenessStruct)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of the protection's effectiveness.*

## ArrayOfRawDataHazardContourStruct

Element Type: [RawDataHazardContourStruct](RawDataHazardContourStruct)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of Raw Data Hazard Contours.*

## ArrayOfSigmas6

Element Type: LengthMeterFloat32

Cardinality: 6

Encoding: HLAfixedArray

Semantics: *Size of the initial Gaussian puff sigma values.*

## ArrayOfTreatmentStruct

Element Type: [TreatmentStruct](TreatmentStruct)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Array of TreatmentStruct types.*

# 9.3.4. Fixed Record Datatypes

## AgentConcentrationStruct

Encoding:    HLAfixedRecord

Semantics:    *Concentration value associated with a specific agent.*

| Name | Type | Semantic |
|---|---|---|
| MeanConcentration | ConcentrationKgPerMeterCubedFloat32 | *Concentration in kg m-3.* |
| Agent | AgentTypeEnum16 | *Enumeration representation of the agent.* |

## AgentMassStruct

Encoding:    HLAfixedRecord

Semantics:    *Mass of contaminant inside a vehicle brought in by an embedded unit.*

| Name | Type | Semantic |
|---|---|---|
| ContaminatedMass | MassKilogramFloat32 | *Mass in kg of contaminant.* |
| Agent | AgentTypeEnum16 | *Enumeration representation of the agent.* |

## CBRNAlarmStruct

Encoding:    HLAfixedRecord

Semantics:    *Properties of a CBRN alarm.*

| Name | Type | Semantic |
|---|---|---|
| Time | TimeSecInt64 | *Simulation time of this detector alarm.* |
| Location | WorldLocationStruct | *Location of the detector alarm.* |
| Agent | AgentTypeEnum16 | *Agent that the detector believes to have triggered this alarm.* |

## CBRNExposureStruct

Encoding:    HLAfixedRecord

Semantics:    *Dosage exposure value associated with a specific agent.*

| Name | Type | Semantic |
|---|---|---|
| Exposure | DosageKgSecondPerMeterCubedFloat32 | *Dosage value (in kg.s.m-3) which has caused this casualty. Defaults to 0.0.* |
| Agent | AgentTypeEnum16 | *Enumeration representation of the agent.* |

## CBRNSensorReadingStruct

Encoding: HLAfixedRecord

Semantics: *Timed CBRN sensor reading.*

| Name | Type | Semantic |
|---|---|---|
| Time | TimeSecInt64 | *Simulation time of this sensor reading.* |
| Reading | AgentConcentrationStruct | *Agent and concentration value in this reading.* |

## ProbabilityHazardContourStruct

Encoding: HLAfixedRecord

Semantics: *Represents the footprint covered by a CBRN hazard. This object covers the agent-specific effects which would be the output from a casualty model.*

| Name | Type | Semantic |
|---|---|---|
| PercentProbabilityLevel | PercentFloat32 | *Percentage of entities within this contour being affected to the define exposure level.* |
| Locations | ArrayOfWorldLocationStruct3 | *Array of locations that define the probability contour.* |

## ProtectionEffectivenessStruct

Encoding: HLAfixedRecord

Semantics: *Protection effectiveness associated with a specific agent.*

| Name | Type | Semantic |
|---|---|---|
| Effectiveness | PercentFloat32 | *Percentage by which this protection reduces effects.* |
| Agent | AgentTypeEnum16 | *Enumeration representation of the agent.* |

## RawDataHazardContourStruct

Encoding:     HLAfixedRecord

Semantics:     *Contour locations bounding a given exposure value.*

| Name | Type | Semantic |
|------|------|----------|
| ExposureLevel | ExposureFloat32 | *Quantity of exposure, measured in SI units.* |
| Locations | ArrayOfWorldLocationStruct3 | *Array of locations that define the hazard contour.* |

## ReleaseDistributionStruct

Encoding:     HLAfixedRecord

Semantics:     *Mean and variance of the distribution of the particles or droplets in a release.*

| Name | Type | Semantic |
|------|------|----------|
| Mean | MeanMetersFloat32 | *Mean size of the released material in meters.* |
| Variance | VarianceMetersSquaredFloat32 | *Variance of the distribution of released particulates/droplets.* |

## ReleaseDynamicsStruct

Encoding:     HLAfixedRecord

Semantics:     *Defines the dynamic properties of a release.*

| Name | Type | Semantic |
|------|------|----------|
| DensityRatio | DensityRatioFloat32 | *Ratio of material density relative to the atmosphere.* |
| TemperatureDifference | TemperatureDegreeCelsiusFloat32 | *Difference in temperature between the released material and the atmosphere in Celsius.* |

## ReleaseSizeStruct

Encoding:     HLAfixedRecord

Semantics:     *Defines the properties of the initial size of a release.*

| Name | Type | Semantic |
|------|------|----------|
| SigmaArray | ArrayOfSigmas6 | *Initial Gaussian sigmas of the released puff.* |
| ReleaseDistribution | ReleaseDistributionStruct | *Details regarding the size of the released particles/droplets for non-gaseous materials.* |

## TreatmentStruct

Encoding:     HLAfixedRecord

Semantics:    *Defines the properties for a CBRN treatment.*

| Name | Type | Semantic |
|---|---|---|
| UniqueID | UuidArrayOfHLAbyte16 | *The ID of this treatment.* |
| Effectiveness | PercentFloat32 | *Percentage by which this treatment reduces effects.* |
| Duration | TimeSecondInteger32 | *Duration in seconds for which this treatment will remain effective.* |
| TreatmentWindow | TimeSecondInteger32 | *The time window in seconds between exposure and treatment for which this treatment is effective.* |
| TreatableAgents | ArrayOfAgentTypeEnum | *Array of agents that can be treated using this treatment.* |

# 10. Module TMR_v1.1.3

## Information

| | |
|---|---|
| **Name:** | Transfer of Modelling Responsibility FOM Module |
| **Type:** | FOM |
| **Version:** | 1.1 |
| **Modification Date:** | 2014-09-26 |
| **Security Classification:** | Unclassified |
| **Purpose:** | Protocol for Transfer of Modelling Responsilbility |
| **Application Domain:** | Training |
| **Description:** | Transfer of Modelling Responsibility FOM Module |
| **Use Limitation:** | NA |
| **Other:** | NA |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 470 55 06 |
| **Email:** | lennart.olsson@pitch.se |

## Secondary author Point Of Contact

| | |
|---|---|
| **Name:** | Bjorn Lofstrand |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 470 55 07 |
| **Email:** | bjorn.lofstrand@pitch.se |

## References

| | |
|---|---|
| **Dependency** | NETN-Base |

## Use History

| |
|---|
| v1.0.1<br>- XML Schema Reference Changed |
| v1.0.2 - Spelling correction at enumerations |
| v1.0.3 - Adding AttributeValues |
| v1.0.3r3 - Adding reason |
| v1.0.3r4 - Added parameter Respondent at interaction TMR_OfferTransferModellingResponsibility and enumeration value NoofferReasonEnum32.OwnershipStateNotApplicableWithRequest |
| v1.0.3r5 - Added enumeration value NoofferReasonEnum32.EntityNotKnown |
| V1.0.3r6 - Change definition of data type TransactionId, a counter and the federate handle |
| v1.1.0r1 - Added interactions TMR_CancelRequest and TMR_Status |
| v1.1.0 - Removed "r1" from module name |
| v1.1.1 - Update of Dependecy table |
| v1.1.2 - Rename of enumeration values (AttributeSetTooRestricted, AttributeSetTooExtensive). |
| v1.1.3 - Rename of enumeration value (FederateTooBusy). |

## Dependencies

| |
|---|
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *10.1. Interaction Classes*
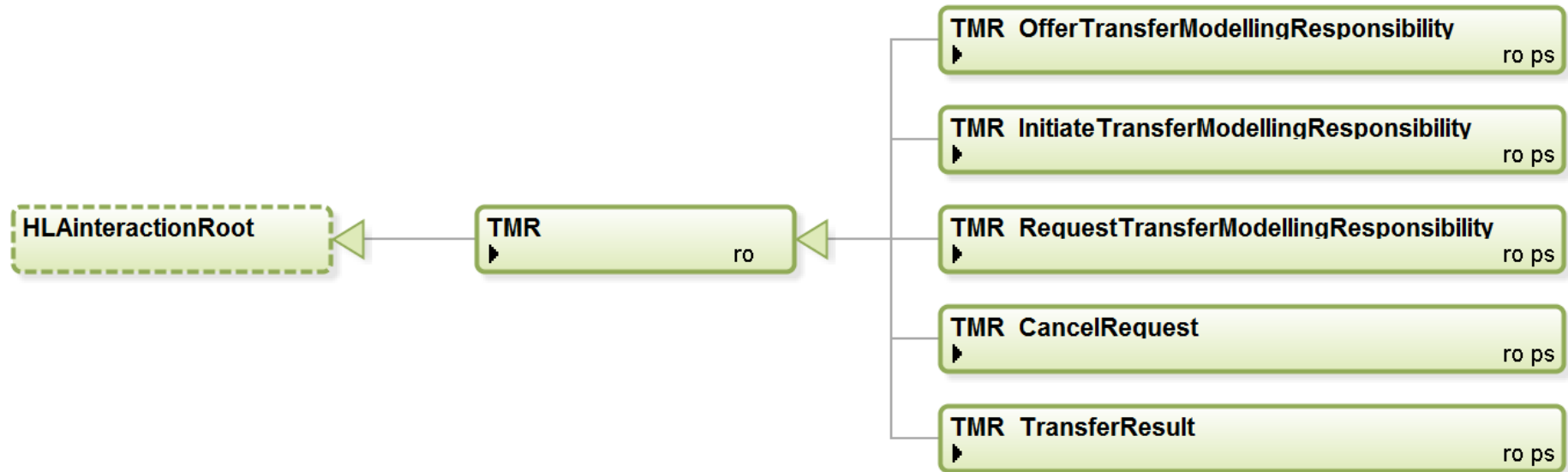


## 10.1.1. **HLAinteractionRoot**

Full Name:          HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:         -

## 10.1.2. **TMR**

Full Name: HLAinteractionRoot.TMR

Sharing:

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Base class for Transfer of Modelling Responsibility interactions.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **TransactionID** | TransactionId | *Identifier for this transaction. Required* |
| **RequestFederate** | FederateName | *Federate name, Required* |
| **ResponseFederate** | FederateName | *Federate name. Not necessary if TransferType is AquireWithoutNegotiation* |

### 10.1.3. **TMR_OfferTransferModellingResponsibility**

Full Name: HLAinteractionRoot.TMR.TMR_OfferTransferModellingResponsibility

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Offer Transfer of Modelling Responsibility*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **isOffering** | HLAboolean | *Is offering (=true) Transfer of Modelling Responsibility or not (=false). Required* |
| **Respondent** | FederateName | *The name of the sending federate of the TMR_OfferTransferModellingResponsibility. The requesting or responding federate.*<br>*Required.* |
| **Reason** | NoofferReasonEnum32 | *Describes the reason why the offer is negative. Optional* |
| **TransactionID**<br><br>*Inherited from TMR in TMR_v1.1.3* | TransactionId | *Identifier for this transaction. Required* |
| **RequestFederate**<br><br>*Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name, Required* |

| Name | Datatype | Semantics |
|---|---|---|
| **ResponseFederate**<br><br>*Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name. Not necessary if TransferType is AquireWithoutNegotiation* |

## 10.1.4. **TMR_InitiateTransferModellingResponsibility**

Full Name:      HLAinteractionRoot.TMR.TMR_InitiateTransferModellingResponsibility

Sharing:      Publish/Subscribe

Transportation type: HLAreliable

Order:      Receive

Dimensions:

Semantics:      *Interaction for initiating Transfer of Modelling Responsibility between federates.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Initiating** | HLAunicodeString | *Id of the initiating federate/role. Required* |
| **TransferType** | TransferTypeEnum32 | *Required* |
| **Instances** | ArrayOfUuid | *Array of Unique Instance IDs. Required* |
| **Attributes** | ArrayOfAttributes | *Array with Attribute names. Required* |
| **CapabilityType** | CapabilityTypeEnum32 | *Specify the type of capability that shall be transfered between federates. A guidance for the acquiring federate. Optional* |
| **InstanceAttributeValues** | ArrayOfInstanceAttributeValues | *The value that the new owner of the attributes may use. Optional* |
| **TransactionID**<br><br>*Inherited from TMR in TMR_v1.1.3* | TransactionId | *Identifier for this transaction. Required* |
| **RequestFederate**<br><br>*Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name, Required* |
| **ResponseFederate**<br><br>*Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name. Not necessary if TransferType is AquireWithoutNegotiation* |

## 10.1.5. **TMR_RequestTransferModellingResponsibility**

Full Name:      HLAinteractionRoot.TMR.TMR_RequestTransferModellingResponsibility

Sharing:      Publish/Subscribe

Transportation type: HLAreliable

Order:                          Receive

Dimensions:

Semantics:               *Request Transfer of Modelling Responsibility*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **TransferType** | TransferTypeEnum32 | *Required* |
| **Instances** | ArrayOfUuid | *Array of unique instance ids. Required* |
| **Attributes** | ArrayOfAttributes | *Array of attributes. Required* |
| **CapabilityType** | CapabilityTypeEnum32 | *Specifies the capability type that the transfer of the modelling responsibility is about. A guidance for the acquiring federate. Optional* |
| **InstanceAttributeValues** | ArrayOfInstanceAttributeValues | *Attribute values that the new owner of the instance attribute may use. Optional* |
| **TransactionID** *Inherited from TMR in TMR_v1.1.3* | TransactionId | *Identifier for this transaction. Required* |
| **RequestFederate** *Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name, Required* |
| **ResponseFederate** *Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name. Not necessary if TransferType is AquireWithoutNegotiation* |

## 10.1.6. **TMR_CancelRequest**

Full Name:              HLAinteractionRoot.TMR.TMR_CancelRequest

Sharing:                Publish/Subscribe

Transportation type: HLAreliable

Order:                  Receive

Dimensions:

Semantics:               *Shall be sent by the requesting federate to inform the respons fedrate that the transfer is canceled*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Reason** | CancellationReasonEnum32 | *The reason for the cancellation* |
| **TransactionID** *Inherited from TMR in TMR_v1.1.3* | TransactionId | *Identifier for this transaction. Required* |

| Name | Datatype | Semantics |
|---|---|---|
| **RequestFederate** *Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name, Required* |
| **ResponseFederate** *Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name. Not necessary if TransferType is AquireWithoutNegotiation* |

## 10.1.7. **TMR_TransferResult**

Full Name:       HLAinteractionRoot.TMR.TMR_TransferResult

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:            Receive

Dimensions:

Semantics:        *Sent by the requesting federate to inform the status of an terminated transfer, completed or not completed*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **TransferOk** | HLAboolean | *True if the transfer is completed, else false* |
| **TransactionID** *Inherited from TMR in TMR_v1.1.3* | TransactionId | *Identifier for this transaction. Required* |
| **RequestFederate** *Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name, Required* |
| **ResponseFederate** *Inherited from TMR in TMR_v1.1.3* | FederateName | *Federate name. Not necessary if TransferType is AquireWithoutNegotiation* |

## *10.2. Datatypes*

## *10.2.1. Simple Datatypes*

**Counter**

| | |
|---|---|
| Representation: | HLAinteger32BE |
| Units: | NA |
| Resolution: | 1 |
| Accuracy: | perfect |
| Semantics: | Counter |

## *10.2.2. Enumerated Datatypes*

### TransferTypeEnum32

Representation:   HLAinteger32BE

Semantics:       *Transfer type*

| Enumerator | Value |
|---|---|
| Other | 0 |
| Acquire | 1 |
| Divest | 2 |
| AcquireWithoutNegotiating | 3 |

### CapabilityTypeEnum32

Representation:   HLAinteger32BE

Semantics:       *TotalTransfer indicates that all instance attributes shall be involved in the ownership transfer*

| Enumerator | Value |
|---|---|
| Other | 0 |
| TotalTransfer | 1 |
| Movement | 2 |
| Damage | 3 |
| ResourceConsumption | 4 |

### NoofferReasonEnum32

Representation:   HLAinteger32BE

Semantics:       *Describes the reason why not accepting a TMR request*

| Enumerator | Value |
|---|---|
| Other | 0 |
| CapabilityDoesNotMatch | 1 |
| AttributeSetTooRestricted | 2 |

| Enumerator | Value |
|---|---|
| AttributeSetTooExtensive | 3 |
| FederateTooBusy | 4 |
| AttributeSetNotCompatibleWithPublication | 5 |
| OwnershipStateNotApplicableWithRequest | 6 |
| EntityNotKnown | 7 |

## CancellationReasonEnum32

Representation:    HLAinteger32BE

Semantics:    *Describes the reason for the cancellation*

| Enumerator | Value |
|---|---|
| Other | 0 |
| TimeOut | 1 |

## 10.2.3. Array Datatypes

**ArrayOfAttributes**

Element Type: HLAunicodeString

Cardinality:   Dynamic

Encoding:      HLAvariableArray

Semantics:     *Array of attribute names.*

**FederateName**

Element Type: HLAunicodeChar

Cardinality:   Dynamic

Encoding:      HLAvariableArray

Semantics:     *HLA Federate Name*

**ArrayOfBytes**

Element Type: Octet

Cardinality:   Dynamic

Encoding:      HLAvariableArray

Semantics:     *An array of bytes, used as the raw value of attributes and parameters*

**ArrayOfAttributeValues**

Element Type:  AttributeValueStruct

Cardinality:   Dynamic

Encoding:      HLAvariableArray

Semantics:     *An array with name-value pairs*

**ArrayOfInstanceAttributeValues**

Element Type:  InstanceAttributeValuesStruct

Cardinality:   Dynamic

Encoding:      HLAvariableArray

Semantics:    *Array with instances and its attribute values as an array with name-value pairs*

## *10.2.4. Fixed Record Datatypes*

### TransactionId

Encoding:     HLAfixedRecord

Semantics:     *Unique identifier for this transaction.*

| Name | Type | Semantic |
|---|---|---|
| TransactionCounter | Counter | *This value shall be incremented by 1 for each sent transaction. Required* |
| FederateHandle | HLAhandle | *The handle that the federate get when joining the federation. Required* |

### AttributeValueStruct

Encoding:     HLAfixedRecord

Semantics:     *The name-value pair for attributes*

| Name | Type | Semantic |
|---|---|---|
| AttributeName | HLAunicodeString | *Name of the attribute* |
| Value | ArrayOfBytes | *The value as a byte array* |

### InstanceAttributeValuesStruct

Encoding:     HLAfixedRecord

Semantics:     *Instance and name-value pairs for instance attributes*

| Name | Type | Semantic |
|---|---|---|
| Instance | UuidArrayOfHLAbyte16 | *The UUID for the instance* |
| AttributeValues | ArrayOfAttributeValues | *Array with attribute name-value pairs* |

## 10.3. User Supplied Tags

**Update/Reflect**

Datatype:   NA

Semantics:  *NA*

**Send/Receive**

Datatype:   NA

Semantics:  *NA*

**Delete/Remove**

Datatype:   NA

Semantics:  *NA*

**Divestiture Request**

Datatype:   TransactionId

Semantics:  *NA*

**Divestiture Completion**

Datatype:   NA

Semantics:  *NA*

**Acquisition Request**

Datatype:   TransactionId

Semantics:  *NA*

**Request Update**

Datatype:   NA

Semantics:  *NA*

# 11. Module MRM_v1.1.1

## Information

| | |
|---|---|
| **Name:** | NETN Multi-Resolution Management FOM Module |
| **Type:** | FOM |
| **Version:** | 1.1.1 |
| **Modification Date:** | 2014-05-15 |
| **Security Classification:** | Unclassified |
| **Purpose:** | Specify classes necessary to enable federation multi-resolution modeling |
| **Application Domain:** | Training and Education. Platform and aggregate level simulations. |
| **Description:** | The MRM FOM module specifies classes necessary to enable federation multi-resolution modeling. |
| **Use Limitation:** | Depends on TMR and NETN-Base FOM modules |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Andy Bowers |
| **Organization:** | MITRE |
| **Telephone:** | 757.673.5718 |
| **Email:** | bowersa@mitre.org |

## Contributor Point Of Contact

| | |
|---|---|
| **Name:** | Lennart Olsson |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 470 55 06 |
| **Email:** | lennart.olsson@pitch.se |

## Contributor Point Of Contact

| | |
|---|---|
| **Name:** | Bjorn Lofstrand |
| **Organization:** | Pitch Technologies |
| **Telephone:** | +46 13 470 55 07 |

| **Email:** | bjorn.lofstrand.pitch.se |
|---|---|

## Sponsor Point Of Contact

| **Name:** | JS J7 |
|---|---|
| **Organization:** | |
| **Telephone:** | |
| **Email:** | |

## References

| **HLA Evolved Conversion Tool** | Pitch Visual OMT 1516 v1.6.0 |
|---|---|
| **Dependency** | NETN Service Consumer-Provider FOM Module |
| **Dependency** | RPR2 Aggregate FOM Module |
| **Dependency** | RPR2 Physical FOM Module |
| **Dependency** | TMR FOM Module |
| **Dependency** | NETN-Base FOM Module |
| **Dependency** | RPR2 Foundation FOM Module |
| **Dependency** | RPR2 Enumerations FOM Module |

## Use History

| |
|---|
| v1.1.0d1 - NETN2 First version |
| v1.1.0d2 - Updated Identification, modified parameters at MRM_CancelRequest and MRM_ActionComplete |
| v1.1.0d3 - Added CompletionResult parameter to MRM_ActionComplete, added semantics for parameter reason. |
| v1.1.0d4 - Added NonComplianceReason and associated enumerated datatype to both MRM_DisaggregationResponse and MRM_AggregationResponse. |
| v1.1.0d5 - Added UuidList to MRM_DisaggregationRequest. Changed MRM_DisaggregationRequest.Instance name to AggregateUuid. |
| v1.1.0d6 - Add Aggregate to AggregateStateEnum, Changed semantics for AggregateFederate and HigherResolutionFederate in MRM_Object. |
| v1.1.0d7 - Changed AggregateStateEnum to AggregateStateEnum32 and revised enumerated values. |
| v1.1.0d8 - Added MRM_TriggerResponse interaction. Updated References tab. |
| v1.1.0 - Removed draft number (d8) from name. |
| v1.1.1 - Semantics update |

## Dependencies

| |
|---|
| TMR_v1.1.3 |
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# 11.1. Interaction Classes
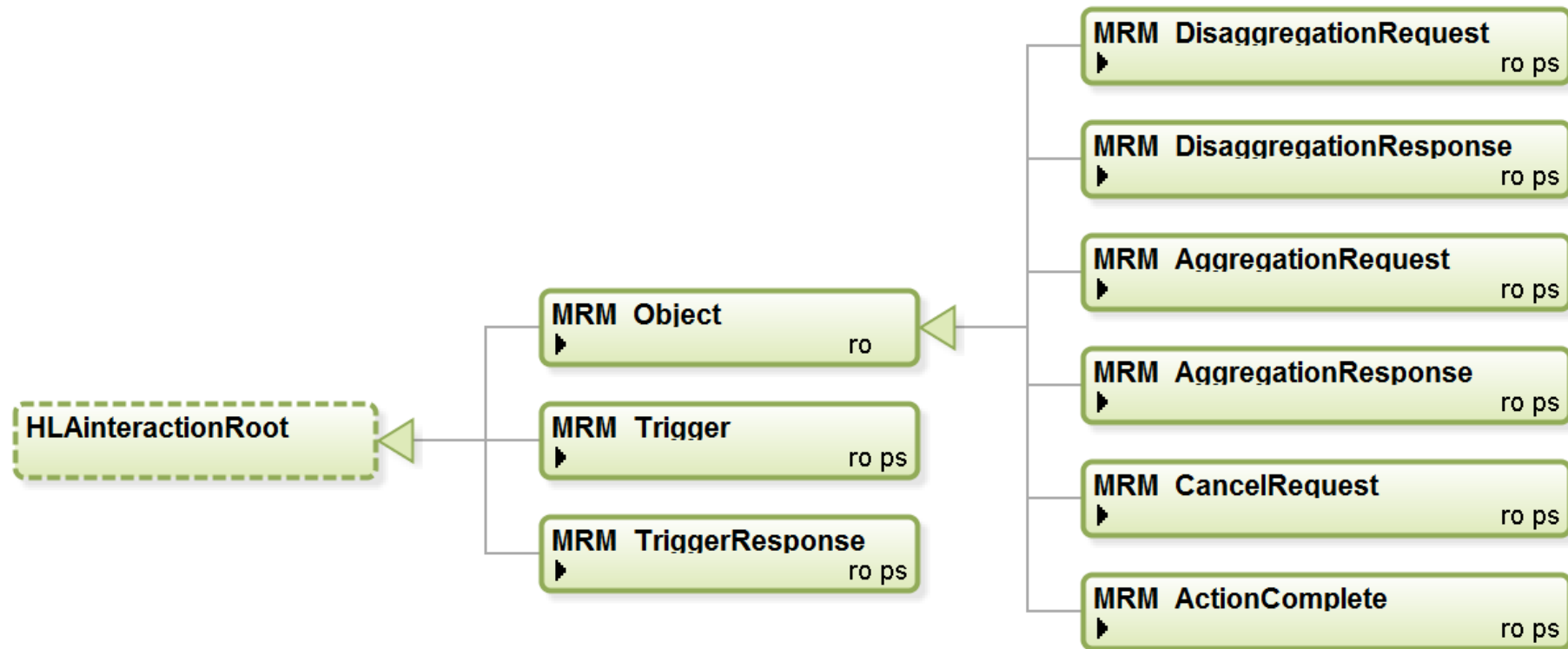


### 11.1.1. **HLAinteractionRoot**

Full Name:        HLAinteractionRoot

Sharing:

Transportation type:  HLAreliable

Order:           Receive

Dimensions:

Semantics:

Parameters:                -

### 11.1.2. **MRM_Object**

Full Name:                HLAinteractionRoot.MRM_Object

Sharing:

Transportation type: HLAreliable

Order:                Receive

Dimensions:

Semantics:                *Base class for Multi-Resolution Modelling (MRM) interactions.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **TransactionID** | TransactionId | *Identifier for this transaction. Required* |
| **AggregateFederate** | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate** | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

### 11.1.3. **MRM_DisaggregationRequest**

Full Name:                HLAinteractionRoot.MRM_Object.MRM_DisaggregationRequest

Sharing:                Publish/Subscribe

Transportation type: HLAreliable

Order:                Receive

Dimensions:

Semantics:                *A request to disaggregate an object instance specified by a UUID.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **AggregateUuid** | UuidArrayOfHLAbyte16 | *The UUID of the object instance intended for disaggregation.* |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **AggregationState** | AggregateStateEnum32 | *Informs Aggregate Federate of intended Aggregation State:*<br>*If Fully Disaggregate, the aggregate unit does not send updates and all Entities and/or (sub)units of the aggregate unit are updated*<br>*If Disaggregate, the aggregate unit sends updates and entities and/or (sub)units of the aggregate unit are updated*<br>*If Pseudo-Disaggregate, the aggregate unit sends updates and all Entities and/or (sub)units of the aggregate unit are updated but these "are not capable of full interaction with other entities"*<br>*If Partially Disaggregate, the aggregate unit send updates and some entities and/or (sub)units of the aggregate unit are updated, but others are not (and are accounted for using the "silent" attribute)* |
| **UuidList** | ArrayOfUuid | *Optional for: Disaggregated and FullyDisaggregated*<br>*Required for: PartllyDisaggregated (and PseudoDisaggregated)*<br><br>*The list of UUIDs which will be instantiated as a result of the disaggregation.* |
| **TransactionID**<br><br>*Inherited from MRM_Object in MRM_v1.1.1* | TransactionId | *Identifier for this transaction. Required* |
| **AggregateFederate**<br>*Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate**<br>*Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

## 11.1.4. **MRM_DisaggregationResponse**

Full Name:        HLAinteractionRoot.MRM_Object.MRM_DisaggregationResponse

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:        *A response from the receiving federate indicating ability to comply with request.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Acknowledge** | ResponseFlagEnum16 | *The receiver federates response to the disaggregation request.* |
| **NonComplianceReason** | NonComplianceReasonEnum | *An optional parameter sent only if the ResponseFlagEnum16 value equals 2, UnableToComply, to specify the reason for non-compliance.* |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **TransactionID** <br><br> *Inherited from MRM_Object in MRM_v1.1.1* | TransactionId | *Identifier for this transaction. Required* |
| **AggregateFederate** <br><br> *Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate** <br><br> *Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

## 11.1.5. **MRM_AggregationRequest**

Full Name:          HLAinteractionRoot.MRM_Object.MRM_AggregationRequest

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:          *A request to aggregate a set of UUIDs*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **AggregateUuid** | UuidArrayOfHLAbyte16 | *The UUID of the Aggregate object which will result from the aggregation.* |
| **UuidList** | ArrayOfUuid | *Optional. The list of UUIDs which should be aggregated.* |
| **TransactionID** <br><br> *Inherited from MRM_Object in MRM_v1.1.1* | TransactionId | *Identifier for this transaction. Required* |
| **AggregateFederate** <br><br> *Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate** <br><br> *Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

## 11.1.6. **MRM_AggregationResponse**

Full Name:          HLAinteractionRoot.MRM_Object.MRM_AggregationResponse

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *A response from the receiving federate indicating ability to comply with request.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Acknowledge** | ResponseFlagEnum16 | *The receiver federate's response to the request for aggregation.* |
| **NonComplianceReason** | NonComplianceReasonEnum | *An optional parameter sent only if the ResponseFlagEnum16 value equals 2, UnableToComply, to specify the reason for non-compliance.* |
| **TransactionID** <br> *Inherited from MRM_Object in MRM_v1.1.1* | TransactionId | *Identifier for this transaction. Required* |
| **AggregateFederate** <br> *Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate** <br> *Inherited from MRM_Object in MRM_v1.1.1* | FederateName | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

## 11.1.7. **MRM_CancelRequest**

Full Name: HLAinteractionRoot.MRM_Object.MRM_CancelRequest

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *An interaction sent to cancel either a MRM_DisaggregationRequest or a MRM_AggregationRequest*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Reason** | CancellationReasonEnum32 | *Reason given for cancelling the request* |
| **TransactionID** <br> *Inherited from MRM_Object in MRM_v1.1.1* | TransactionId | *Identifier for this transaction. Required* |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **AggregateFederate**<br><br>*Inherited from MRM_Object in MRM_v1.1.1* | [FederateName](FederateName) | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate**<br><br>*Inherited from MRM_Object in MRM_v1.1.1* | [FederateName](FederateName) | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

## 11.1.8. **MRM_ActionComplete**

Full Name:          HLAinteractionRoot.MRM_Object.MRM_ActionComplete

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:          Receive

Dimensions:

Semantics:        *An interaction sent at the completion of either a DisaggregationRequest or AggregationRequest.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **CompletionResult** | HLAboolean | *True if the MRM_Action is successfully completed, else false* |
| **TransactionID**<br><br>*Inherited from MRM_Object in MRM_v1.1.1* | [TransactionId](TransactionId) | *Identifier for this transaction. Required* |
| **AggregateFederate**<br><br>*Inherited from MRM_Object in MRM_v1.1.1* | [FederateName](FederateName) | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from AggregateFederate, else Optional.* |
| **HigherResolutionFederate**<br><br>*Inherited from MRM_Object in MRM_v1.1.1* | [FederateName](FederateName) | *Federate name; Required in MRM_DisaggregationRequest or MRM_AggregationRequest from MRM SP, and in MRM_DisaggregationResponse or MRM_AggregationResponse from HigherResolutionFederate, else Optional.* |

## 11.1.9. **MRM_Trigger**

Full Name:          HLAinteractionRoot.MRM_Trigger

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:          Receive

Dimensions:

Semantics:            *A trigger to inform the MRM SP to disaggregate or to aggregate an object instance specified by a UUID.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Instance** | UuidArrayOfHLAbyte16 | *Required. This is the UUID of the object instance intended for disaggregation when triggering a DisaggregationRequest and it is the AggregateUuid when triggering an AggregationRequest* |
| **AggregationState** | AggregateStateEnum32 | *Informs Aggregate Federate of intended Aggregation State:*<br>*If Aggregate, the aggregate unit send updates*<br>*If Fully Disaggregate, the aggregate unit does not send updates and all Entities and/or (sub)units of the aggregate unit send updates*<br>*If Disaggregate, the aggregate unit sends updates and entities and/or (sub)units of the aggregate unit send updates*<br>*If Pseudo-Disaggregate, the aggregate unit sends updates and all Entities and/or (sub)units of the aggregate unit send updates but these "are not capable of full interaction with other entities"*<br>*If Partially Disaggregate, the aggregate unit send updates and some entities and/or (sub)units of the aggregate unit send updates, but others do not (and are accounted for using the "silent" attribute)* |
| **UuidList** | ArrayOfUuid | *Optional when in triggering an AggregationRequest or DisaggregationRequest, state: Disaggregate and Fully Disaggregate*<br><br>*Required when in triggering an  DisaggregationRequest, state: Partially Disaggregate and Pseudo Disaggregate.* |

## 11.1.10. **MRM_TriggerResponse**

Full Name:            HLAinteractionRoot.MRM_TriggerResponse

Sharing:              Publish/Subscribe

Transportation type: HLAreliable

Order:                Receive

Dimensions:

Semantics:            *An interaction sent in response to MRM_Trigger in order to inform the initiator of the MRM_Trigger interaction 1. that the MRM SP has received the interaction and will act on it and 2. of the TransactionID which will be used for the subsequent interactions associated with the particular trigger (to include the MRM_ActionComplete interaction).*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Instance** | UuidArrayOfHLAbyte16 | *Required. This is the UUID of the object instance specified in the MRM_Trigger interaction.* |

| Name | Datatype | Semantics |
|---|---|---|
| **TransactionID** | TransactionId | *Required. The TransactionID which will be used for all interactions (to include the MRM_ActionComplete interaction) associated with the particular MRM_Trigger interaction.* |

## *11.2. Datatypes*

## *11.2.1. Enumerated Datatypes*

### NonComplianceReasonEnum

Representation:    RPRunsignedInteger32BE

Semantics:    *An enumerated list of reasons why a federate may not be able to comply with a MRM_DisaggregationRequest interaction.*

| Enumerator | Value |
|---|---|
| Other | 0 |
| UnitUnknown | 1 |
| UnitAlreadyDisgaggregated | 2 |
| UnitNotOwned | 4 |
| UnitAlreadyAggregated | 3 |

### AggregateStateEnum32

Representation:    RPRunsignedInteger32BE

Semantics:    *Aggregate state*

| Enumerator | Value |
|---|---|
| Other | 0 |
| Aggregated | 1 |
| Disaggregated | 2 |
| FullyDisaggregated | 3 |
| PseudoDisaggregated | 4 |
| PartiallyDisaggregated | 5 |

# 12. Module NETN-HCBML_v1.1.1

## Information

| | |
|---|---|
| **Name:** | HCBML |
| **Type:** | FOM |
| **Version:** | 1.1.1 |
| **Modification Date:** | 2014-07-22 |
| **Security Classification:** | Unclassified |
| **Purpose:** | C-BML module |
| **Application Domain:** | Training |
| **Description:** | C-BML standard implementation. This module allows exchange between C2 system and Simulation system. HCBML : High level CBML |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Jose RUIZ |
| **Organization:** | DGA/DS/CATOD/DSF/CMI |
| **Telephone:** | +33 1 79 86 41 12 |
| **Email:** | jose.ruiz@dga.defense.gouv.fr |

## References

| | |
|---|---|
| **HLA Evolved Editor Tool** | Pitch Visual OMT 1516 v2.2.0 |
| **Dependency** | Base module for NETN FOM v2 modules : NETN-Base_v1.0.2 |

## Dependencies

| |
|---|
| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *12.1. Object Classes*



### 12.1.1. **MessageBML**

Full Name:   HLAobjectRoot.MessageBML

Sharing:     Subscribe

Semantics:   *Global object which describes a BML element*

Attributes:

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| **OpsHeader** | OperationalHeaderStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Military header information about BML distribution* | | | | | |
| **BMLContent** | BMLContentDescription | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Contains the entire CBML message.*<br>*CBML message is describe in XML format compliante with CBML 2.2.C shema* | | | | | |

| HLAprivilegeToDeleteObject | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from HLAobjectRoot in MIM* | Static | *NA* | | | | |
| | **Semantics** | | | | | |
| | | | | | | |

## 12.1.2. **OrderBML**

Full Name:     HLAobjectRoot.MessageBML.OrderBML

Sharing:       Publish/Subscribe

Semantics:     *Object which describe a BML Order*

Attributes:

| MetaData | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | ArrayOfMetaDataOrder | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Meta data which describe information contains in the Order* | | | | | |
| **OpsHeader** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | OperationalHeaderStruct | PS | DA | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from MessageBML in NETN-HCBML_v1.1.1* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Military header information about BML distribution* | | | | | |
| **BMLContent** | **Datatype** | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| | BMLContentDescription | PS | | RO | HLAbestEffort | |
| | **Update type** | **Update Condition** | | | | |
| *Inherited from MessageBML in NETN-HCBML_v1.1.1* | Conditional | *On change* | | | | |
| | **Semantics** | | | | | |
| | *Contains the entire CBML message.* *CBML message is describe in XML format compliante with CBML 2.2.C shema* | | | | | |

| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| **HLAprivilegeToDeleteObject** | HLAtoken | | PS | DA | TS | HLAreliable | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from HLAobjectRoot in MIM* | Static | | *NA* | | | | |
| | **Semantics** | | | | | | |
| | | | | | | | |

## 12.1.3. **RequestBML**

Full Name:     HLAobjectRoot.MessageBML.RequestBML

Sharing:        Publish/Subscribe

Semantics:    *Object which describe a BML Request*

Attributes:

| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
|---|---|---|---|---|---|---|---|
| **MetaData** | ArrayOfMetaDataRequest | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Meta data which describe information contains in the Request* | | | | | | |
| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **OpsHeader** | OperationalHeaderStruct | | PS | DA | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from MessageBML in NETN-HCBML_v1.1.1* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Military header information about BML distribution* | | | | | | |
| | **Datatype** | | **Sharing** | **Ownership** | **Order** | **Transportation** | **Dimensions** |
| **BMLContent** | BMLContentDescription | | PS | | RO | HLAbestEffort | |
| | **Update type** | | **Update Condition** | | | | |
| *Inherited from MessageBML in NETN-HCBML_v1.1.1* | Conditional | | *On change* | | | | |
| | **Semantics** | | | | | | |
| | *Contains the entire CBML message.*<br>*CBML message is describe in XML format compliante with CBML 2.2.C shema* | | | | | | |

| | Datatype | Sharing | Ownership | Order | Transportation | Dimensions |
|---|---|---|---|---|---|---|
| | HLAtoken | PS | DA | TS | HLAreliable | |
| **HLAprivilegeToDeleteObject** | **Update type** | | **Update Condition** | | | |
| | Static | | *NA* | | | |
| *Inherited from HLAobjectRoot in MIM* | **Semantics** | | | | | |
| | | | | | | |

# 12.2. Interaction Classes
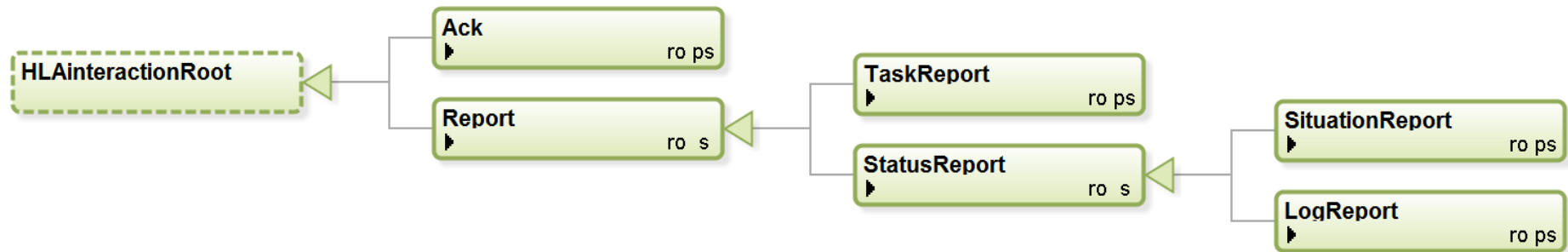


## 12.2.1. HLAinteractionRoot

| | |
|---|---|
| Full Name: | HLAinteractionRoot |
| Sharing: | |
| Transportation type: | HLAreliable |
| Order: | Receive |
| Dimensions: | |
| Semantics: | |
| Parameters: | - |

## 12.2.2. Ack

| | |
|---|---|
| Full Name: | HLAinteractionRoot.Ack |
| Sharing: | Publish/Subscribe |
| Transportation type: | HLAreliable |
| Order: | Receive |
| Dimensions: | |
| Semantics: | *Acknowledgment for CBML message* |
| | *Confirm reception and ability to process a BML message* |
| Parameters: | |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Id** | BmlId | *Identifier of the acknowledgment* |
| **IdRef** | BmlId | *Reference Element identifier for this acknowledgment.*<br>*Could be reference a task of an Order or a Request* |
| **Who** | Callsign | *Sender of the acknowledgment* |
| **Type** | AcknowledgmentStatusEnum | *Type of acknowledgment* |
| **Reason** | CommentDescription | *Inform about the reason which not allows to process or execute a mission* |

## 12.2.3. **Report**

Full Name:              HLAinteractionRoot.Report

Sharing:                Subscribe

Transportation type:    HLAreliable

Order:                  Receive

Dimensions:

Semantics:              *Global interaction which describe a BML Report*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Id** | BmlId | *Identifier of the report* |
| **When** | Datetime18 | *Time of the report* |

## 12.2.4. **TaskReport**

Full Name:              HLAinteractionRoot.Report.TaskReport

Sharing:                Publish/Subscribe

Transportation type:    HLAreliable

Order:                  Receive

Dimensions:

Semantics:              *Report about progress of a BML Task Order*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **IdTask** | BmlId | *Identifier of the Task associated to the Report* |

| Name | Datatype | Semantics |
|---|---|---|
| **IdOrder** | BmlId | *Identifier of the Order (optional)* |
| **Status** | StatusReportEnum32BE | *Progress status of the Task* |
| **Comments** | CommentDescription | *Additionnal information about Task progress* |
| **Id**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the report* |
| **When**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | Datetime18 | *Time of the report* |

## 12.2.5. **StatusReport**

Full Name:        HLAinteractionRoot.Report.StatusReport

Sharing:        Subscribe

Transportation type:  HLAreliable

Order:        Receive

Dimensions:

Semantics:        *Global interaction which describe a BML Status Report*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **IdTask** | BmlId | *Identifier of the Task associated to the report (optional)* |
| **IdOrder** | BmlId | *Identifier of the Order (optional)* |
| **Who** | Callsign | *Sender of the Report* |
| **Id**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the report* |
| **When**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | Datetime18 | *Time of the report* |

## 12.2.6. **SituationReport**

Full Name:        HLAinteractionRoot.Report.StatusReport.SituationReport

Sharing:        Publish/Subscribe

Transportation type:  HLAreliable

Order:        Receive

Dimensions:

Semantics: *Status Report about perceived view (BFT & Red Situation)*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Observer** | UuidArrayOfHLAbyte16 | *Entity who observe the situation*<br>*Could be the same of the sender* |
| **Hostility** | HostilityStatusEnum32BE | *Hostility for the target* |
| **Status** | OperationalStatusEnum32BE | *Operational status of the target* |
| **TargetDesignation** | TargetDescription | *Target track name* |
| **TargetRealIdentity** | UuidArrayOfHLAbyte16 | *Target real identity (optional)* |
| **ObservePosition** | WorldLocationStruct | *Target position* |
| **ObserveTime** | Datetime18 | *Time of observation* |
| **IdTask**<br><br>*Inherited from StatusReport in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the Task associated to the report (optional)* |
| **IdOrder**<br><br>*Inherited from StatusReport in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the Order (optional)* |
| **Who**<br><br>*Inherited from StatusReport in NETN-HCBML_v1.1.1* | Callsign | *Sender of the Report* |
| **Id**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the report* |
| **When**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | Datetime18 | *Time of the report* |

## 12.2.7. **LogReport**

Full Name: HLAinteractionRoot.Report.StatusReport.LogReport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Logistic Report*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Consumable** | ConsumableTypeStruct | *A set of Consumable-Material-Type-Category-Name* |
| **Quantity** | QuantityFloat32 | *Available quantity (metric system shall be used)* |
| **IdTask**<br><br>*Inherited from StatusReport in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the Task associated to the report (optional)* |
| **IdOrder**<br><br>*Inherited from StatusReport in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the Order (optional)* |
| **Who**<br><br>*Inherited from StatusReport in NETN-HCBML_v1.1.1* | Callsign | *Sender of the Report* |
| **Id**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | BmlId | *Identifier of the report* |
| **When**<br><br>*Inherited from Report in NETN-HCBML_v1.1.1* | Datetime18 | *Time of the report* |

## *12.3. Datatypes*

## *12.3.1. Enumerated Datatypes*

### SendActionEnum32BE

Representation:   HLAinteger32BE

Semantics:   *Represent the type of action for a BML message receiver*

| Enumerator | Value |
|---|---|
| ForAction | 0 |
| ForInfo | 1 |

### StatusReportEnum32BE

Representation:   HLAinteger32BE

Semantics:   *The specific value that represents the perceived appraisal of the progress of a specific ACTION-TASK.*
*JC3IEDM_ActionTaskStatusProgressCodeXmlType*

| Enumerator | Value |
|---|---|
| ABO | 0 |
| AIRBRN | 1 |
| CANCLD | 2 |
| COM | 3 |
| DELAY | 4 |
| DPLMMW | 5 |
| DWNTMW | 6 |
| IPR | 7 |
| NOOPER | 8 |
| NKN | 9 |
| NOS | 10 |
| NST | 11 |
| OFFTSK | 12 |

| Enumerator | Value |
|---|---|
| PAU | 13 |
| PLAN | 14 |
| RECMMW | 15 |
| RETASK | 16 |
| SCRMBL | 17 |
| TASKED | 18 |
| TRNMMW | 19 |

## OperationalStatusEnum32BE

Representation: HLAinteger32BE

Semantics: *The specific value that represents the operational status of a specific ORGANISATION.*
*JC3IEDM_OrganisationStatusOperationalStatusCodeXmlType*

| Enumerator | Value |
|---|---|
| MOPS | 0 |
| NKN | 1 |
| NOP | 2 |
| OPR | 3 |
| SOPS | 4 |
| TNOPS | 5 |

## HostilityStatusEnum32BE

Representation: HLAinteger32BE

Semantics: *The specific value that represents the perceived hostility status of a specific OBJECT-ITEM.*
*JC3IEDM_ObjectItemHostilityStatusCodeXmlType*

| Enumerator | Value |
|---|---|
| AFR | 0 |
| AHO | 1 |
| AIV | 2 |

| Enumerator | Value |
|---|---|
| ANT | 3 |
| FAKER | 4 |
| FR | 5 |
| HO | 6 |
| IV | 7 |
| JOKER | 8 |
| NEUTRL | 9 |
| PENDNG | 10 |
| SUSPCT | 11 |
| UNK | 12 |

## PriorityEnum32BE

Representation:  HLAinteger32BE

Semantics:  *Represent the associate priority of a BML message*

| Enumerator | Value |
|---|---|
| Z | 0 |
| O | 1 |
| P | 2 |
| R | 4 |

## AcknowledgmentStatusEnum

Representation:  HLAoctet

Semantics:  *Represente the different status of an acknowledgment*

| Enumerator | Value |
|---|---|
| Received | 0 |
| Acknowledged_Ok | 1 |
| Acknowledged_Nok | 2 |

## ConsumableTypeEnum

Representation:    HLAoctet

Semantics:    *Represent the different type of logistic consumable*

| Enumerator | Value |
|---|---|
| Fuel | 0 |
| Ammo | 1 |
| Food | 2 |

## 12.3.2. Array Datatypes

### ArrayOfMetaDataOrder

Element Type: MetaDataOrderStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Order Meta data list*

### ArrayOfMetaDataRequest

Element Type: MetaDataOrderStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Request Meta data list*

### ArrayofReceiver

Element Type: ReceiverStruct

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Receiver list for a BML message*

### Datetime18

Element Type: HLAunicodeChar

Cardinality: 18

Encoding: HLAfixedArray

Semantics: *A designation of a specified chronological point measured using Coordinated Universal Time (UTC) ISO 8601:2000 as a standard of reference, constrained to "zero meridian" i.e. Zulu time zone only. This is expressed as a composite field using a compacted ISO notation YYYYMMDDHHMMSS.SSS where YYYY represents a year, MM represents a month in values from 00 to 12, and DD represents a day in values from 00 to 31, HH represents an hour, MM represents a minute, and SS.SSS represents the number of seconds and milliseconds.*

## MessageDescription

Element Type: HLAunicodeChar

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Represents the identification of a BML message*

## BMLContentDescription

Element Type: HLAunicodeChar

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Contains the entire CBML message.*
*CBML message is described in XML format compliante with CBML 2.2.C shema*

## CommentDescription

Element Type: HLAunicodeChar

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Comment for a BML message*

## TargetDescription

Element Type: HLAunicodeChar

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Represents the Track name of an observed Entity*

## BmlData

Element Type: HLAunicodeChar

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *BML message data*

## 12.3.3. Fixed Record Datatypes

### MetaDataOrderStruct

Encoding:    HLAfixedRecord

Semantics:    *Meta data for an Order*

| Name | Type | Semantic |
|------|------|----------|
| Id | BmlData | *BML message order id*<br>*Information extract from Xml data message* |
| IdTask | BmlData | *BML message task id*<br>*Information extract from Xml data message* |
| Who | BmlData | *BML message taskee*<br>*Information extract from Xml data message* |
| What | BmlData | *BML message mission*<br>*Information extract from Xml data message* |
| GeographicInterest | WGS84Location | *BML message mission zone (Baricentre)*<br>*Information extract from Xml data message* |
| Status | StatusReportEnum32BE | *Actual state of the BML Task*<br>*State is update with the progress of the Order* |

### OperationalHeaderStruct

Encoding:    HLAfixedRecord

Semantics:    *Meta data for distributed BML message*

| Name | Type | Semantic |
|------|------|----------|
| Sender | BmlData | *BML message sender*<br>*Information extract from Xml data message* |
| Receivers | ArrayofReceiver | *List of Receivers for the BML message*<br>*Information extract from Xml data message* |
| SendTime | Datetime18 | *Sending date of the BML message* |
| Priority | PriorityEnum32BE | *BML message priority*<br>*Information extract from Xml data message* |

## ReceiverStruct

Encoding: HLAfixedRecord

Semantics: *Receiver desription*

| Name | Type | Semantic |
|------|------|----------|
| Name | BmlData | *BML message receiver*<br>*Information extract from Xml data message* |
| SendAction | SendActionEnum32BE | *BML message action for the receiver*<br>*Information extract from Xml data message* |

## BmlId

Encoding: HLAfixedRecord

Semantics: *Represent Identifier of a BML message*

| Name | Type | Semantic |
|------|------|----------|
| Counter | CounterInt32 | *EventCount shall start at one (1) and then incremented by one (1) for a new BML message.*<br><br>*In the case where all possible values are exhausted, the numbers may be reused beginning again at one.* |
| MessageId | MessageDescription | *Identifier of BML message.*<br>*This identifier corresponds to xml id information of Request and Order* |

## WGS84Location

Encoding: HLAfixedRecord

Semantics: *Represents a location in WGS84*

| Name | Type | Semantic |
|------|------|----------|
| latitude | Float32 | *Latitude representation in degree* |
| longitude | Float32 | *Longitude representation in degree* |
| altitude | MeterFloat32 | *Altitude representation in meter* |

## ConsumableTypeStruct

Encoding:     HLAfixedRecord

Semantics:    *Consumable Description*

| Name | Type | Semantic |
|------|------|----------|
| ConsumableType | ConsumableTypeEnum | *Consumable type.* |
| SubCategory | EntityTypeStruct | *Consumable Enumere* |
| SubCategoryDesription | HLAunicodeString | *OPTIONAL- Consumable name.* |

## *12.4. Switches*

| | |
|---|---|
| Auto Provide | Disabled |
| Convey Region Designator Sets | Disabled |
| Convey Producing Federate | Disabled |
| Attribute Scope Advisory | Disabled |
| Attribute Relevance Advisory | Disabled |
| Object Class Relevance Advisory | Disabled |
| Interaction Relevance Advisory | Disabled |
| Service Reporting | Disabled |
| Exception Reporting | Disabled |
| Delay Subscription Evaluation | Disabled |
| Automatic Resign Action | CancelThenDeleteThenDivest |

# 13. Module NETN-LBML_v1.1.0

## Information

| | |
|---|---|
| **Name:** | LBML |
| **Type:** | FOM |
| **Version:** | 1.0 |
| **Modification Date:** | 2014-09-24 |
| **Security Classification:** | Unclassified |
| **Purpose:** | Low level BML |
| **Application Domain:** | |
| **Description:** | Low level BML orders/tasks and reports. |
| **Use Limitation:** | |
| **Other:** | |

## Primary author Point Of Contact

| | |
|---|---|
| **Name:** | Roger Jansen |
| **Organization:** | |
| **Telephone:** | |
| **Email:** | |

## References

| | |
|---|---|
| **HLA Evolved Conversion Tool** | Pitch Visual OMT v2.2.3 |

## Release Restrictions

## Use History

| |
|---|
| v.1.1.0 - Renamed (from 1.0.0d6) |

## Dependencies

| NETN-Base_v1.0.2 |
| RPR-Base_v2.0 |
| RPR-Enumerations_v2.0 |
| RPR-Foundation_v2.0 |

# *13.1. Interaction Classes*

### 13.1.1. **HLAinteractionRoot**

Full Name:          HLAinteractionRoot

Sharing:

Transportation type: HLAreliable

Order:               Receive

Dimensions:

Semantics:

Parameters:          -

### 13.1.2. **LBMLMessage**

Full Name:          HLAinteractionRoot.LBMLMessage

Sharing:

Transportation type: HLAreliable

Order:               Receive

Dimensions:

Semantics:           *Root class of low level BML interactions*

Parameters:          -

### 13.1.3. **LBMLTask**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLTask

Sharing:             Subscribe

Transportation type: HLAreliable

Order:               Receive

Dimensions:

Semantics:           *An interaction for ordering a unit to execute a task.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Task** | TaskId | *Identifies the task.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Taskee** | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** | Callsign | *Identifies the commander of the task.* |
| **StartWhen** | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

### 13.1.4. **Move**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.Move

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to move in the specified direction. The unit will keep on moving until the specified end time or when ordered otherwise.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Direction** | AngleRadianFloat32 | *Determines the azimuth direction, in radians.* |
| **Task** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |

| Name | Datatype | Semantics |
|---|---|---|
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

### 13.1.5. **MoveToLocation**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.MoveToLocation

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to move to the specified destination.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Destination** | WorldLocationStruct | *The location to move to.* |
| **MoveType** | MoveTypeEnum32 | *Indicates if roads have to be followed.* |
| **Waypoints** | WorldLocationStructLengthlessArray | *Optional route to the destination.* |
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

### 13.1.6. **MoveToUnit**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.MoveToUnit

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to move to another unit.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Unit** | UuidArrayOfHLAbyte16 | *The unit to move to.* |
| **MoveType** | MoveTypeEnum32 | *Indicates if roads have to be followed.* |
| **Waypoints** | WorldLocationStructLengthlessArray | *Optional route to the destination.* |
| **Task** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

### 13.1.7. **MoveIntoFormation**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.MoveIntoFormation

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks an aggregate unit to move into the given formation with the given heading.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Formation** | FormationEnum32 | *The category of positional arrangement of the entities within the aggregate.* |
| **Distance** | MeterFloat32 | *Distance between the individual vehicles in the formation.* |
| **Location** | WorldLocationStruct | *The location (x, y and z) to move to.* |
| **Heading** | AngleRadianFloat32 | *The heading of the formation in radians.* |
| **Task**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**  *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.8. **FollowRoute**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.FollowRoute

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to follow the specified route.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **MoveType** | MoveTypeEnum32 | |
| **ControlMeasure** | EntityIdentifierStruct | *Follow a control measure referenced by an entity identifier struct. This would typically be an envionmental object which contains one (waypoint) or many points (route), but could also be another entity.* |
| **Task**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.9. **FollowUnit**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.FollowUnit

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to follow another unit.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Unit** | UuidArrayOfHLAbyte16 | *The unit to follow.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Behind** | MeterFloat32 | *The distance in meters behind the unit to follow.* |
| **Right** | MeterFloat32 | *The distance in meters to the right of the unit to follow.* |
| **Above** | MeterFloat32 | *The distance in meters above the unit to follow.* |
| **Task** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.10. **TurnToHeading**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.TurnToHeading

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to turn to the specified heading.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Heading** | AngleRadianFloat32 | *Determines the heading, in radians, a unit has to turn to.* |
| **Task** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Taskee**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.11. **TurnToOrientation**

Full Name:        HLAinteractionRoot.LBMLMessage.LBMLTask.TurnToHeading.TurnToOrientation

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Pitch** | AngleRadianFloat32 | |
| **Roll** | AngleRadianFloat32 | |
| **Heading**<br>*Inherited from TurnToHeading in NETN-LBML_v1.1.0* | AngleRadianFloat32 | *Determines the heading, in radians, a unit has to turn to.* |
| **Task**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Tasker** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.12. **VehicleMount**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.VehicleMount

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to mount the specified vehicle.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **VehicleToMount** | UuidArrayOfHLAbyte16 | *The vehicle to mount.* |
| **Task** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |

| Name | Datatype | Semantics |
|---|---|---|
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Datetime18](#) | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [TaskTypeEnum8](#) | *Determines how this new task is related to the current task.* |

## 13.1.13. **VehicleDismount**

Full Name:               HLAinteractionRoot.LBMLMessage.LBMLTask.VehicleDismount

Sharing:                  Publish/Subscribe

Transportation type:  HLAreliable

Order:                 Receive

Dimensions:

Semantics:            *Tasks a unit to dismount.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [TaskId](#) | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [UuidArrayOfHLAbyte16](#) | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Callsign](#) | *Identifies the commander of the task.* |
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Datetime18](#) | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Datetime18](#) | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | [TaskTypeEnum8](#) | *Determines how this new task is related to the current task.* |

### 13.1.14. **FireAtLocation**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.FireAtLocation

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to fire at a location.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **TargetLocation** | WorldLocationStruct | *The location to fire at.* |
| **Task** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

### 13.1.15. **FireIndirectWM**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.FireAtLocation.FireIndirectWM

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to fire at a location with the specified weapon and munition.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **WeaponTypeToUse** | EntityTypeStruct | |
| **MunitionTypeToUse** | EntityTypeStruct | |
| **TargetLocation** <br> *Inherited from FireAtLocation in NETN-LBML_v1.1.0* | WorldLocationStruct | *The location to fire at.* |
| **Task** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.16. **FireAtUnit**

Full Name:        HLAinteractionRoot.LBMLMessage.LBMLTask.FireAtUnit

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:            Receive

Dimensions:

Semantics:        *Tasks a unit to fire at another specified unit.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Target** | [UuidArrayOfHLAbyte16](#) | *The unit to fire at.* |
| **Task** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | [TaskId](#) | *Identifies the task.* |
| **Taskee** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | [UuidArrayOfHLAbyte16](#) | *The unit that has to execute the task.* |
| **Tasker** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Callsign](#) | *Identifies the commander of the task.* |
| **StartWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Datetime18](#) | *Time when the task execution has to start.* |
| **EndWhen** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | [Datetime18](#) | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType** <br> *Inherited from LBMLTask in NETN-LBML_v1.1.0* | [TaskTypeEnum8](#) | *Determines how this new task is related to the current task.* |

## 13.1.17. **FireDirectWM**

Full Name:            HLAinteractionRoot.LBMLMessage.LBMLTask.FireAtUnit.FireDirectWM

Sharing:              Publish/Subscribe

Transportation type:  HLAreliable

Order:                Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **WeaponTypeToUse** | EntityTypeStruct | *The weapon type to use.* |
| **MunitionTypeToUse** | EntityTypeStruct | *The munition type that should be used by the select weapon type.* |
| **Target** <br> *Inherited from FireAtUnit in NETN-LBML_v1.1.0* | [UuidArrayOfHLAbyte16](#) | *The unit to fire at.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.18. **Wait**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLTask.Wait

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Tasks a unit to wait until the specified end time. Wait indefinitely if no end time is specified.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |

| Name | Datatype | Semantics |
|---|---|---|
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.19. **ChangeOrderedSpeed**

Full Name:            HLAinteractionRoot.LBMLMessage.LBMLTask.ChangeOrderedSpeed

Sharing:              Publish/Subscribe

Transportation type:  HLAreliable

Order:                Receive

Dimensions:

Semantics:            *Change the ordered speed. Usually sent with TaskType InterruptCurrentTask to adjust the current move task.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Speed** | VelocityMeterPerSecondFloat32 | *Determines the ordered speed to set for a unit, in m/s.* |
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.20. **ChangeOrderedAltitude**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLTask.ChangeOrderedAltitude

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:          *Change the ordered altitude. Usually sent with TaskType InterruptCurrentTask to adjust the current move task.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Altitude** | Float64 | |
| **AltitudeType** | AltitudeTypeEnum8 | |
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |

| Name | Datatype | Semantics |
|---|---|---|
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.21. **SetRulesOfEngagement**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLTask.SetRulesOfEngagement

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:          Receive

Dimensions:

Semantics:          *Change the rules of engagment for a unit.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **RulesOfEngagement** | RulesOfEngagementEnum8 | *Determines the rules of engagment for a unit.* |
| **Task**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskId | *Identifies the task.* |
| **Taskee**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |
| **StartWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to start.* |
| **EndWhen**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | Datetime18 | *Time when the task execution has to end. 00000000000000.000 means no end time.* |
| **Why**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | HLAunicodeString | *For what reason has this task to be executed.* |
| **TaskType**<br><br>*Inherited from LBMLTask in NETN-LBML_v1.1.0* | TaskTypeEnum8 | *Determines how this new task is related to the current task.* |

## 13.1.22. **LBMLTaskManagement**

Full Name:        HLAinteractionRoot.LBMLMessage.LBMLTaskManagement

Sharing:        Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:        *Task management interactions. For now only used to cancel tasks. Can be extended to reschedule tasks, etc.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Taskee** | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker** | Callsign | *Identifies the commander of the task.* |

## 13.1.23. **CancelAllTasks**

Full Name:        HLAinteractionRoot.LBMLMessage.LBMLTaskManagement.CancelAllTasks

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:        Receive

Dimensions:

Semantics:        *Cancel all tasks. Tasks already started have to be aborted immediately.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Taskee**<br><br>*Inherited from LBMLTaskManagement in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTaskManagement in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |

## 13.1.24. **CancelSpecifiedTasks**

Full Name:        HLAinteractionRoot.LBMLMessage.LBMLTaskManagement.CancelSpecifiedTasks

Sharing:        Publish/Subscribe

Transportation type: HLAreliable

Order:             Receive

Dimensions:

Semantics:         *Cancel all specified tasks. Tasks already started have to be aborted immediately.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Tasks** | ArrayOfTaskIds | *Tasks that have to be cancelled.* |
| **Taskee**<br><br>*Inherited from LBMLTaskManagement in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that has to execute the task.* |
| **Tasker**<br><br>*Inherited from LBMLTaskManagement in NETN-LBML_v1.1.0* | Callsign | *Identifies the commander of the task.* |

## 13.1.25. **LBMLReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport

Sharing:            Subscribe

Transportation type: HLAreliable

Order:             Receive

Dimensions:

Semantics:         *An interaction for sending reports from a simulation framework (e.g. VR-Forces) to a BML agent framework.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **When** | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments** | HLAunicodeString | *Any additional comments* |

## 13.1.26. **StatusReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport

Sharing:            Subscribe

Transportation type: HLAreliable

Order:             Receive

Dimensions:

Semantics:      *Status report from a friendly unit about its own (perceived) state. The C2 agent shall base its low level BML tasks on this perceived truth data of blue units instead of RPR ground truth data, although for blue units perceived and ground truth data might be the same (but not necessarily).*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Unit** | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.27. **TaskStatusReport**

Full Name:      HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.TaskStatusReport

Sharing:      Publish/Subscribe

Transportation type: HLAreliable

Order:      Receive

Dimensions:

Semantics:      *A report about the status of a task the unit was ordered to execute.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **Task** | TaskId | *Identifies the task associated with the task report.* |
| **TaskStatus** | TaskStatusEnum32 | *Indicates the evaluation status of the task.* |
| **Unit**<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.28. **PositionStatusReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.PositionStatusReport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Report about the position, speed, and heading of the unit.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| Position | WorldLocationStruct | *Position of the unit at the specified time.* |
| Heading | AngleRadianFloat32 | *Heading of the unit.* |
| Speed | VelocityMeterPerSecondFloat32 | *Speed of the unit.* |
| Unit<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| When<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| Comments<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

### 13.1.29. **DamageStatusReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.DamageStatusReport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Represents a report from an unit that has been damaged or destroyed.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| DamageType | DamageStatusEnhancedEnum32 | *Damage state of the reported unit.* |
| Unit<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |

| Name | Datatype | Semantics |
|---|---|---|
| **When** <br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments** <br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

### 13.1.30. **FuelStatusReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.FuelStatusReport

Sharing:             Publish/Subscribe

Transportation type:  HLAreliable

Order:             Receive

Dimensions:

Semantics:        *Report about the amount of fuel the unit has left. FuelType is a string since it is still experimental.*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **FuelType** | HLAunicodeString | *The type of fuel* |
| **FuelPercentage** | PercentFloat32 | *The amount of fuel the unit has not yet used, in percentages.* |
| **Unit** <br> *Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When** <br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments** <br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

### 13.1.31. **AmmunitionStatusReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.AmmunitionStatusReport

Sharing:             Publish/Subscribe

Transportation type:  HLAreliable

Order:             Receive

Dimensions:

Semantics:        *Report about the amount of ammunition the unit has left.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **AmmunitionType** | EntityTypeStruct | *The type of ammunition.* |
| **AmmunitionPercentage** | PercentFloat32 | *The amount of ammunition the entity has not yet used in percentages.* |
| **Unit**<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.32. **UnderAttackStatusReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.UnderAttackStatusReport

Sharing:            Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:          *Report that the unit is under attack.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **FromDirection** | AngleRadianFloat32 | *Direction from which the unit is attacked.* |
| **Severeness** | AttackTypeEnum32 | *Severeness of the attack upon the reporting unit.* |
| **Unit**<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.33. **ActivityStatusReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.ActivityStatusReport

Sharing: Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Base class for an activity report (absolute truth).*

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **EntitiesInvolved** | ArrayOfUuid | *Reference to entities involved in a particular activity.* |
| **TimeLeftToCompletion** | Float64 | *Amount of time (if known) to completion of activity. 0 if unknown.* |
| **Activity** | HLAunicodeString | *A application specific description of the task since different CGF's / simulators are capable of executing different task types which may not fall neatly into those defined in the AggregateMissionEnum16.* |
| **ActivityType** | AggregateMissionEnum16 | *Provide a universally understood summary of the activity using the aggregate mission enum (for compatability)* |
| **Unit** <br><br> *Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When** <br><br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments** <br><br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.34. **CurrentActivityStatusReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.ActivityStatusReport.CurrentActivityStatusReport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ElapsedTaskTime** | Float64 | *Time entity has been performing task.* |
| **TaskExecutionStatus** | HLAunicodeString | *Includes more specific information about the current task state (application specific) or sub-states within the task.* |
| **EntitiesInvolved**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | [ArrayOfUuid](#) | *Reference to entities involved in a particular activity.* |
| **TimeLeftToCompletion**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | Float64 | *Amount of time (if known) to completion of activity. 0 if unknown.* |
| **Activity**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | HLAunicodeString | *A application specific description of the task since different CGF's / simulators are capable of executing different task types which may not fall neatly into those defined in the AggregateMissionEnum16.* |
| **ActivityType**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | [AggregateMissionEnum16](#) | *Provide a universally understood summary of the activity using the aggregate mission enum (for compatability)* |
| **Unit**<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | [UuidArrayOfHLAbyte16](#) | *The unit that is reported about.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | [Datetime18](#) | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.35. **NextActivityStatusReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.StatusReport.ActivityStatusReport.NextActivityStatus Report

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **StartCondition** | TaskStartConditionEnum8 | |
| **TimeToStart** | Float64 | |
| **EntitiesInvolved**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | ArrayOfUuid | *Reference to entities involved in a particular activity.* |
| **TimeLeftToCompletion**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | Float64 | *Amount of time (if known) to completion of activity. 0 if unknown.* |
| **Activity**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | HLAunicodeString | *A application specific description of the task since different CGF's / simulators are capable of executing different task types which may not fall neatly into those defined in the AggregateMissionEnum16.* |
| **ActivityType**<br><br>*Inherited from ActivityStatusReport in NETN-LBML_v1.1.0* | AggregateMissionEnum16 | *Provide a universally understood summary of the activity using the aggregate mission enum (for compatability)* |
| **Unit**<br><br>*Inherited from StatusReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *The unit that is reported about.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.36. **SpotReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.SpotReport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *Spot reports are one-time reports used by all units to transmit intelligence or information about a spotted enemy, neutral, or unknown unit. The C2 agent shall base its low level BML tasks on this perceived truth data on non friendly / unknown units instead of RPR ground truth data. UnitType, EquipmentType, and Activity are strings since they are still experimental.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Observer** | UuidArrayOfHLAbyte16 | *Unit that observed the enemy (or neutral/unknown unit) and sends the spot report.* |
| **IdentificationLevel** | IdentificationLevelEnum8 | *The identification level of the unit(s) spotted.* |
| **ForceIdentifier** | PerceivedForceIdentifierEnum32 | *Force Id of the spotted unit(s) as assumed by the observer.* |
| **Position** | WorldLocationStruct | *Position of the spotted unit at the specified time.* |
| **NumberOfUnits** | Integer32 | *Number of spotted units.* |
| **UnitType** | EntityTypeStruct | *Description of the units spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **NumberOfEquipments** | Integer32 | *Number of spotted enemy equipments.* |
| **EquipmentType** | EntityTypeStruct | *Description of the equipments spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.37. **ActivitySpotReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.SpotReport.ActivitySpotReport

Sharing: Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics: *The information here is based on perception information which is determined from situation awareness, intel or potentially instinct.*

Parameters:

| Name | Datatype | Semantics |
|------|----------|-----------|
| **EntitiesInvolved** | ArrayOfUuid | *Entities involved in the perceived activity.* |
| **TimeLeftToCompletion** | Float64 | |
| **Activity** | HLAunicodeString | *Description of the activity of the enemy spotted.* |
| **ActivityType** | AggregateMissionEnum16 | *Perceived activities are engaged in.* |

| Name | Datatype | Semantics |
|------|----------|-----------|
| **Observer**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *Unit that observed the enemy (or neutral/unknown unit) and sends the spot report.* |
| **IdentificationLevel**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | IdentificationLevelEnum8 | *The identification level of the unit(s) spotted.* |
| **ForceIdentifier**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | PerceivedForceIdentifierEnum32 | *Force Id of the spotted unit(s) as assumed by the observer.* |
| **Position**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | WorldLocationStruct | *Position of the spotted unit at the specified time.* |
| **NumberOfUnits**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted units.* |
| **UnitType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the units spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **NumberOfEquipments**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted enemy equipments.* |
| **EquipmentType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the equipments spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.38. **CurrentActivitySpotReport**

Full Name: HLAinteractionRoot.LBMLMessage.LBMLReport.SpotReport.ActivitySpotReport.CurrentActivitySpotReport

Sharing: Publish/Subscribe

Transportation type: HLAreliable

Order: Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **ElapsedTaskTime** | Float64 | *Perceived time the task started if known. 0 if unknown.* |
| **TaskExecutionStatus** | HLAunicodeString | *Perceived exeution status.* |
| **EntitiesInvolved** <br><br> *Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | ArrayOfUuid | *Entities involved in the perceived activity.* |
| **TimeLeftToCompletion** <br><br> *Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | Float64 | |
| **Activity** <br><br> *Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Description of the activity of the enemy spotted.* |
| **ActivityType** <br><br> *Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | AggregateMissionEnum16 | *Perceived activities are engaged in.* |
| **Observer** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *Unit that observed the enemy (or neutral/unknown unit) and sends the spot report.* |
| **IdentificationLevel** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | IdentificationLevelEnum8 | *The identification level of the unit(s) spotted.* |
| **ForceIdentifier** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | PerceivedForceIdentifierEnum32 | *Force Id of the spotted unit(s) as assumed by the observer.* |
| **Position** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | WorldLocationStruct | *Position of the spotted unit at the specified time.* |
| **NumberOfUnits** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted units.* |
| **UnitType** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the units spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **NumberOfEquipments** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted enemy equipments.* |
| **EquipmentType** <br><br> *Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the equipments spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **When** <br><br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments** <br><br> *Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

### 13.1.39. **NextActivitySpotReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport.SpotReport.ActivitySpotReport.NextActivitySpotReport

Sharing:             Publish/Subscribe

Transportation type: HLAreliable

Order:              Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **StartCondition** | TaskStartConditionEnum8 | |
| **TimeToStart** | Float64 | |
| **EntitiesInvolved**<br><br>*Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | ArrayOfUuid | *Entities involved in the perceived activity.* |
| **TimeLeftToCompletion**<br><br>*Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | Float64 | |
| **Activity**<br><br>*Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Description of the activity of the enemy spotted.* |
| **ActivityType**<br><br>*Inherited from ActivitySpotReport in NETN-LBML_v1.1.0* | AggregateMissionEnum16 | *Perceived activities are engaged in.* |
| **Observer**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *Unit that observed the enemy (or neutral/unknown unit) and sends the spot report.* |
| **IdentificationLevel**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | IdentificationLevelEnum8 | *The identification level of the unit(s) spotted.* |
| **ForceIdentifier**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | PerceivedForceIdentifierEnum32 | *Force Id of the spotted unit(s) as assumed by the observer.* |
| **Position**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | WorldLocationStruct | *Position of the spotted unit at the specified time.* |
| **NumberOfUnits**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted units.* |

| Name | Datatype | Semantics |
|---|---|---|
| **UnitType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the units spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **NumberOfEquipments**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted enemy equipments.* |
| **EquipmentType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the equipments spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.40. **InSensorReport**

Full Name:           HLAinteractionRoot.LBMLMessage.LBMLReport.SpotReport.InSensorReport

Sharing:              Publish/Subscribe

Transportation type:  HLAreliable

Order:               Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **SensorType** | EntityTypeStruct | |
| **SensedEntities** | ArrayOfUuid | |
| **Observer**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *Unit that observed the enemy (or neutral/unknown unit) and sends the spot report.* |
| **IdentificationLevel**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | IdentificationLevelEnum8 | *The identification level of the unit(s) spotted.* |
| **ForceIdentifier**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | PerceivedForceIdentifierEnum32 | *Force Id of the spotted unit(s) as assumed by the observer.* |
| **Position**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | WorldLocationStruct | *Position of the spotted unit at the specified time.* |

| Name | Datatype | Semantics |
|---|---|---|
| **NumberOfUnits**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted units.* |
| **UnitType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the units spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **NumberOfEquipments**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted enemy equipments.* |
| **EquipmentType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the equipments spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## 13.1.41. **InWeaponRangeReport**

Full Name:          HLAinteractionRoot.LBMLMessage.LBMLReport.SpotReport.InWeaponRangeReport

Sharing:          Publish/Subscribe

Transportation type: HLAreliable

Order:          Receive

Dimensions:

Semantics:

Parameters:

| Name | Datatype | Semantics |
|---|---|---|
| **WeaponType** | EntityTypeStruct | |
| **EntitiesInWeaponRange** | ArrayOfUuid | |
| **Observer**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | UuidArrayOfHLAbyte16 | *Unit that observed the enemy (or neutral/unknown unit) and sends the spot report.* |
| **IdentificationLevel**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | IdentificationLevelEnum8 | *The identification level of the unit(s) spotted.* |
| **ForceIdentifier**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | PerceivedForceIdentifierEnum32 | *Force Id of the spotted unit(s) as assumed by the observer.* |

| Name | Datatype | Semantics |
|---|---|---|
| **Position**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | WorldLocationStruct | *Position of the spotted unit at the specified time.* |
| **NumberOfUnits**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted units.* |
| **UnitType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the units spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **NumberOfEquipments**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | Integer32 | *Number of spotted enemy equipments.* |
| **EquipmentType**<br><br>*Inherited from SpotReport in NETN-LBML_v1.1.0* | EntityTypeStruct | *Description of the equipments spotted. Subfields can be 0 if unknown, depending on the identification level.* |
| **When**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | Datetime18 | *Date and time when the reported status was valid.* |
| **Comments**<br><br>*Inherited from LBMLReport in NETN-LBML_v1.1.0* | HLAunicodeString | *Any additional comments* |

## *13.2. Datatypes*

## *13.2.1. Simple Datatypes*

**Counter**

Representation:   HLAinteger32BE
Units:            NA
Resolution:       1
Accuracy:         perfect
Semantics:        Counter

## *13.2.2. Enumerated Datatypes*

### RulesOfEngagementEnum8

Representation: HLAoctet

Semantics: *Rules of engagment for a simulated unit.*

| Enumerator | Value |
|---|---|
| HoldFire | 0 |
| FireAtWill | 1 |
| FireWhenFiredUpon | 2 |

### TaskStatusEnum32

Representation: HLAinteger32BE

Semantics: *The status of a task.*

| Enumerator | Value |
|---|---|
| Accepted | 0 |
| Refused | 1 |
| Aborted | 2 |
| Completed | 3 |

### IdentificationLevelEnum8

Representation: HLAoctet

Semantics: *The identification level of an object.*

| Enumerator | Value |
|---|---|
| Lost | 0 |
| Detected | 1 |
| Classified | 2 |
| Identified | 3 |
| FullKnowledge | 4 |

## MoveTypeEnum32

Representation:    HLAinteger32BE

Semantics:    *CrossCountry: move directly to the destination without taking into account the roads.*
*OnlyRoads: stay on the roads to get to the closest point to the destination that is still on a road; if there is no road very near to the start (within around 10 meters) there will be no movement at all.*
*RoadsAndCrossCountry: move to the destination by taking into account the roads; it is allowed to go off the road.*

| Enumerator | Value |
|---|---|
| CrossCountry | 0 |
| OnlyRoads | 1 |
| RoadsAndCrossCountry | 2 |

## AttackTypeEnum32

Representation:    HLAinteger32BE

Semantics:    *The kind of attack by the enemy.*

| Enumerator | Value |
|---|---|
| None | 0 |
| Artillery | 1 |
| HeavyArtillery | 2 |
| Other | 3 |

## AltitudeTypeEnum8

Representation:    HLAoctet

Semantics:    *AMSL = Above Mean Sea Level*
*AGL = Abve Ground Level*

| Enumerator | Value |
|---|---|
| AMSL | 1 |
| AGL | 2 |

## TaskStartConditionEnum8

Representation:    HLAoctet

Semantics:

| Enumerator | Value |
|---|---|
| OnCompletionOfPrevious | 1 |
| AtTime | 2 |

## TaskTypeEnum8

Representation:    HLAoctet

Semantics:    *CancelAllOtherTasks: this new task replaces all other tasks. The current task has to be aborted as soon as possible and the new task can be executed at the start time.*
*AddToTaskList: this new task will be executed after all other tasks with a smaller start time have been completed.*
*InterruptCurrentTask: this new task interrupts the current task or is an adjustment of the current task.*

| Enumerator | Value |
|---|---|
| CancelAllOtherTasks | 0 |
| AddToTaskList | 1 |
| InterruptCurrentTask | 2 |

## PerceivedForceIdentifierEnum32

Representation:    HLAinteger32BE

Semantics:

| Enumerator | Value |
|---|---|
| Unknown | 0 |
| AssumedFriend | 1 |
| Friend | 2 |
| Neutral | 3 |
| Suspect | 4 |
| Hostile | 5 |

## *13.2.3. Array Datatypes*

### Datetime18

Element Type:   HLAunicodeChar

Cardinality:   18

Encoding:   HLAfixedArray

Semantics:   *A designation of a specified chronological point measured using Coordinated Universal Time (UTC) ISO 8601:2000 as a standard of reference, constrained to "zero meridian" i.e. Zulu time zone only. This is expressed as a composite field using a compacted ISO notation YYYYMMDDHHMMSS.SSS where YYYY represents a year, MM represents a month in values from 00 to 12, and DD represents a day in values from 00 to 31, HH represents an hour, MM represents a minute, and SS.SSS represents the number of seconds and milliseconds.*

### ArrayOfTaskIds

Element Type:   TaskId

Cardinality:   Dynamic

Encoding:   HLAvariableArray

Semantics:   *Array of Task Ids.*

## 13.2.4. Fixed Record Datatypes

**TaskId**

Encoding:     HLAfixedRecord

Semantics:     *Unique identifier for this order.*

| Name | Type | Semantic |
|---|---|---|
| TaskCounter | Counter | *This value shall be incremented by 1 for each sent task.* |
| FederateHandle | HLAhandle | *The handle that the federate get when joining the federation.* |