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# 1 Catalogue header information

Name: Feature Catalogue for S-129  
Scope: Dynamic under keel clearance management information  
Field of Application: Under keel clearance management  
Version Number:   
Version date: 2018-10-19

Producer information:  
Individual name:   
Organisation name: International Hydrographic Organization  
Position Name:   
Contact Information:   
Phone:   
Address:

| **deliveryPoint** | **city** | **administrativeArea** | **postalCode** | **country** | **electronicMailAddress** |
| --- | --- | --- | --- | --- | --- |
| International Hydrographic Organization, 4 quai Antoine 1er, B.P. 445 |  |  | MC 98011 MONACO CEDEX |  |  |

Online resource information:   
Hours of Service:   
Contact Instructions:   
Role: user  
Classification: unclassified

# 2 Definition Sources

No definition sources in catalogue

# 3 Simple Attributes

## 3.1 Generation Time

Name: Generation Time  
Definition:.  
Code: 'generationTime'  
Remarks:   
Aliases: (none)  
Value Type: dateTime

## 3.2 Vessel ID

Name: Vessel ID  
Definition:   
Code: 'vesselID'  
Remarks:   
Aliases: (none)  
Value Type: text

## 3.3 Source Route Name

Name: Source Route Name  
Definition:   
Code: 'sourceRouteName'  
Remarks:   
Aliases: (none)  
Value Type: text

## 3.4 Source Route Version

Name: Source Route Version  
Definition:.  
Code: 'sourceRouteVersion'  
Remarks:.  
Aliases: (none)  
Value Type: text

## 3.5 Maximum Draught

Name: Maximum Draught  
Definition:.  
Code: 'maximumDraught'  
Remarks:   
Aliases:   
Value Type: real

## 3.6 Distance Above UKC Limit

Name: Distance Above UKC Limit  
Definition:.  
Code: 'distanceAboveUKCLimit\_m'  
Remarks:   
Aliases:   
Value Type: real

## 3.7 Scale Minimum

Name: Scale Minimum  
Definition:   
Code: 'scaleMinimum'  
Remarks:   
Aliases:   
Value Type: integer

## 3.8 Name

Name: Name  
Definition:   
Code: 'name'  
Remarks:   
Aliases:   
Value Type: text

## 3.8 Expect Passing Time

Name: Expect Passing Time  
Definition:   
Code: 'expectPassingTime'  
Remarks:   
Aliases:   
Value Type: dateTime

## 3.8 Expect Passing Speed

Name: Expect Passing Speed  
Definition:   
Code: 'expectPassingSpeed'  
Remarks:   
Aliases:   
Value Type: real

# 4 Enumerations

## 4.1 UnderKeelClearance Purpose Type

Name: UnderKeelClearance Purpose Type  
Definition:.  
Code: 'UnderKeelClearancePurposeType'  
Remarks:   
Aliases: (none)  
Value Type:

Listed Values

| **Label** | **Definition** | **Code** | **Remarks** |
| --- | --- | --- | --- |
| 'prePlan' Aliases: (none) |  | 1 |  |
| 'actualPlan' Aliases: (none) |  | 2 |  |
| 'actualUpdate' Aliases: (none) |  | 3 |  |

## 4.2 UnderKeelClearance Calculation Request

Name: UnderKeelClearance Calculation Request  
Definition:.  
Code: 'UnderKeelClearanceCalculationRequest'  
Remarks:   
Aliases: (none)  
Value Type:

Listed Values

| **Label** | **Definition** | **Code** | **Remarks** |
| --- | --- | --- | --- |
| 'timeWindow' Aliases: (none) |  | 1 |  |
| 'maxDraught' Aliases: (none) |  | 2 |  |

# 5 Complex Attributes

## 5.1 Fixed Time Range

Name: Fixed Time Range  
Definition:.  
Code: 'fixedTimeRange'  
Remarks:   
Aliases: (none)

Sub-Attributes

| **Sub-attribute** | **Type** | **Mult.** | **Permitted Values** | **sequential** |
| --- | --- | --- | --- | --- |
| timeStart | dateTime |  |  | false |
| timeEnd | dateTime |  |  | false |

# 6 Associations and Roles

## 6.1 Associations

Association(name): (none)

Definition: Association between ‘UnderKeelClearancePlanNonNavigable’ class and ‘UnderKeelClearancePlan’ class

Role type: Aggregation

Code: <S100FC:featureBinding> ~ </S100FC:featureBinding>

Multiplicity: 0..\* / 1

Role: consistOf / componentOf

Feature type: UnderKeelClearancePlanNonNavigable / UnderKeelClearancePlan

Remarks: It must be in all feature types that they have connection. The featuretype attribute is target feature.

Association(name): (none)

Definition: Association between ‘UnderKeelClearanceAlmostNonNavigableArea’ class and ‘UnderKeelClearancePlan’ class

Role type: Aggregation

Code: <S100FC:featureBinding> ~ </S100FC:featureBinding>

Multiplicity: 0..\* / 1

Role: consistOf/ componentOf

Feature type: UnderKeelClearanceAlmostNonNavigableArea / UnderKeelClearancePlan

Remarks: It must be in all feature types that they have connection. The featuretype attribute is target feature.

Association(name): (none)

Definition: Association between ‘UnderKeelClearanceControlPoint’ class and ‘UnderKeelClearancePlan’ class

Role type: Aggregation

Code: <S100FC:featureBinding> ~ </S100FC:featureBinding>

Multiplicity: 0..\* / 1

Role: consistOf / componentOf

Feature type: UnderKeelClearanceControlPoint / UnderKeelClearancePlan

Remarks: It must be in all feature types that they have connection. The featuretype attribute is target feature.

## 6.2 Component of

Name: Component of  
Definition: A pointer to the aggregate in a whole-part relationship.  
Code: 'componentOf'  
Remarks: Definition may need to be discussed with S-101 team and GI registry manager  
Aliases: (none)

## 6.3 Consists of

Name: Consists of  
Definition: A pointer to a part in a whole-part relationship  
Code: 'consistsOf'  
Remarks: Definition may need to be discussed with S-101 team and GI registry manager  
Aliases: (none)

# 7 Feature Types

## 7.1 UnderKeelClearancePlan

Name: UnderKeelClearancePlan Abstract type: true  
Definition: This feature is MetaFeature of UKCM information  
Code: 'UKCP'  
Remarks:   
Aliases: (none) Supertype: MetaFeatureType  
Feature use type: meta  
Permitted primitives: noGeometry

Attribute Bindings

| **Attribute** | **Type** | **Mult.** | **Permitted Values** | **Sequential** |
| --- | --- | --- | --- | --- |
| generationTime | Simple |  |  | false |
| vesselID | Simple |  |  | false |
| sourceRouteName | Simple |  |  | false |
| sourceRouteVersion | Simple |  |  | false |
| maximumDraught | Simple |  |  | false |
| UnderKeelClearancePurposeType | Enumeration |  | 1 : prePlan  2 : actualPlan  3 : actualUpdate | false |
| UnderKeelClearanceCalculationRequested | Enumeration |  | 1 : timeWindow  2 : maxDraught | false |
| fixedTimeRange | Complex |  |  | false |

Feature Bindings

| **RoleType** | **Association** | **Role** | **Mult.** | **FeatureType** |
| --- | --- | --- | --- | --- |
| Aggregation | (none) | componentOf | 1 | UnderKeelClearanceNonNavigableArea |
| Aggregation | (none) | componentOf | 1 | UnderKeelClearanceAlmostNonNavigableArea |
| Aggregation | (none) | componentOf | 1 | UnderKeelClearanceControlPoint |

## 7.2 UnderKeelClearanceNonNavigableArea

Name: UnderKeelClearanceNonNavigableArea Abstract type: false  
Definition: Non Navigation Area.  
Code: 'UnderKeelClearanceNonNavigableArea'  
Remarks:   
Aliases: (none) Supertype: FeatureType  
Feature use type: geographic  
Permitted primitives: surface

Attribute Bindings

| **Attribute** | **Type** | **Mult.** | **Permitted Values** | **Sequential** |
| --- | --- | --- | --- | --- |
| scaleMinimum | Simple |  |  | false |

Feature Bindings

| **RoleType** | **Association** | **Role** | **Mult.** | **FeatureType** |
| --- | --- | --- | --- | --- |
| Aggregation | (none) | consistOf | 0..\* | UnderKeelClearancePlan |

## 7.3 UnderKeelClearanceAlmostNonNavigableArea

Name: UnderKeelClearanceAlmostNonNavigableArea Abstract type: false  
Definition: Almost Non-Navigable Area.  
Code: 'UnderKeelClearanceAlmostNonNavigableArea'  
Remarks:   
Aliases: (none) Supertype: FeatureType  
Feature use type: geographic  
Permitted primitives: surface

Attribute Bindings

| **Attribute** | **Type** | **Mult.** | **Permitted Values** | **Sequential** |
| --- | --- | --- | --- | --- |
| scaleMinimum | Simple |  |  | false |
| distanceAboveUKCLimit\_m | Simple |  |  | false |

Feature Bindings

| **RoleType** | **Association** | **Role** | **Mult.** | **FeatureType** |
| --- | --- | --- | --- | --- |
| Aggregation | (none) | consistOf | 0..\* | UnderKeelClearancePlan |

## 7.4 UnderKeelClearanceControlPoint

Name: UnderKeelClearanceControlPoint Abstract type: false  
Definition: UnderKeelClearance ControlPoint  
Code: 'UnderKeelClearanceControlPoint'  
Remarks:   
Aliases: (none) Supertype: FeatureType  
Feature use type: geographic  
Permitted primitives: point

Attribute Bindings

| **Attribute** | **Type** | **Mult.** | **Permitted Values** | **Sequential** |
| --- | --- | --- | --- | --- |
| name | Simple | 0..1 |  | false |
| distanceAboveUKCLimit\_m | Simple | 0..1 |  | false |
| expectedPassingTime | Simple | 0..1 |  | false |
| expectedPassingSpeed | Simple | 0..1 |  | false |
| fixedTimeRange | Complex | 0..1 |  | false |

Feature Bindings

| **RoleType** | **Association** | **Role** | **Mult.** | **FeatureType** |
| --- | --- | --- | --- | --- |
| Aggregation | (none) | consistOf | 0..\* | UnderKeelClearancePlan |