

**IALA S-211**

**Product Specification**

**Draft 1.0.0 – 28 March 2019**

IALA Port Call Message Product Specification

Annex B

Data Format Documentation

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Schema **S211.xsd**

|  |  |
| --- | --- |
| targetNamespace: | **urn:mrn:ipcdmc:schema:port-call-message** |
|  |  |

|  |  |  |
| --- | --- | --- |
| Elements | Complex types | Simple types |
| [**FeatureType**](#Link1) | [**administrationStateType**](#Link2) | [**comment**](#Link3) |
| [**PortCallMessage**](#Link4) | [**atLocationType**](#Link5) | [**LocalJobIdentifier**](#Link6) |
|  | [**betweenLocationsType**](#Link7) | [**LocalPortCallIdentifier**](#Link8) |
|  | [**DatasetType**](#Link9) | [**LocationIdentifier**](#LinkA) |
|  | [**FeatureType**](#LinkB) | [**locationReferenceObjectType**](#LinkC) |
|  | [**fromLocationType**](#LinkD) | [**messageOperationNameType**](#LinkE) |
|  | [**locationStateType**](#LinkF) | [**MRN**](#Link10) |
|  | [**MemberType**](#Link11) | [**PortCallIdentifier**](#Link12) |
|  | [**messageOperationType**](#Link13) | [**PortCallMessageIdentifier**](#Link14) |
|  | [**PortCallMessage**](#Link15) | [**serviceObjectType**](#Link16) |
|  | [**serviceStateType**](#Link17) | [**TerminalIdentifier**](#Link18) |
|  | [**toLocationType**](#Link19) | [**timeOffset**](#Link1A) |
|  | [**vendorExtensionType**](#Link1B) | [**timeOffsetType**](#Link1C) |
|  |  | [**timeSequenceType**](#Link1D) |
|  |  | [**timeTypeType**](#Link1E) |
|  |  | [**VesselIdentifier**](#Link1F) |
|  |  | [**VoyageIdentifier**](#Link20) |

element **FeatureType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**FeatureType**](#LinkB) |
| substitution group | **gml:AbstractFeature** |
| children | **gml:boundedBy featureObjectIdentifier informationAssociation featureAssociation invFeatureAssociation** |

element **PortCallMessage**

|  |  |
| --- | --- |
| diagram |  |
| type | [**PortCallMessage**](#Link15) |
| children | **gml:boundedBy featureObjectIdentifier informationAssociation featureAssociation invFeatureAssociation** [**portCallId**](#Link21)[**portCode**](#Link22)[**localPortCallId**](#Link23)[**localJobId**](#Link24)[**vesselId**](#Link25)[**messageId**](#Link26)[**reportedAt**](#Link27)[**reportedBy**](#Link28)[**comment**](#Link29)[**incomingVoyage**](#Link2A)[**outgoingVoyage**](#Link2B)[**vendorExtension**](#Link2C)[**locationState**](#Link2D)[**messageOperation**](#Link2E)[**administrationState**](#Link2F)[**serviceState**](#Link30) |

complexType **administrationStateType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**serviceObject**](#Link31)[**performingActor**](#Link32)[**timeSequence**](#Link33)[**effectiveTime**](#Link34)[**windowBefore**](#Link35)[**windowAfter**](#Link36)[**atLocation**](#Link37)[**betweenLocations**](#Link38) |
| annotation | |  | | --- | | documentation | | Describes a time related data point for a service administration event, such as a request made, received, confirmed or denied. | |

element **administrationStateType/serviceObject**

|  |  |
| --- | --- |
| diagram |  |
| type | [**serviceObjectType**](#Link16) |

element **administrationStateType/performingActor**

|  |  |
| --- | --- |
| diagram |  |
| type | [**MRN**](#Link10) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[A-Za-z0-9][A-Za-z0-9-]{0,27}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |

element **administrationStateType/timeSequence**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeSequenceType**](#Link1D) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | CANCELLED | |  | | --- | | documentation | | The time sequence (of an administrative state) to cancel a service [service object] by performing actor | | appinfo | | <code>1</code> | | | enumeration | CONFIRMED | |  | | --- | | documentation | | The time sequence (of an administrative state) to confirm a service [service object] by performing actor | | appinfo | | <code>2</code> | | | enumeration | DENIED | |  | | --- | | documentation | | The time sequence (of an administrative state) to deny a service [service object] by performing actor | | appinfo | | <code>3</code> | | | enumeration | REQUESTED | |  | | --- | | documentation | | The time sequence (of an administrative state) to request a service [service object] by the client | | appinfo | | <code>4</code> | | | enumeration | REQUEST\_RECEIVED | |  | | --- | | documentation | | The time sequence (of an administrative state) to tell that the request of a service [service object] has been received by performing actor | | appinfo | | <code>5</code> | | | enumeration | COMMENCED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been initiated | | appinfo | | <code>6</code> | | | enumeration | COMPLETED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been concluded | | appinfo | | <code>7</code> | | | enumeration | ARRIVAL\_TO | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has arrived to a particular location | | appinfo | | <code>8</code> | | | enumeration | DEPARTURE\_FROM | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has departed from a particular location | | |
| annotation | |  | | --- | | appinfo | | <permittedValues>  <value>1</value>  <value>2</value>  <value>3</value>  <value>4</value>  <value>5</value> </permittedValues> | |

element **administrationStateType/effectiveTime**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:dateTime** |

element **administrationStateType/windowBefore**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeOffset**](#Link1A) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |

element **administrationStateType/windowAfter**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeOffset**](#Link1A) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |

element **administrationStateType/atLocation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**atLocationType**](#Link5) |
| children | [**locationMRN**](#Link39)[**terminal**](#Link3A) |

element **administrationStateType/betweenLocations**

|  |  |
| --- | --- |
| diagram |  |
| type | [**betweenLocationsType**](#Link7) |
| children | [**toLocation**](#Link3B)[**fromLocation**](#Link3C) |

complexType **atLocationType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**locationMRN**](#Link39)[**terminal**](#Link3A) |
| annotation | |  | | --- | | documentation | | The location where a stationary service is performed | |

element **atLocationType/locationMRN**

|  |  |
| --- | --- |
| diagram |  |
| type | [**LocationIdentifier**](#LinkA) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT\_AREA|RENDEZV\_AREA|TUG\_ZONE|VTS\_AREA):[^:]+ |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT|PORT\_AREA|RENDEZV\_AREA|TRAFFIC\_AREA|TUG\_ZONE|VESSEL|VTS\_AREA) |  | |

element **atLocationType/terminal**

|  |  |
| --- | --- |
| diagram |  |
| type | [**TerminalIdentifier**](#Link18) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[tT][eE][rR][mM][iI][nN][aA][lL]:[A-Za-z]{5}:.+ |  | |

complexType **betweenLocationsType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**toLocation**](#Link3B)[**fromLocation**](#Link3C) |
| annotation | |  | | --- | | documentation | | The two locations between which a nautical service is performed | |

element **betweenLocationsType/toLocation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**toLocationType**](#Link19) |
| children | [**locationMRN**](#Link3D)[**terminal**](#Link3E) |

element **betweenLocationsType/fromLocation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**fromLocationType**](#LinkD) |
| children | [**locationMRN**](#Link3F)[**terminal**](#Link40) |

complexType **DatasetType**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **gml:AbstractFeatureType** |
| children | **gml:boundedBy** [**DatasetIdentificationInformation**](#Link41)[**DatasetStructureInformation**](#Link42)[**member**](#Link43) |
| annotation | |  | | --- | | documentation | | Dataset element for PortCDM dataset as "GML document" | |

element **DatasetType/DatasetIdentificationInformation**

|  |  |
| --- | --- |
| diagram |  |
| type | **DataSetIdentificationType** |
| children | **encodingSpecification encodingSpecificationEdition productIdentifier productEdition applicationProfile datasetFileIdentifier datasetTitle datasetReferenceDate datasetLanguage datasetAbstract datasetTopicCategory** |
| annotation | |  | | --- | | documentation | | Dataset identification information | |

element **DatasetType/DatasetStructureInformation**

|  |  |
| --- | --- |
| diagram |  |
| type | **DataSetStructureInformationType** |
| children | **datasetCoordOriginX datasetCoordOriginY datasetCoordOriginZ coordMultFactorX coordMultFactorY coordMultFactorZ nInfoRec nPointRec nMultiPointRec nCurveRec nCompositeCurveRec nSurfaceRec nFeatureRec** |
| annotation | |  | | --- | | documentation | | Dataset structure information | |

element **DatasetType/member**

|  |  |
| --- | --- |
| diagram |  |
| type | [**MemberType**](#Link11) |
| children | **gml:AbstractFeature** |
| annotation | |  | | --- | | documentation | | intended for technical GML 3.2 requirement for making the dataset a "GML document" and clause 21.3 of the OGC GML standard | |

complexType **FeatureType**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **AbstractFeatureType** |
| children | **gml:boundedBy featureObjectIdentifier informationAssociation featureAssociation invFeatureAssociation** |
| annotation | |  | | --- | | documentation | | Generalized feature type which carry all the common attributes | |

complexType **fromLocationType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**locationMRN**](#Link3F)[**terminal**](#Link40) |
| annotation | |  | | --- | | documentation | | The departure location | |

element **fromLocationType/locationMRN**

|  |  |
| --- | --- |
| diagram |  |
| type | [**LocationIdentifier**](#LinkA) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT\_AREA|RENDEZV\_AREA|TUG\_ZONE|VTS\_AREA):[^:]+ |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT|PORT\_AREA|RENDEZV\_AREA|TRAFFIC\_AREA|TUG\_ZONE|VESSEL|VTS\_AREA) |  | |

element **fromLocationType/terminal**

|  |  |
| --- | --- |
| diagram |  |
| type | [**TerminalIdentifier**](#Link18) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[tT][eE][rR][mM][iI][nN][aA][lL]:[A-Za-z]{5}:.+ |  | |

complexType **locationStateType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**referenceObject**](#Link44)[**effectiveTime**](#Link45)[**windowBefore**](#Link46)[**windowAfter**](#Link47)[**timeType**](#Link48)[**timeSequence**](#Link49)[**fromLocation**](#Link4A)[**toLocation**](#Link4B) |
| annotation | |  | | --- | | documentation | | Describes a time related data point for an arrival to or departure from a specified location. | |

element **locationStateType/referenceObject**

|  |  |
| --- | --- |
| diagram |  |
| type | [**locationReferenceObjectType**](#LinkC) |

element **locationStateType/effectiveTime**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:dateTime** |

element **locationStateType/windowBefore**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeOffset**](#Link1A) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |

element **locationStateType/windowAfter**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeOffset**](#Link1A) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |

element **locationStateType/timeType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeTypeType**](#Link1E) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | ESTIMATED | |  | | --- | | documentation | | The time type for expressing assessed time of occurrence | | | enumeration | ACTUAL | |  | | --- | | documentation | | The timetype for expressing the actual time of occurrence | | | enumeration | PLANNED | |  | | --- | | documentation | | The timetype for expressing planned time of occurence | | | enumeration | RECOMMENDED | |  | | --- | | documentation | | The timetype for expressing recommended time of occurrence | | | enumeration | REQUIRED | |  | | --- | | documentation | | The timetype for expressing required time of occurrence | | |

element **locationStateType/timeSequence**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeSequenceType**](#Link1D) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | CANCELLED | |  | | --- | | documentation | | The time sequence (of an administrative state) to cancel a service [service object] by performing actor | | appinfo | | <code>1</code> | | | enumeration | CONFIRMED | |  | | --- | | documentation | | The time sequence (of an administrative state) to confirm a service [service object] by performing actor | | appinfo | | <code>2</code> | | | enumeration | DENIED | |  | | --- | | documentation | | The time sequence (of an administrative state) to deny a service [service object] by performing actor | | appinfo | | <code>3</code> | | | enumeration | REQUESTED | |  | | --- | | documentation | | The time sequence (of an administrative state) to request a service [service object] by the client | | appinfo | | <code>4</code> | | | enumeration | REQUEST\_RECEIVED | |  | | --- | | documentation | | The time sequence (of an administrative state) to tell that the request of a service [service object] has been received by performing actor | | appinfo | | <code>5</code> | | | enumeration | COMMENCED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been initiated | | appinfo | | <code>6</code> | | | enumeration | COMPLETED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been concluded | | appinfo | | <code>7</code> | | | enumeration | ARRIVAL\_TO | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has arrived to a particular location | | appinfo | | <code>8</code> | | | enumeration | DEPARTURE\_FROM | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has departed from a particular location | | |
| annotation | |  | | --- | | appinfo | | <permittedValues>  <value>8</value>  <value>9</value> </permittedValues> | |

element **locationStateType/fromLocation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**fromLocationType**](#LinkD) |
| children | [**locationMRN**](#Link3F)[**terminal**](#Link40) |

element **locationStateType/toLocation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**toLocationType**](#Link19) |
| children | [**locationMRN**](#Link3D)[**terminal**](#Link3E) |

complexType **MemberType**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **gml:AbstractFeatureMemberType** |
| children | **gml:AbstractFeature** |
| annotation | |  | | --- | | documentation | | dataset member | |

complexType **messageOperationType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**messageOperationName**](#Link4C)[**messageId**](#Link4D) |
| annotation | |  | | --- | | documentation | | Administrative operations on previously sent messages. This can be used to flag a previous message as withdrawn, to allow for correction of errors in previous messages | |

element **messageOperationType/messageOperationName**

|  |  |
| --- | --- |
| diagram |  |
| type | [**messageOperationNameType**](#LinkE) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | WITHDRAW | |  | | --- | | documentation | | The action to withdraw a time stamp (Used when a time stamp has been reported incorrectly ). | | |

element **messageOperationType/messageId**

|  |  |
| --- | --- |
| diagram |  |
| type | [**PortCallMessageIdentifier**](#Link14) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | length | 59 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[mM][eE][sS][sS][aA][gG][eE]:[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-4[0-9a-fA-F]{3}-[8-9a-bA-B][0-9a-fA-F]{3}-[0-9a-fA-F]{12} |  | |

complexType **PortCallMessage**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of [**FeatureType**](#LinkB) |
| children | **gml:boundedBy featureObjectIdentifier informationAssociation featureAssociation invFeatureAssociation** [**portCallId**](#Link21)[**portCode**](#Link22)[**localPortCallId**](#Link23)[**localJobId**](#Link24)[**vesselId**](#Link25)[**messageId**](#Link26)[**reportedAt**](#Link27)[**reportedBy**](#Link28)[**comment**](#Link29)[**incomingVoyage**](#Link2A)[**outgoingVoyage**](#Link2B)[**vendorExtension**](#Link2C)[**locationState**](#Link2D)[**messageOperation**](#Link2E)[**administrationState**](#Link2F)[**serviceState**](#Link30) |
| annotation | |  | | --- | | documentation | | A message for communicating all relevant port call information between ship and port, ship  to ship, or shore authorities | |

element **PortCallMessage/portCallId**

|  |  |
| --- | --- |
| diagram |  |
| type | [**PortCallIdentifier**](#Link12) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 120 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[pP][oO][rR][tT]\_[cC][aA][lL][lL]:[A-Za-z]{5}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |

element **PortCallMessage/portCode**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | length | 5 |  | |
| annotation | |  | | --- | | documentation | | portCode is the 5 letter UN/Locode of the port this message is pertaining to | |

element **PortCallMessage/localPortCallId**

|  |  |
| --- | --- |
| diagram |  |
| type | [**LocalPortCallIdentifier**](#Link8) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 120 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][lL]\_[pP][oP][rR][tT]\_[cC][aA][lL][lL]:[A-Za-z]{5}:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+ |  | |

element **PortCallMessage/localJobId**

|  |  |
| --- | --- |
| diagram |  |
| type | [**LocalJobIdentifier**](#Link6) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 120 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][lL]\_[jJ][oO][bB]:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+ |  | |

element **PortCallMessage/vesselId**

|  |  |
| --- | --- |
| diagram |  |
| type | [**VesselIdentifier**](#Link1F) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[vV][eE][sS][sS][eE][lL]:(([iI][mM][oO]:[0-9]{7})|([mM][mM][sS][iI]:[0-9]{9})) |  | |

element **PortCallMessage/messageId**

|  |  |
| --- | --- |
| diagram |  |
| type | [**PortCallMessageIdentifier**](#Link14) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | length | 59 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[mM][eE][sS][sS][aA][gG][eE]:[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-4[0-9a-fA-F]{3}-[8-9a-bA-B][0-9a-fA-F]{3}-[0-9a-fA-F]{12} |  | |

element **PortCallMessage/reportedAt**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:dateTime** |
| annotation | |  | | --- | | documentation | | Time when a time stamp was reported | |

element **PortCallMessage/reportedBy**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| annotation | |  | | --- | | documentation | | Entity that reported a time stamp | |

element **PortCallMessage/comment**

|  |  |
| --- | --- |
| diagram |  |
| type | [**comment**](#Link3) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 200 |  | |

element **PortCallMessage/incomingVoyage**

|  |  |
| --- | --- |
| diagram |  |
| type | [**VoyageIdentifier**](#Link20) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | .\*:[vV][oO][yY][aA][gG][eE]:[a-zA-Z0-9\_]+(:[a-zA-Z0-9\_]+)? |  | |

element **PortCallMessage/outgoingVoyage**

|  |  |
| --- | --- |
| diagram |  |
| type | [**VoyageIdentifier**](#Link20) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | .\*:[vV][oO][yY][aA][gG][eE]:[a-zA-Z0-9\_]+(:[a-zA-Z0-9\_]+)? |  | |

element **PortCallMessage/vendorExtension**

|  |  |
| --- | --- |
| diagram |  |
| type | [**vendorExtensionType**](#Link1B) |
| children | [**extensionVendor**](#Link4E)[**XMLextension**](#Link4F)[**schemaNamespace**](#Link50) |

element **PortCallMessage/locationState**

|  |  |
| --- | --- |
| diagram |  |
| type | [**locationStateType**](#LinkF) |
| children | [**referenceObject**](#Link44)[**effectiveTime**](#Link45)[**windowBefore**](#Link46)[**windowAfter**](#Link47)[**timeType**](#Link48)[**timeSequence**](#Link49)[**fromLocation**](#Link4A)[**toLocation**](#Link4B) |

element **PortCallMessage/messageOperation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**messageOperationType**](#Link13) |
| children | [**messageOperationName**](#Link4C)[**messageId**](#Link4D) |

element **PortCallMessage/administrationState**

|  |  |
| --- | --- |
| diagram |  |
| type | [**administrationStateType**](#Link2) |
| children | [**serviceObject**](#Link31)[**performingActor**](#Link32)[**timeSequence**](#Link33)[**effectiveTime**](#Link34)[**windowBefore**](#Link35)[**windowAfter**](#Link36)[**atLocation**](#Link37)[**betweenLocations**](#Link38) |

element **PortCallMessage/serviceState**

|  |  |
| --- | --- |
| diagram |  |
| type | [**serviceStateType**](#Link17) |
| children | [**serviceObject**](#Link51)[**performingActor**](#Link52)[**timeSequence**](#Link53)[**effectiveTime**](#Link54)[**windowBefore**](#Link55)[**windowAfter**](#Link56)[**timeType**](#Link57)[**atLocation**](#Link58)[**betweenLocations**](#Link59) |

complexType **serviceStateType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**serviceObject**](#Link51)[**performingActor**](#Link52)[**timeSequence**](#Link53)[**effectiveTime**](#Link54)[**windowBefore**](#Link55)[**windowAfter**](#Link56)[**timeType**](#Link57)[**atLocation**](#Link58)[**betweenLocations**](#Link59) |
| annotation | |  | | --- | | documentation | | Describes a time related data point for a service. | |

element **serviceStateType/serviceObject**

|  |  |
| --- | --- |
| diagram |  |
| type | [**serviceObjectType**](#Link16) |

element **serviceStateType/performingActor**

|  |  |
| --- | --- |
| diagram |  |
| type | [**MRN**](#Link10) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[A-Za-z0-9][A-Za-z0-9-]{0,27}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |

element **serviceStateType/timeSequence**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeSequenceType**](#Link1D) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | CANCELLED | |  | | --- | | documentation | | The time sequence (of an administrative state) to cancel a service [service object] by performing actor | | appinfo | | <code>1</code> | | | enumeration | CONFIRMED | |  | | --- | | documentation | | The time sequence (of an administrative state) to confirm a service [service object] by performing actor | | appinfo | | <code>2</code> | | | enumeration | DENIED | |  | | --- | | documentation | | The time sequence (of an administrative state) to deny a service [service object] by performing actor | | appinfo | | <code>3</code> | | | enumeration | REQUESTED | |  | | --- | | documentation | | The time sequence (of an administrative state) to request a service [service object] by the client | | appinfo | | <code>4</code> | | | enumeration | REQUEST\_RECEIVED | |  | | --- | | documentation | | The time sequence (of an administrative state) to tell that the request of a service [service object] has been received by performing actor | | appinfo | | <code>5</code> | | | enumeration | COMMENCED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been initiated | | appinfo | | <code>6</code> | | | enumeration | COMPLETED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been concluded | | appinfo | | <code>7</code> | | | enumeration | ARRIVAL\_TO | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has arrived to a particular location | | appinfo | | <code>8</code> | | | enumeration | DEPARTURE\_FROM | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has departed from a particular location | | |
| annotation | |  | | --- | | appinfo | | <permittedValues>  <value>6</value>  <value>7</value> </permittedValues> | |

element **serviceStateType/effectiveTime**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:dateTime** |

element **serviceStateType/windowBefore**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeOffset**](#Link1A) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |

element **serviceStateType/windowAfter**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeOffset**](#Link1A) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |

element **serviceStateType/timeType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**timeTypeType**](#Link1E) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | ESTIMATED | |  | | --- | | documentation | | The time type for expressing assessed time of occurrence | | | enumeration | ACTUAL | |  | | --- | | documentation | | The timetype for expressing the actual time of occurrence | | | enumeration | PLANNED | |  | | --- | | documentation | | The timetype for expressing planned time of occurence | | | enumeration | RECOMMENDED | |  | | --- | | documentation | | The timetype for expressing recommended time of occurrence | | | enumeration | REQUIRED | |  | | --- | | documentation | | The timetype for expressing required time of occurrence | | |

element **serviceStateType/atLocation**

|  |  |
| --- | --- |
| diagram |  |
| type | [**atLocationType**](#Link5) |
| children | [**locationMRN**](#Link39)[**terminal**](#Link3A) |

element **serviceStateType/betweenLocations**

|  |  |
| --- | --- |
| diagram |  |
| type | [**betweenLocationsType**](#Link7) |
| children | [**toLocation**](#Link3B)[**fromLocation**](#Link3C) |

complexType **toLocationType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**locationMRN**](#Link3D)[**terminal**](#Link3E) |
| annotation | |  | | --- | | documentation | | The arrival location | |

element **toLocationType/locationMRN**

|  |  |
| --- | --- |
| diagram |  |
| type | [**LocationIdentifier**](#LinkA) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT\_AREA|RENDEZV\_AREA|TUG\_ZONE|VTS\_AREA):[^:]+ |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT|PORT\_AREA|RENDEZV\_AREA|TRAFFIC\_AREA|TUG\_ZONE|VESSEL|VTS\_AREA) |  | |

element **toLocationType/terminal**

|  |  |
| --- | --- |
| diagram |  |
| type | [**TerminalIdentifier**](#Link18) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[tT][eE][rR][mM][iI][nN][aA][lL]:[A-Za-z]{5}:.+ |  | |

complexType **vendorExtensionType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**extensionVendor**](#Link4E)[**XMLextension**](#Link4F)[**schemaNamespace**](#Link50) |
| annotation | |  | | --- | | documentation | | The two locations between which a nautical service is performed | |

element **vendorExtensionType/extensionVendor**

|  |  |
| --- | --- |
| diagram |  |
| type | [**MRN**](#Link10) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[A-Za-z0-9][A-Za-z0-9-]{0,27}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |

element **vendorExtensionType/XMLextension**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:anyType** |

element **vendorExtensionType/schemaNamespace**

|  |  |
| --- | --- |
| diagram |  |
| type | [**MRN**](#Link10) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[A-Za-z0-9][A-Za-z0-9-]{0,27}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |

simpleType **comment**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 200 |  | |
| annotation | |  | | --- | | documentation | | Restriction of string type limiting the maximum length. | |

simpleType **LocalJobIdentifier**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 120 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][lL]\_[jJ][oO][bB]:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+ |  | |
| annotation | |  | | --- | | documentation | | Port call identifier, based on MRN. First element of the NSS should be the UN/Locode of the port | |

simpleType **LocalPortCallIdentifier**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 120 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][lL]\_[pP][oP][rR][tT]\_[cC][aA][lL][lL]:[A-Za-z]{5}:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+:[A-Za-z0-9()+,\-.=@;$\_!\*'%/?#]+ |  | |
| annotation | |  | | --- | | documentation | | Local Port call identifier, based on MRN. First element of the NSS should be the UN/Locode  of the port, second element is a data source id and the third is the port call id of the data source  external system | |

simpleType **LocationIdentifier**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT\_AREA|RENDEZV\_AREA|TUG\_ZONE|VTS\_AREA):[^:]+ |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[lL][oO][cC][aA][tT][iI][oO][nN]:[A-Za-z]{5}:(ANCHORING\_AREA|BERTH|BOUY|ETUG\_ZONE|HOME\_BASE|PILOT\_BOARDING\_AREA|PORT|PORT\_AREA|RENDEZV\_AREA|TRAFFIC\_AREA|TUG\_ZONE|VESSEL|VTS\_AREA) |  | |
| annotation | |  | | --- | | documentation | | Location identifier, based on MRN. This can be either a specific identifier for an identified physical location or a type-only identifier for a logical location, such as ANCHORING\_AREA.  For BERTH, there's also the possibility of describing bollards, ranges of bollards and ranges of berths. Assuming two berth locations are adjacent, say Quay\_A and Quay\_B, a ship occupying a space crossing  between the two can be said to be at Quay\_A/B7-Quay\_B/K3, meaning that one end of the ship is at the bollard identified as B7 on Quay\_A and the bollard K3 on Quay\_B. Please note that the names of Quays  and bollards are mere examples. Both quays and bollards can be named according to any schema, as long as the names don't contain any of the characters "/" or "-" which are used as delimiters. If both  bollards are on the same berth location, the berth location name can be excluded in the second occurence in the range. Using our previous example, assuming that the ship ends av bollard B23 on  Quay\_A, this can be written as Quay\_A/B7-B23. | |

simpleType **locationReferenceObjectType**

|  |  |
| --- | --- |
| type | union of (restriction of **xs:string**, restriction of **xs:string**) |
| annotation | |  | | --- | | documentation | | The entity that the time stamp concerns that changes location upon a timestamp of a  location state | |

simpleType **messageOperationNameType**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | WITHDRAW | |  | | --- | | documentation | | The action to withdraw a time stamp (Used when a time stamp has been reported incorrectly ). | | |
| annotation | |  | | --- | | documentation | | Operation to be performed on port call message | |

simpleType **MRN**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[A-Za-z0-9][A-Za-z0-9-]{0,27}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |
| annotation | |  | | --- | | documentation | | Marine Resource Name identifier, based on URN. Note that the NID, including the mrn:  prefix can be no more than 31 characters long | |

simpleType **PortCallIdentifier**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | maxLength | 120 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[pP][oO][rR][tT]\_[cC][aA][lL][lL]:[A-Za-z]{5}:[A-Za-z0-9()+,\-.:=@;$\_!\*'%/?#]+ |  | |
| annotation | |  | | --- | | documentation | | Port call identifier, based on MRN. First element of the NSS should be the 5 character UN/Locode of the port | |

simpleType **PortCallMessageIdentifier**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | length | 59 |  | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[mM][eE][sS][sS][aA][gG][eE]:[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-4[0-9a-fA-F]{3}-[8-9a-bA-B][0-9a-fA-F]{3}-[0-9a-fA-F]{12} |  | |
| annotation | |  | | --- | | documentation | | Port call message identifier, based on MRN and UUID. | |

simpleType **serviceObjectType**

|  |  |
| --- | --- |
| type | union of (restriction of **xs:string**, restriction of **xs:string**) |
| annotation | |  | | --- | | documentation | | The reference to a particular service in service state and administration state messages | |

simpleType **TerminalIdentifier**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[tT][eE][rR][mM][iI][nN][aA][lL]:[A-Za-z]{5}:.+ |  | |

simpleType **timeOffset**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |
| annotation | |  | | --- | | documentation | | Time offset, relative a given time. In hours and minutes (HH:MM) | |

simpleType **timeOffsetType**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [0-9][0-9]:[0-6][0-9] |  | |
| annotation | |  | | --- | | documentation | | Time offset, relative a given time. In hours and minutes (HH:MM) | |

simpleType **timeSequenceType**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | CANCELLED | |  | | --- | | documentation | | The time sequence (of an administrative state) to cancel a service [service object] by performing actor | | appinfo | | <code>1</code> | | | enumeration | CONFIRMED | |  | | --- | | documentation | | The time sequence (of an administrative state) to confirm a service [service object] by performing actor | | appinfo | | <code>2</code> | | | enumeration | DENIED | |  | | --- | | documentation | | The time sequence (of an administrative state) to deny a service [service object] by performing actor | | appinfo | | <code>3</code> | | | enumeration | REQUESTED | |  | | --- | | documentation | | The time sequence (of an administrative state) to request a service [service object] by the client | | appinfo | | <code>4</code> | | | enumeration | REQUEST\_RECEIVED | |  | | --- | | documentation | | The time sequence (of an administrative state) to tell that the request of a service [service object] has been received by performing actor | | appinfo | | <code>5</code> | | | enumeration | COMMENCED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been initiated | | appinfo | | <code>6</code> | | | enumeration | COMPLETED | |  | | --- | | documentation | | The time sequence (of a service state) to tell that the service delivery is planned to / has been concluded | | appinfo | | <code>7</code> | | | enumeration | ARRIVAL\_TO | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has arrived to a particular location | | appinfo | | <code>8</code> | | | enumeration | DEPARTURE\_FROM | |  | | --- | | documentation | | The time sequence (of a location state) to tell that a reference object is planned to / has departed from a particular location | | |
| annotation | |  | | --- | | documentation | | The component of a state (as location, service, administrative state) regulating the communicative intent of the state (such as arrived, departed, commenced, completed, requested, request received, confirmed, denied, cancelled) | |

simpleType **timeTypeType**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | ESTIMATED | |  | | --- | | documentation | | The time type for expressing assessed time of occurrence | | | enumeration | ACTUAL | |  | | --- | | documentation | | The timetype for expressing the actual time of occurrence | | | enumeration | PLANNED | |  | | --- | | documentation | | The timetype for expressing planned time of occurence | | | enumeration | RECOMMENDED | |  | | --- | | documentation | | The timetype for expressing recommended time of occurrence | | | enumeration | REQUIRED | |  | | --- | | documentation | | The timetype for expressing required time of occurrence | | |
| annotation | |  | | --- | | documentation | | The time dimension of a time stamp combined with the state expressing intentions, recommendations or outcomes | |

simpleType **VesselIdentifier**

|  |  |
| --- | --- |
| type | restriction of [**MRN**](#Link10) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | [uU][rR][nN]:[mM][rR][nN]:[iI][pP][cC][dD][mM][cC]:[vV][eE][sS][sS][eE][lL]:(([iI][mM][oO]:[0-9]{7})|([mM][mM][sS][iI]:[0-9]{9})) |  | |
| annotation | |  | | --- | | documentation | | Vessel identifier, based on MRN. Can be either IMO or MMSI based | |

simpleType **VoyageIdentifier**

|  |  |
| --- | --- |
| type | restriction of [**MRN**](#Link10) |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | .\*:[vV][oO][yY][aA][gG][eE]:[a-zA-Z0-9\_]+(:[a-zA-Z0-9\_]+)? |  | |
| annotation | |  | | --- | | documentation | | Voyage identifier, based on MRN | |