**1. Meta Feature Types**

**2. Geo Feature Types**

**2.1. dLoran Station**

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

**CamelCase:** DLoranStation

**Alias:**

**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 |
| Status |  | 1 : permanent  2 : occasional  3 : recommended  4 : notinuse  5 : periodic/intermittent  6 : reserved  7 : temporary  8 : private  9 : mandatory  19 : planned  35 : manual observation  36 : unknown status | 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. dLoran Station Almanac**

**Definition:**

**CamelCase:** DLoranStationAlmanac

**Alias:**

**Super type:**

**Remarks:** No remarks.

**Attribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Name of eLoran Region |  |  | TE | 0, 1 |
| 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, \* |
| Number of Transmitters |  |  | IN | 0, 1 |
| Reference Document |  |  | C | 0, 1 |
| Title |  |  | (S) TE | 1, 1 |
| Version |  |  | (S) TE | 1, 1 |
| Name of Issuing Organization |  |  | C | 0, 1 |
| Norminal ECD Value |  |  | (S) RE | 0, 1 |

**5. Simple Attributes**

**5.1. Name of eLoran Region**

**Definition:**

**CamelCase:** nameOfeLoranRegion

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.2. Issue Number of Data**

**Definition:**

**CamelCase:** issueNumberOfData

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.3. Date Start**

**Definition:**

**CamelCase:** dateStart

**Alias:**

**Value type:** date

**Remarks:** No remarks.

**5.4. Number of ASF Maps**

**Definition:**

**CamelCase:** numberOfASFMaps

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.5. ID Numbers of ASF Maps**

**Definition:**

**CamelCase:** iDNumbersOfASFMaps

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.6. Number of Transmitters**

**Definition:**

**CamelCase:** numberOfTransmitters

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.7. ID Code**

**Definition:**

**CamelCase:** idCode

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.8. Scale Minimum**

**Definition:**

**CamelCase:** scaleMinimum

**Alias:**

**Value type:** integer

**Remarks:** No remarks.

**5.9. File Locator**

**Definition:**

**CamelCase:** fileLocator

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.10. File Reference**

**Definition:**

**CamelCase:** fileReference

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.11. Headline**

**Definition:**

**CamelCase:** headline

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.12. 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.

**5.13. Text**

**Definition:**

**CamelCase:** text

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.14. Prictorial Representation**

**Definition:**

**CamelCase:** prictorialRepresentation

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.15. Source Date**

**Definition:**

**CamelCase:** sourceDate

**Alias:**

**Value type:** date

**Remarks:** No remarks.

**5.16. Picture Caption**

**Definition:**

**CamelCase:** pictureCaption

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.17. Picture Information**

**Definition:**

**CamelCase:** pictureInformation

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.18. Name**

**Definition:**

**CamelCase:** name

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.19. Norminal ASF Value**

**Definition:**

**CamelCase:** norminalASFValue

**Alias:**

**Value type:** real

**Remarks:** No remarks.

**5.20. Norminal ECD Value**

**Definition:**

**CamelCase:** norminalECDValue

**Alias:**

**Value type:** real

**Remarks:** No remarks.

**5.21. Pictorial Representation**

**Definition:**

**CamelCase:** pictorialRepresentation

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.22. Designator of Transmitter**

**Definition:**

**CamelCase:** designatorOfTransmitter

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.23. Display Name**

**Definition:**

**CamelCase:** displayName

**Alias:**

**Value type:** boolean

**Remarks:** No remarks.

**5.24. Title**

**Definition:**

**CamelCase:** title

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.25. Version**

**Definition:**

**CamelCase:** version

**Alias:**

**Value type:** text

**Remarks:** No remarks.

**5.26. 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 |  |
| 19 | planned |  |
| 35 | manual observation |  |
| 36 | unknown status |  |

**5.27. Differential Correction Flag**

**Definition:**

**CamelCase:** differentialCorrectionFlag

**Alias:**

**Value type:** enumeration

**Remarks:** No remarks.

**Listed Values:**

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

**5.28. 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 |  |

**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, 1 |

**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. dLoran Related Transmitters**

**Definition:**

**CamelCase:** dLoranRelatedTransmitters

**Alias:**

**Remarks:** No remarks.

**SubAttribute Bindings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S-10x Attribute** | **S-57 Acronym** | **Allowable Encoding Value** | **Type** | **Multiplicity** |
| Designator of Transmitter |  |  | TE | 0, 1 |
| Norminal ASF Value |  |  | RE | 0, 1 |
| Norminal ECD Value |  |  | RE | 0, 1 |

**6.5. 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 |

**6.6. 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**