# Pulling elements out of the C2SIM Standard

The following tables have the classes and their elements from where they exist in the C2SIM.rdf file. These tables were used to create the MessageBody tabs in the ASX Sample Excel files.

## Reports and Observations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Line | Object Label | Min / Max | Object Type | Description |
| **61** | **C2SIM # UUIDBase** |  | **Class** |  |
|  | equivalentClass: string |  |  | Has a pattern definition |
| **1986** | **C2SIM # DomainMessageBody** |  |  | **The body of a message that is sent between actors in the domain.** |
|  | Subclass of: MessageBody |  |  |  |
|  | Restriction : isFromSender | 1 | UUIDBase |  |
|  | Restriction: isToReceiver | 1 | UUIDBase |  |
| 507 | hasReportContent |  | ObjectProperty | Provides content for a ReportBody message. |
| **3127** | **C2SIM # ReportBody** |  | **Class (Definition)** | **Structure for sending report messages.** |
|  | Subclass of: DomainMessageBody |  |  |  |
|  | Restriction: hasReportContent | 1 | ReportContent |  |
|  | Restriction: hasReportID | 1 | UUIDBase |  |
|  | Restriction: hasReportingEntity | 1 | UUIDBase |  |
| 3153 | Axiom: |  |  |  |
| **3169** | **C2SIM # ReportContent** |  | **Class** |  |
|  | Subclass of: MessageConcept |  |  |  |
|  | Restriction: hasTimeofObservation | 1 | DateTime |  |
|  | hasDuration | 1 | Duration | \*\*\* |
| **949** | **Smx # Observation** |  | **Class** |  |
|  | Subclass of: |  | C2SIMContent |  |
|  | Restriction: hasActorReference | 1 | String |  |
|  | Restriction: hasConfidenceLevel | 1 | Double |  |
|  | Restriction: hasUncertaintyInterval | 1 | Double | Defn of Uncertainty Interval line 998 |
|  | Comment: |  | Subclasses define specific observations that can be made.  The subclasses defined here are sufficient to create a report with Size, Activity, Location, Unit Identification, Time, and Equipment, or some subset of that. |  |
| **1005** | **ObservationReportContent** |  |  |  |
|  | Subclass of ReportContent |  |  |  |
|  | Restriction: hasObservation | 1 | Observation |  |
| **596** | **ActivityObservation** |  |  |  |
|  | Subclass of : Observation |  |  |  |
|  | Restriction: hasActionCode | 1 | ActionCode |  |
|  | Restriction: |  |  |  |
| **791** | **HealthObservation** |  |  |  |
|  | Subclass of: Observation |  |  |  |
|  | Restriction: hasEntityHealthStatus | 1 | EntityHealthStatus |  |
| **825** | **LocationObservation** |  |  | **An observation of the location of a subject.** |
|  | Subclass of: Observation |  |  |  |
|  | Restriction: hasLocation | 1 | C2SIM # Location |  |
|  | Restriction: hasDirectionOfMovement | 1 | C2SIM # Orientation |  |
|  | Restriction: hasSpeed | 1 | Float |  |
| **898** | **NameObservation** |  |  | **An observation of the unit name, a vehicle marking, a force side, and/or a hostility status of the observed entity.** |
|  | Subclass of: Observation | 1 |  |  |
|  | hasHostilityStatusCode | 1 | Smx # HostilitySstatusCode |  |
|  | hasName | 1 | String |  |
|  | hasMarking | 1 | String |  |
|  | hasSide | 1 | UUIDBase |  |
| **1038** | **ResourceObservation** |  |  | **Observations on resource availability, e.g. fuel, ammunition** |
|  | Subclass of: Observation | 1 |  |  |
|  | hasResource | 1 | Resource |  |
| **1063** | **SubjectTypeObservation** |  |  | **Describes the type of the subject of an observation.** |
|  | Subclass of: Observation | 1 |  |  |
|  | C2SIM # hasEntityType | 1 | EntityType |  |
| **1653** | **C2SIM # C2SIMHeader** |  | **Class** |  |
|  | Subclass of C2SIM # MessageConcept |  |  |  |
|  | Restriction: hasCommunicativeActTypeCode | 1 | CommunicativeActTypeCode |  |
|  | Restriction: hasSecurityClassificationCode | 1 | SecurityClassificationCode |  |
|  | Restriction: hasSendingTime | 1 | DateTime |  |
|  | Restriction: hasProtocol | 1 | SISO-STD-C2SIM (value) |  |
|  | Restriction: hasProtocolVersion | 1 | 1.0.0 (value) |  |
|  | hasConversationId | 1 | UUIDBase |  |
|  | hasMessageId |  | UUIDBase |  |
|  | isFromSendingSystem | 1 | String |  |
|  | isToReceivingSystem | 1 | String |  |
|  | hasReplyToSystem | 1 | String |  |
|  | isInReplyToMessageId | 1 | UUIDBase |  |
| **2475** | **C2SIM # Message** |  | **Any C2SIM message that is sent between host systems.** |  |
|  | Subclass of MessageConcept | 1 |  |  |
|  | hasC2SIMHeader | 1 | C2SIMHeader |  |
|  | hasMessageBody | 1 | MessageBody |  |
| **2498** | **C2SIM # MessageBody** |  | **The structure for sending domain messages: orders, reports, and acknowledgements.** | **No Attributes** |
| **2516** | **C2SIM # MessageConcept** |  | **This parent class collects together classes that define the basic structure of messages used in C2SIM.** | **No attributes** |

## SMX Tactical Objects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Line | Object Label | Min / Max | Object Type | Description |
| 1022 | Point |  |  | Specifies NATO APP6-C tactical graphics symbol for a point location. |
|  | Subclass of TacticalGraphic |  |  |  |
| 1112 | TacticalArea |  |  | Specifies a NATO APP6-C-based tactical graphics symbol for an area location. |
|  | Subclass of TacticalGraphics |  |  |  |
| 1119 | TacticalGraphic |  |  |  |
|  | Subclass of C2SIM # MapGraphic |  |  |  |
| 1056 | Smx # Route |  |  | Specifies a NATO APP6-C-based tactical graphics symbol for a route line. |
|  | Subclass of smx # Line |  |  |  |
| 80 | C2SIM # angle |  | Double | Collection with +/` Pi |

## Orders

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Line | Object Label | Min | Object Type | Description |
| **2667** | **C2SIM # OrderBody** |  | **Class** |  |
|  | Subclass of: DomainMessageBody |  |  |  |
|  | hasEntity | 0 | MapGraphic |  |
|  | hasTask | 0 | Task |  |
|  | hasIssuedTime | 1 | DateTime |  |
|  | hasTaskReference | 0 | UUIDBase |  |
|  | hasOrderID | 1 | UUIDBase |  |
|  | hasRequestingEntity | 1 | UUIDBase |  |
| **3434** | **Task** |  |  |  |
|  | Subclass of: Action |  |  |  |
|  | hasDesiredEffectCode | 0 | DesiredEffectCode |  |
|  | hasTaskActionCode | 0 | TaskActionCode |  |
|  | hasDuration | 1 | Duration |  |
|  | hasEndTime | 1 | TimeInstant |  |
|  | hasStartTime | 1 | TimeInstant |  |
|  | hasAffectedEntity | 0 | UUIDBase |  |
|  | hasPerformingEntity | 1 | UUIDBase |  |

## Requests

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Line | Object Label | Min | Object Type | Description |
| **3204** | **C2SIM # RequestBody** |  | **Class** |  |
|  | Subclass of: DomainMessageBody |  |  |  |
|  | hasRequestContent |  | RequestContent |  |
|  | hasRequestingEntity | 1 | UUIDBase |  |
| **1417** | **C2SIM # AcknowledgementBody** |  |  | **An acknowledgement from one Actor to another that a message was received.** |
|  | Subclass of: DomainMessageBody |  |  |  |
|  |  |  |  |  |

## Initialization

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Line | Object Label | Min | Object Type | Description |
| **1775** | **C2SIM # C2SIMInitializationBody** |  | **Class** |  |
|  | Subclass of: MessageBody |  |  |  |
|  | hasInitializationFile | 0 | InitializationDataFile |  |
|  | hasObjectDefinitions | 1 | ObjectDefinitions |  |
|  | hasSystemEntityList | 1 | SystemEntityList |  |
|  | hasScenarioSetting | 1 | ScenarioSetting |  |