**1. Meta Feature Types**

**2. Geo Feature Types**

**2.1. Radio station**

**Definition:** A place equipped to transmit radio waves.

**CamelCase:** RadioStation

**Alias:** RDOSTA

**Super type:**

**Feature use type:** geographic

**Primitive:** point

**Remarks:** Such a station may be either stationary or mobile, and may also be provided with a radio receiver. In British terminology, also called 'w/t station'. The transmission of a radio station may serve to provide mariners with a line of position (IHO Chart Specifications, M-4). The object 'radio station' is used to encode the point of transmission of the signal.

**Attribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| ID Code |  |  | IN | 1, 1 |
| Category of Radio Station |  | 21 : dGNSS Station  22 : dLoran Station  23 : eLoran Station | EN | 0, 1 |
| Status |  | 1 : permanent  2 : occasional  3 : recommended  4 : notinuse  5 : periodic/intermittent  6 : reserved  7 : temporary  8 : private  9 : mandatory  19 :  35 :  36 : | EN | 0, \* |
| Scale Minimum |  |  | IN | 0, 1 |
| Name |  |  | (S) TE | 1, 1 |

**Information Bindings:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type** | **Association Name** | **Association Ends** | | | | | |
| **Class** | **Role** | **Mult** | **Class** | **Role** | **Mult** |
| association | Additional Information |  |  |  | **ELoranStationAlmanac** | referencedBy | 0, 1 |

**3. Carto Feature Types**

**4. Information Types**

**4.1. eLoran Station Almanac**

**Definition:**

**CamelCase:** ELoranStationAlmanac

**Alias:**

**Super type:**

**Remarks:** No remarks.

**Attribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Issue Number of Data |  |  | TE | 0, 1 |
| Date Start |  |  | DA | 0, 1 |
| Number of ASF Maps |  |  | IN | 1, 1 |
| ID Numbers of ASF Maps |  |  | TE | 0, \* |
| Emission Delay |  |  | RE | 0, 1 |
| Signal Power |  |  | IN | 0, 1 |
| Norminal ECD |  |  | IN | 0, 1 |
| lDC Type |  | 1 : none  2 : tri-state PPM  3 : 9th Pulse  4 : 10th Pulse | EN | 0, 1 |
| Pulse Type |  | 1 : eLoran  2 : Chyka etc | EN | 0, 1 |
| Dual Rate Flag |  | 1 : single rate  2 : dual rate | EN | 0, 1 |
| Blanking Priority Flag |  | 1 : priority on this rate  2 : priority on dual rate  3 : alternate blanking | EN | 0, 1 |
| UTC Synchronisation Mode |  | 1 : SAM control  2 : TOE control | EN | 0, 1 |
| Differential Correction Flag |  | 1 : relative  2 : absolute | EN | 0, 1 |
| Reference Document |  |  | C | 0, 1 |
| Title |  |  | (S) TE | 1, 1 |
| Version |  |  | (S) TE | 1, 1 |
| Text |  |  | (S) TE | 0, \* |

**5. Simple Attributes**

**5.1. Issue Number of Data**

**Definition:**

**CamelCase:** issueNumberOfData

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.2. Date Start**

**Definition:**

**CamelCase:** dateStart

**Alias:**

**Value type:** date

**Remarks:** No remarks.

**5.3. Number of ASF Maps**

**Definition:**

**CamelCase:** numberOfASFMaps

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.4. ID Numbers of ASF Maps**

**Definition:**

**CamelCase:** iDNumbersOfASFMaps

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.5. Emission Delay**

**Definition:**

**CamelCase:** emissionDelay

**Alias:**

**Value type:** real

**Remarks:** No remarks.

**5.6. Signal Power**

**Definition:**

**CamelCase:** signalPower

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.7. Norminal ECD**

**Definition:**

**CamelCase:** norminalECD

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.8. lDC Type**

**Definition:**

**CamelCase:** lDCType

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | none |  |
| 2 | tri-state PPM |  |
| 3 | 9th Pulse |  |
| 4 | 10th Pulse |  |

**5.9. Pulse Type**

**Definition:**

**CamelCase:** pulseType

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | eLoran |  |
| 2 | Chyka etc |  |

**5.10. Dual Rate Flag**

**Definition:**

**CamelCase:** dualRateFlag

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | single rate |  |
| 2 | dual rate |  |

**5.11. Blanking Priority Flag**

**Definition:**

**CamelCase:** blankingPriorityFlag

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | priority on this rate |  |
| 2 | priority on dual rate |  |
| 3 | alternate blanking |  |

**5.12. UTC Synchronisation Mode**

**Definition:**

**CamelCase:** uTCSynchronisationMode

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | SAM control |  |
| 2 | TOE control |  |

**5.13. Differential Correction Flag**

**Definition:**

**CamelCase:** differentialCorrectionFlag

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | relative |  |
| 2 | absolute |  |

**5.14. Category of Radio Station**

**Definition:**

**CamelCase:** categoryOfRadioStation

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 21 | dGNSS Station |  |
| 22 | dLoran Station |  |
| 23 | eLoran Station |  |

**5.15. Status**

**Definition:**

**CamelCase:** status

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

|  |  |  |
| --- | --- | --- |
| **Code** | **Label** | **Definition** |
| 1 | permanent |  |
| 2 | occasional |  |
| 3 | recommended |  |
| 4 | notinuse |  |
| 5 | periodic/intermittent |  |
| 6 | reserved |  |
| 7 | temporary |  |
| 8 | private |  |
| 9 | mandatory |  |
| 10 | planned |  |
| 11 | manual observation |  |
| 12 | unknown status |  |

**5.16. ID Code**

**Definition:**

**CamelCase:** idCode

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.17. Scale Minimum**

**Definition:**

**CamelCase:** scaleMinimum

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.18. File Locator**

**Definition:**

**CamelCase:** fileLocator

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.19. File Reference**

**Definition:**

**CamelCase:** fileReference

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.20. Headline**

**Definition:**

**CamelCase:** headline

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.21. Language**

**Definition:** The method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way.

**CamelCase:** language

**Alias:**

**Value type:** text

**Remarks:** The language is encoded by a 3 character code following ISO 639-2/T.

**5.22. Text**

**Definition:**

**CamelCase:** text

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.23. Prictorial Representation**

**Definition:**

**CamelCase:** prictorialRepresentation

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.24. Source Date**

**Definition:**

**CamelCase:** sourceDate

**Alias:**

**Value type:** date

**Remarks:** No remarks.

**5.25. Picture Caption**

**Definition:**

**CamelCase:** pictureCaption

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.26. Picture Information**

**Definition:**

**CamelCase:** pictureInformation

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.27. Name**

**Definition:**

**CamelCase:** name

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.28. Title**

**Definition:**

**CamelCase:** title

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.29. Version**

**Definition:**

**CamelCase:** version

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.30. Display Name**

**Definition:**

**CamelCase:** displayName

**Alias:**

**Value type:** boolean

**Remarks:** No remarks.

**5.31. Pictorial Representation**

**Definition:**

**CamelCase:** pictorialRepresentation

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**6. Complex Attributes**

**6.1. Information**

**Definition:** Textual information about the feature. The information may be provided as a string of text or as a file name of a single external text file that contains the text.

**CamelCase:** information

**Alias:**

**Remarks:** At least one of the sub-attributes file reference or text must be populated.The sub-attribute file reference is generally used for long text strings or those that require formatting, however, there is no restriction on the type of text (except for lexical level) that can be held in files referenced by sub-attribute file reference.

**SubAttribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| File Locator |  |  | TE | 0, 1 |
| File Reference |  |  | TE | 0, 1 |
| Headline |  |  | TE | 0, 1 |
| Language |  |  | TE | 0, 1 |
| Text |  |  | TE | 0, \* |

**6.2. Graphic**

**Definition:** Pictorial information such as a photograph, sketch or other graphic, optionally accompanied by descriptive information about the graphic and the location relative to its subject from which it was made.

**CamelCase:** graphic

**Alias:**

**Remarks:** No remarks.

**SubAttribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Pictorial Representation |  |  | TE | 1, 1 |
| Source Date |  |  | DA | 0, 1 |
| Picture Caption |  |  | TE | 0, 1 |
| Picture Information |  |  | TE | 0, 1 |

**6.3. Name of Issuing Organization**

**Definition:**

**CamelCase:** nameOfIssuingOrganization

**Alias:**

**Remarks:** No remarks.

**SubAttribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Language |  |  | TE | 0, 1 |
| Name |  |  | TE | 1, 1 |

**6.4. Reference Document**

**Definition:**

**CamelCase:** referenceDocument

**Alias:**

**Remarks:** No remarks.

**SubAttribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Title |  |  | TE | 1, 1 |
| Version |  |  | TE | 1, 1 |

**6.5. Feature Name**

**Definition:** Provides the name of an entity, defines the national language of the name, and provides the option to display the name at various system display settings.

**CamelCase:** featureName

**Alias:**

**Remarks:** No remarks.

**SubAttribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Display Name |  |  | BO | 0, 1 |
| Language |  |  | TE | 0, 1 |
| Name |  |  | TE | 1, 1 |

**7. Roles**

**7.1. Reference**

**Definition:**

**CamelCase:** reference

**Alias:**

**Remarks:** No remarks.

**7.2. Referenced By**

**Definition:**

**CamelCase:** referencedBy

**Alias:**

**Remarks:** No remarks.

**8. Information Associations**

**8.1. Additional Information**

**Definition:** an information association for the binding between at least one instance of a geo feature and an instance of an information type.

**CamelCase:** AdditionalInformation

**Alias:**

**Remarks:** No remarks.

**Role:** Reference

**Role:** Referenced By

**9. Feature Associations**