

SafeSeaNet 3.4 API

This document is currently in a Draft state and as such its content is subject to change.

URI Templating

URI's in this document is given in the following format:

```
/api/v1/{path_param}/static?query[?opt_query_1][?opt_query_2]
```

Note: The v1 is a common way of selecting API versions, since it is not expected that the API will change, but rather that schemas will. This may change in the final version.

When generating URI's from the pattern, `{}` indicates a part that needs substitution and a leading `?` indicates a query parameter. Query parameters are used as `?query=value` and are not substituted in the same way as path parameters. Optional query parameters are surrounded with `[]` and can be provided if needed or otherwise left out. When providing multiple query parameters an `&` is used as a separator.

Examples:

| URI Template | Parameters | Result |
|---|---|---|
| /api/v1/search?query[?skip][?take][?orderBy][?filter] | { query: "temp" } | /api/v1/search?query=temp |
| /api/v1/search?query[?skip][?take][?orderBy][?filter] | { query: "temp", skip: 10, take: 20 } | /api/v1/search?query=temp&skip=10&take=20 |
| /api/v1/search?query[?skip][?take][?orderBy][?filter] | { query: "temp", orderBy: '\$created' } | /api/v1/search?query=temp&orderBy=\$created |
| /api/v1/content/{contentType}[?skip][?take] | { contentType: "notification" } | /api/v1/content/notification |
| /api/v1/content/{contentType}[?skip][?take] | { contentType: "notification", take: 10 } | /api/v1/content/notification?take=10 |
| /api/v1/content/{contentType}/{uid} | { contentType: "ship", uid: '42' } | /api/v1/content/ship/42 |

Domain and host names are omitted in all URI's, as the URI applies to all running SafeSeaNet environments. So the base URI for a given environment should be added to the complete URI.

As such, an example uri for the production environment could be:

```
https://nswapi.safeseanet.dk/api/v1/search?query=contentType: ship&take=5
```

| Environment | Base URI |
|-------------|----------------------------------|
| Prod | https://nswapi.safeseanet.dk |
| Edu | https://nsweduapi.safeseanet.dk |
| Test | https://nswtestapi.safeseanet.dk |

Note: The subdomain of these are subject to change.

HTTP Headers

For all API requests, the accepted content type is `application/json`. The client should also use this for the accept header.

- accept: `application/json`
- content-type: `application/json`

Schema versions

| Type | Header | Format | Description |
|----------|---------------------------|---------------------|--|
| Request | ssn-client-schema-version | X.Y.Z | Used by a client to tell the server which schema version it conforms to |
| Response | ssn-server-schema-version | X.Y.Z | Response header that indicates what schema version the server is currently running |
| Response | ssn-server-version | X.Y.Z-Build.A+Sha.B | Response header that indicates what version the server is currently running |

`ssn-client-schema-version` should be provided by 3rd party clients to ensure that any migrations added after that version is run when it's received as well as running them in reverse before returning a document.

If a `ssn-client-schema-version` header is not provided by a client, the current schema version of the server is used (this version can be read from the `ssn-server-schema-version` header). This means that no migration will happen.

Note: Migration is not executed for historical data, only new updates and reads.

Experimental

Experimental support for various other formats are added to SafeSeaNet 3 in order to bridge some gaps between integrators that use XML and the system.

The following content-types and accept headers are valid:

| content-type | accept | Description |
|------------------------------|------------------------------|--|
| application/ssn.for.xml+json | application/ssn.for.xml+json | Provides direct support for XML based on JSON.NET JSON to XML conversion |
| application/ssn.json+xml | application/ssn.json+xml | Provides a intermedeate JSON format that is convertible to XML |

These are experimental as they are not guarantied to work with all data as of now.

HTTP Status Codes

- **1xx:** Informational - Request received, continuing process
- **2xx:** Success - The action was successfully received, understood, and accepted
- **3xx:** Redirection - Further action must be taken in order to complete the request
- **4xx:** Client Error - The request contains bad syntax or cannot be fulfilled
- **5xx:** Server Error - The server failed to fulfill an apparently valid request

Tools

Rest tools such as [DHC - REST/HTTP API Client \(https://chrome.google.com/webstore/detail/dhc-resthttp-api-client/aejoelaoggembcahagimdiliamlcdmfm?hl=en\)](https://chrome.google.com/webstore/detail/dhc-resthttp-api-client/aejoelaoggembcahagimdiliamlcdmfm?hl=en) can be great for testing various request against HTTP Api's such as SafeSeaNet 3.

Search API

The search api can be used to search across json documents in the system.

```
GET /api/v1/search?query[?skip][?take][?orderBy][?filter]
```

Performs a search for json documents and returns the result.

Parameters

| | | |
|----------------|----------------|--|
| query | <i>string</i> | Main search query to run |
| skip | <i>integer</i> | The number of results to skip |
| take | <i>integer</i> | The number of results to return |
| orderBy | <i>string</i> | Ordering of results in format: field:direction,nextField:direction where direction is asc/desc. Direction is optional, so field,nextField:desc,thirdField is also allowed. |
| filter | <i>string</i> | List of contentType to include in the search, e.g. notification,ship |

Status codes

| | | |
|------------|------------------------------|--|
| 200 | <i>OK</i> | Request was successful |
| 400 | <i>Bad Request</i> | Server cannot process the request due to invalid input |
| 405 | <i>Method Not Allowed</i> | The method is not allowed for endpoint |
| 500 | <i>Internal Server Error</i> | Server error |

Query Language

The query language used by SafeSeaNet 3 is mainly based on the basic Lucene Query Syntax found here:

- https://lucene.apache.org/core/2_9_4/queryparsersyntax.html

Field names are based on the path of that field, so if a notification has a property **ship**, which again has a property **imo**. It can be queried based on that field as **ship.imo**.

Arrays are treated a bit special in this context, as their indexer gets removed, so if a value could be accessed on a notification as **person.crew[0].givenName** which would give the given name of the first crew member, searching for notifications by crew members given name would instead be done as **person.crew.givenName: Donald**.

This means that the schema for a given **contentType** can tell which fields there is to query for. Given this schema example.

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/example",
  "contentType": "example",
  "type": "object",
  "properties": {
    "name": { "type": "string" },
    "obj": {
      "type": "object",
      "properties": {
        "date": { "type": "string", "cstype": "date" },
        "name": { "type": "string" }
      }
    },
    "array": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "number": { "type": "integer" },
          "name": { "type": "string" }
        }
      }
    }
  },
  "$created": { "type": "string", "cstype": "date" },
```

```
  "$updated": { "type": "string", "cstype": "date" },
  "contentType": { "type": "string" }
}
```

It is known that the list of search fields are:

| Field name | Field type |
|--------------|------------|
| name | string |
| obj.date | date |
| obj.name | string |
| array.number | integer |
| array.name | string |
| \$created | date |
| \$updated | date |
| contentType | string |

If it important to know that when performing searches in the system, searches are performed against all known content.

If only the contentType **notification** is of interest, it's important to include that in the query.

Examples

Note: In all the examples below, each entity in the response result has been simplified, this is to make it more reader friendly in this document.

```
GET nsw.safeseanet.dk/api/v1/search?query=contentType: ship AND name: Neptune*
```

Finds all ships with a name that has a term starting with **Neptune**.

Note that this also returns **WEST NEPTUNE** as the second term in it's name matches the query.

RETURNS 200 OK Search Result containing all ships that matches **name: Neptune***

```
{
  "totalCount": 51,
  "results": [
    {"name": "NEPTUNE GALE", "imo": "5145568", "mmsi": "376212000", "callSign": "J8SM8" },
    {"name": "WEST NEPTUNE", "imo": "9655028", "mmsi": "371765000", "callSign": "3FQU8" },
    {"name": "QMS NEPTUNE", "imo": "9698501", "mmsi": "375729000", "callSign": "" },
    {"name": "NEPTUNE 2", "imo": "9630286", "mmsi": "422018600", "callSign": "EPBC7" },
    {"name": "Neptune", "callSign": "LXNP", "mmsi": "253532000", "imo": "9616864" },
    {"name": "NEPTUNE", "imo": "7504237", "mmsi": "251554110", "callSign": "TFNX" },
    {"name": "NEPTUNE", "imo": "9712462", "mmsi": "538005979", "callSign": "V7IQ8" },
    {"name": "CSCL NEPTUNE", "imo": "9467316", "mmsi": "477598400", "callSign": "VRKJ3" },
    {"name": "SWISSCO NEPTUNE", "imo": "9676979", "mmsi": "566944000", "callSign": "9V2083" },
    {"name": "NEPTUNE GLORY", "imo": "7913995", "mmsi": "667808000", "callSign": "9LY2107" },
    {"name": "NEPTUNE GAS", "imo": "8005654", "mmsi": "457459000", "callSign": "JVVV2" },
    {"name": "NEPTUNE SEA", "imo": "7727243", "mmsi": "538002005", "callSign": "V7FR9" },
    {"name": "AMAL NEPTUNE", "imo": "8116843", "mmsi": "677042400", "callSign": "5IM524" },
    {"name": "NEPTUNE AVRA", "imo": "8807155", "mmsi": "248598000", "callSign": "9HKH6" },
    {"name": "STELLAR NEPTUNE", "imo": "9030943", "mmsi": "538004848", "callSign": "V7ZK7" },
    {"name": "NEPTUNE", "imo": "9011961", "mmsi": "518790000", "callSign": "E5U2737" },
    {"name": "NEPTUNE", "imo": "8204729", "mmsi": "667001260", "callSign": "9LU2063" },
    {"name": "NEPTUNE PLOES", "imo": "8208311", "mmsi": "248867000", "callSign": "9HUL6" },
    {"name": "NEPTUNE AEGLE", "imo": "9240964", "mmsi": "215170000", "callSign": "9HEX7" },
    {"name": "NEPTUNE DYNAMIS", "imo": "9240976", "mmsi": "215188000", "callSign": "9HFR7" },
    {"name": "NEPTUNE 5", "imo": "9243007", "mmsi": "355462000", "callSign": "HO2293" },
    {"name": "NEPTUNE VOYAGER", "imo": "9249178", "mmsi": "311482000", "callSign": "C6FU7" },
    {"name": "NEPTUNE OKEANIS", "imo": "9306706", "mmsi": "215912000", "callSign": "9HZW7" },
    {"name": "NEPTUNE THELISIS", "imo": "9306718", "mmsi": "256049000", "callSign": "9HZV7" },
    {"name": "OCEAN NEPTUNE", "imo": "9292589", "mmsi": "563973000", "callSign": "S6CB7" }
  ]
}
```

GET

nsw.safeseanet.dk/api/search?query=contentType: notification AND ship.name: Neptune*&orderBy=\$updated:desc

Finds all notifications where the ships name has a term starting with **Neptune** .

RETURNS 200 OK Search Result containing all notifications for the ship that matches **name: Neptune***

```
{
  "totalCount": 6,
  "results": [
    { "ship": { "name": "Neptune", "callSign": "LXNP", "mmsi": "253532000" } },
    { "ship": { "name": "Neptune", "callSign": "LXNP", "mmsi": "253532000" } },
    { "ship": { "name": "Neptune", "callSign": "LXNP", "mmsi": "253532000" } },
    { "ship": { "name": "Neptune", "callSign": "LXNP", "mmsi": "253532000" } },
    { "ship": { "name": "Neptune", "callSign": "LXNP", "mmsi": "253532000" } }
  ]
}
```

GET

nsw.safeseanet.dk/api/search?query=\$created: [1980-12-22T12:00:00 TO 1989-12-22]

Finds all documents created between December 22th, 1980 at noon and December 22th, 1989.

Since the system did not exist in that period this will of course yield an empty result.

RETURNS 200 OK Search Result containing all documents created in that period.

```
{
  "totalCount": 0,
  "results": []
}
```

Content API

GET /api/v1/content/{contentType}[?skip][?take]

RETURNS A list of documents of the specified `contentType`, this is similar to performing a search with `query=contentType: {contentType}`.

Parameters

| | | |
|--------------------------|---------------|---|
| <code>contentType</code> | <i>string</i> | The type of documents to return, a list of content types can be found in appendix 1 |
| <code>skip</code> | <i>string</i> | The number of documents to skip |
| <code>take</code> | <i>string</i> | The number of documents to return |

Status codes

| | | |
|-----|------------------------------|---|
| 200 | <i>OK</i> | Request was successful |
| 401 | <i>Unauthorized</i> | User is not authorized |
| 403 | <i>Forbidden</i> | The request is not allowed for the current user |
| 500 | <i>Internal Server Error</i> | Server error |

GET /api/v1/content/{contentType}/{uid}

RETURNS The document with the specified `uid` of the specified `contentType`

Parameters

| | | |
|--------------------------|---------------|--|
| <code>contentType</code> | <i>string</i> | The type of document to return, a list of content types can be found in appendix 1 |
| <code>uid</code> | <i>guid</i> | The unique identifier of the document |

Status codes

| | | |
|-----|------------------------------|---|
| 200 | <i>OK</i> | Request was successful |
| 401 | <i>Unauthorized</i> | User is not authorized |
| 403 | <i>Forbidden</i> | The request is not allowed for the current user |
| 404 | <i>Not Found</i> | The resource could not be found |
| 500 | <i>Internal Server Error</i> | Server error |

POST /api/v1/content/{contentType}

Creates a new document of the specified `contentType`.

Parameters

| | | |
|--------------------------|---------------|--|
| <code>contentType</code> | <i>string</i> | The type of document, a list of content types can be found in appendix 1 |
|--------------------------|---------------|--|

Body

```
{  
  /* body that conforms to the content type schema */  
}
```

RETURNS The created document.

Status codes

| | | |
|-----|------------------------------|---|
| 200 | <i>OK</i> | Request was successful |
| 401 | <i>Unauthorized</i> | User is not authorized |
| 403 | <i>Forbidden</i> | The request is not allowed for the current user |
| 500 | <i>Internal Server Error</i> | Server error |

PUT /api/v1/content/{contentType}/{uid}

Updates the document with the specified `uid` of the specified `contentType`

Parameters

| | | |
|--------------------------|---------------|--|
| <code>contentType</code> | <i>string</i> | The type of document, a list of content types can be found in appendix 1 |
| <code>uid</code> | <i>guid</i> | The unique identifier of the document |

Body

```
{  
  /* updated body that conforms to the content type schema */  
}
```

RETURNS The updated document.

Status codes

| | | |
|-----|------------------------------|---|
| 200 | <i>OK</i> | Request was successful |
| 401 | <i>Unauthorized</i> | User is not authorized |
| 403 | <i>Forbidden</i> | The request is not allowed for the current user |
| 404 | <i>Not Found</i> | The resource could not be found |
| 500 | <i>Internal Server Error</i> | Server error |

DELETE /api/v1/content/{contentType}/{uid}

Deletes the document with the specified `uid` of the specified `contentType`

RETURNS The deleted document.

Parameters

| | | |
|--------------------------|---------------|--|
| <code>contentType</code> | <i>string</i> | The type of document, a list of content types can be found in appendix 1 |
| <code>uid</code> | <i>guid</i> | The unique identifier of the document |

Status codes

| | | |
|-----|------------------------------|---|
| 200 | <i>OK</i> | Request was successful |
| 403 | <i>Forbidden</i> | The request is not allowed for the current user |
| 404 | <i>Not Found</i> | The resource could not be found |
| 409 | <i>Conflict</i> | The resource has been updated by someone else |
| 500 | <i>Internal Server Error</i> | Server error |

Workflow

Note: This section will describe how to advance notifications in their workflow and how this binds into validations etc. It is important to know that validations do not apply when a notification is in DRAFT.

Document Structures

This section describes some general rules around all document structures, such as reserved properties and an extension on type definitions.

In general there are two categories of field types:

- **Fields handled by the System** : field types which are reserved and solely handled by the system. The values of these fields should remain untouched. The system ignores any attempt to alter the values of these fields via the API.
- **Fields set via the API** : field types which may be required in certain API requests depending on the need.

Schemas for document structures can be found in Appendix 1.

Common fields

The following describes the fields that are common to any document type.

Handled by the System

| Field | Type | Cstype | Description |
|-----------------|--------|----------|--|
| id | string | Guid | A unique identifier for the document. |
| contentType | string | string | The content type for the document, e.g. notification , ship , etc. |
| \$schemaVersion | string | string | The schema version for the document. |
| \$reference | string | string | An identifier for the document that is only unique within it's content type. |
| \$area | string | string | A content area where the document is stored. |
| \$created | string | DateTime | The date and time for when the document was created. |
| \$updated | string | DateTime | The date and time for when the document was last updated. |
| createdBy | object | object | The user who created the document. |
| updatedBy | object | object | The user who updated the latest version of the document. |

Set via the API

| Field | Type | Cstype | Description |
|-----------|---------|---------|---|
| \$version | integer | integer | The current version of the document. Versions are automatically incremented on updates. However, '\$version' is mandatory in a PUT API call in which case the value must be fetched from the document being edited, which has been retrieved by a GET API call. |

Notification fields

The following describes the fields that are used in 'notification' content type documents only.

Handled by the System

| Field | Type | Cstype | Description |
|---------------------|---------|---------|---|
| emsaUpdates | string | Guid | EMSA updates history information. |
| queued | boolean | boolean | Value indicating whether or not to use the EMSA queue mechanism. |
| \$random | integer | integer | A random number assigned when the notification is created via the POST API. Only relevant for an arrival notification. 'relatedNotification' is the id of the related departure notification. |
| relatedNotification | string | Guid | It is set on an arrival notification when creating a departure notification with a related arrival notification via the POST API, i.e. when creating a departure notification with a valid 'origin' property. |

Set via the API

| Field | Type | Cstype | Description |
|--------|--------|--------|--|
| origin | string | Guid | Only relevant for a departure notification. 'origin' is the id of the related arrival notification. It is mandatory in a POST API call when creating a departure notification which must be associated with an arrival notification. |

MRS fields

The following describes the fields that are used in 'mrs' content type documents only.

Handled by the System

| Field | Type | Cstype | Description |
|-------------|---------|---------|--|
| emsaUpdates | string | Guid | EMSA updates history information. |
| queued | boolean | boolean | Value indicating whether or not to use the EMSA queue mechanism. |

Set via the API

None.

Authentication

To authenticate against SafeSeaNet 3, NTLM/Windows authentication is used.

Note: This section will contain details about how we authenticate and which permissions to ask for in the system.

Curl Examples

Curl is a command line tool that can perform HTTP requests, curl is mentioned here because it can help, when a library that supports NTLM on a given platform, cannot be found.

Curl should be supported on most Unix systems as well as windows.

Note: This section will contain a small list of examples on how to do request against SafeSeaNet 3 using curl.

Authorization

Note: This section will contain details about how permissions affects what data a user is allowed to create, read, update and delete.

Appendix 1: Schemas

This appendix contains a list of schemas for the following content types accepted by the content api.

- crewRank
- flagstate
- dgClassification
- infShipClass
- idDocument
- imoHazardClass
- issclssuerType
- mrs
- nationality
- plannedOperation
- port
- notification
- quantityUnit
- purposeOfCall
- region
- securityLevel
- shipType
- ship
- sts
- wasteDeliveryStatus
- wasteType

Appendix: CrewRank Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/crewRank",
  "contentType": "crewRank",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: DgClassification Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/dgClassification",
  "contentType": "dgClassification",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Flagstate Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/flagstate",
  "contentType": "flagstate",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "code": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: IdDocument Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/idDocument",
  "contentType": "idDocument",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: ImoHazardClass Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/imoHazardClass",
  "contentType": "imoHazardClass",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```


Appendix: InfShipClass Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/infShipClass",
  "contentType": "infShipClass",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: IsscIssuerType Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/isscIssuerType",
  "contentType": "isscIssuerType",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Mrs Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/mrs",
  "contentType": "mrs",
  "type": "object",
  "properties": {
    "vessel": {
      "type": "object",
      "properties": {
        "imoNumber": {
          "type": "string"
        },
        "mmsiNumber": {
          "type": "string"
        },
        "callsign": {
          "type": "string"
        },
        "shipname": {
          "type": "string"
        },
        "flag": {
          "type": "string"
        }
      }
    },
    "nextPortOfCall": {
      "type": "string"
    },
    "etaNextPortOfCall": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": [
        "string",
        "date"
      ],
      "properties": {}
    },
    "personsOnBoard": {
      "type": "integer"
    },
    "locationInfo": {
      "type": "object",
      "properties": {
        "longitude": {
          "type": "integer"
        },
        "latitude": {
          "type": "integer"
        }
      },
      "reportingDateTime": {
        "type": [
          "string",
          "float",

```

```
"integer",
"boolean",
"object",
"array",
>null",
"any"
],
"cstype": [
"string",
"date"
],
"properties": {}
},
"cog": {
"type": "integer"
},
"sog": {
"type": "integer"
},
"navigationalStatus": {
"type": "string"
}
}
},
"bunker": {
"type": "object",
"properties": {
"characteristics": {
"type": "string"
},
"quantity": {
"type": "integer"
}
}
},
"cargoType": {
"type": "string"
},
"contactDetails": {
"type": "object",
"properties": {
"lastName": {
"type": "string"
},
"firstName": {
"type": "string"
},
"locode": {
"type": "string"
},
"phone": {
"type": "string"
},
"fax": {
"type": "string"
},
"email": {
"type": "string"
}
}
},
"mrsHazmatElements": {
"type": "array",
```

```
"items": {
  "type": "object",
  "properties": {
    "imoHazardClass": {
      "type": "string"
    },
    "weightQuantity": {
      "type": [
        "float",
        "integer"
      ],
      "cstype": [
        "float",
        "integer"
      ]
    }
  }
},
"submitted": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": [
    "string",
    "date"
  ],
  "properties": {}
},
"state": {
  "type": "string"
},
"$reference": {
  "type": "string"
},
"$area": {
  "type": "string"
},
"$version": {
  "type": "integer"
},
"$created": {
  "type": [
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    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$updated": {
```

```
"type": [  
  "string",  
  "float",  
  "integer",  
  "boolean",  
  "object",  
  "array",  
  "null",  
  "any"  
],  
"cstype": "date",  
"properties": {}  
},  
"mrsType": {  
  "type": "string"  
},  
"$schemaVersion": {  
  "type": "string"  
}  
}  
}
```

Appendix: Nationality Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/nationality",
  "contentType": "nationality",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Notification Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/notification",
  "contentType": "notification",
  "type": "object",
  "properties": {
    "ship": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "imo": {
          "type": "string"
        },
        "mmsi": {
          "type": "string"
        },
        "callSign": {
          "type": "string"
        },
        "flag": {
          "type": "object",
          "properties": {
            "name": {
              "type": "string"
            },
            "code": {
              "type": "string"
            }
          }
        }
      },
    },
    "registryPort": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "locode": {
          "type": "string"
        },
        "regions": {
          "type": "array",
          "items": {
            "type": "object",
            "properties": {
              "name": {
                "type": "string"
              },
              "code": {
                "type": "string"
              },
              "countryCodes": {
                "type": "array",
                "items": {
                  "type": "string"
                }
              }
            }
          }
        }
      }
    }
  }
}
```



```

},
"description": {
  "type": "string"
},
"inmarsatCallNumber": {
  "type": "string"
},
"certificateOfRegistryNumber": {
  "type": "string"
},
"registryDate": {
  "type": "string"
},
"grossTonnage": {
  "type": "string"
},
"netTonnage": {
  "type": "string"
},
"shipType": {
  "type": "object",
  "properties": {
    "code": {
      "type": "string"
    },
    "description": {
      "type": "string"
    }
  }
},
"company": {
  "type": "string"
}
},
"port": {
  "type": "object",
  "properties": {
    "portOfCall": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        }
      },
      "locode": {
        "type": "string"
      },
      "region": {
        "type": "string"
      },
      "regions": {
        "type": "array",
        "items": {
          "type": "object",
          "properties": {
            "name": {
              "type": "string"
            },
            "code": {
              "type": "string"
            }
          }
        },
        "countryCodes": {
          "type": "array",

```

```
    "items": {
      "type": "string"
    }
  }
}
},
"isAnchored": {
  "type": "boolean"
},
"isCruiseShip": {
  "type": "boolean"
},
"isduetoinspection": {
  "type": "boolean"
},
"lastPort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "region": {
      "type": [
        "string",
        "object"
      ],
      "cstype": [
        "string",
        "object"
      ],
      "properties": {
        "name": {
          "type": "string"
        },
        "code": {
          "type": "string"
        },
        "countryCodes": {
          "type": "array",
          "items": {
            "type": "string"
          }
        }
      }
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          },
          "countryCodes": {
```

```
    "type": "array",
    "items": {
      "type": "string"
    }
  }
},
"isEu": {
  "type": "boolean"
}
},
"etdFromLastPort": {
  "type": "string"
},
"etaToPortOfCall": {
  "type": "string"
},
"ataToPortOfCall": {
  "type": "string"
},
"etdFromPortOfCall": {
  "type": "string"
},
"positionInPortOfCall": {
  "type": "string"
},
"portFacilityOfArrival": {
  "type": "string"
},
"purposeOfCall": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "code": {
        "type": "string"
      },
      "name": {
        "type": "string"
      },
      "details": {
        "type": "string"
      }
    }
  }
},
"descriptionOfCargo": {
  "type": "string"
},
"itinerary": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "port": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          }
        }
      },
      "locode": {
```

```
    "type": "string"
  },
  "region": {
    "type": "string"
  },
  "regions": {
    "type": "array",
    "items": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "code": {
          "type": "string"
        },
        "countryCodes": {
          "type": "array",
          "items": {
            "type": "string"
          }
        }
      }
    }
  },
  "eta": {
    "type": "string"
  }
},
"lastInspection": {
  "type": "string"
},
"isPossibleAnchorage": {
  "type": "boolean"
},
"configuration": {
  "type": "string"
},
"volumeAndNatureOfCargo": {
  "type": "string"
},
"conditionOfCargoAndBallastTanks": {
  "type": "string"
},
"plannedOperations": {
  "type": "object",
  "properties": {
    "code": {
      "type": "string"
    },
    "description": {
      "type": "string"
    }
  }
},
"plannedWorks": {
  "type": "string"
},
"atdFromPortOfCall": {
```

```
"type": "string"
},
"nextPort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          },
          "countryCodes": {
            "type": "array",
            "items": {
              "type": "string"
            }
          }
        }
      }
    },
    "region": {
      "type": "string"
    }
  }
},
"status": {
  "type": "string"
},
"queued": {
  "type": "boolean"
},
"doNotProvideDpg": {
  "type": "boolean"
},
"doNotProvideWaste": {
  "type": "boolean"
},
"doNotProvideSecurity": {
  "type": "boolean"
},
"dpg": {
  "type": "object",
  "properties": {
    "infShipClass": {
      "type": "object",
      "properties": {
        "name": {
```

```
    "type": "string"
  }
}
},
"confirmDPGListOnBoard": {
  "type": "boolean"
},
"contact": {
  "type": "object",
  "properties": {
    "givenName": {
      "type": "string"
    },
    "familyName": {
      "type": "string"
    },
    "location": {
      "type": "string"
    },
    "phone": {
      "type": "string"
    },
    "fax": {
      "type": "string"
    },
    "email": {
      "type": "string"
    }
  }
},
"items": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "technicalName": {
        "type": "string"
      },
      "unNumber": {
        "type": "string"
      },
      "imoHazardClass": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          }
        }
      },
      "dgClassification": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          }
        }
      },
      "grossQuantity": {
        "type": "object",
        "properties": {
          "amount": {
            "type": [
              "string",
```

```
        "integer"
      ],
      "cstype": [
        "string",
        "integer"
      ]
    },
    "unit": {
      "type": "string"
    }
  },
  "netQuantity": {
    "type": "object",
    "properties": {
      "amount": {
        "type": [
          "string",
          "integer"
        ],
        "cstype": [
          "string",
          "integer"
        ]
      },
      "unit": {
        "type": "string"
      }
    }
  },
  "placement": {
    "type": "string"
  },
  "transportUnitId": {
    "type": "string"
  }
}
}
}
}
},
"cargo": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "loadingPort": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "locode": {
            "type": "string"
          },
          "region": {
            "type": "string"
          },
          "regions": {
            "type": "array",
            "items": {
              "type": "object",
              "properties": {
```

```
"name": {
  "type": "string"
},
"code": {
  "type": "string"
},
"countryCodes": {
  "type": "array",
  "items": {
    "type": "string"
  }
}
}
}
}
},
"transportDocumentNumber": {
  "type": "string"
},
"dischargePort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "region": {
      "type": "string"
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          },
          "countryCodes": {
            "type": "array",
            "items": {
              "type": "string"
            }
          }
        }
      }
    }
  }
},
"descOrHS": {
  "type": "string"
},
"quantity": {
  "type": "object",
  "properties": {
    "amount": {
      "type": [
        "string",
```



```
    "integer"
  ],
  "cstype": [
    "string",
    "integer"
  ]
}
},
"packageType": {
  "type": "string"
},
"weight": {
  "type": "object",
  "properties": {
    "amount": {
      "type": [
        "string",
        "integer"
      ],
      "cstype": [
        "string",
        "integer"
      ]
    },
    "unit": {
      "type": "string"
    }
  }
},
"measurement": {
  "type": "object",
  "properties": {
    "amount": {
      "type": [
        "string",
        "integer"
      ],
      "cstype": [
        "string",
        "integer"
      ]
    },
    "unit": {
      "type": "string"
    }
  }
},
"location": {
  "type": "string"
},
"transportUnitId": {
  "type": "string"
}
}
},
"store": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "name": {
```

```

"type": "string"
},
"quantity": {
  "type": "object",
  "properties": {
    "amount": {
      "type": [
        "string",
        "integer"
      ],
      "cstype": [
        "string",
        "integer"
      ]
    },
    "unit": {
      "type": "string"
    }
  }
},
"locationOnBoard": {
  "type": "string"
},
"officialUse": {
  "type": "string"
}
}
},
"waste": {
  "type": "object",
  "properties": {
    "lastPortDelivered": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "locode": {
          "type": "string"
        },
        "region": {
          "type": "string"
        },
        "regions": {
          "type": "array",
          "items": {
            "type": "object",
            "properties": {
              "name": {
                "type": "string"
              },
              "code": {
                "type": "string"
              },
              "countryCodes": {
                "type": "array",
                "items": {
                  "type": "string"
                }
              }
            }
          }
        }
      }
    }
  }
}
}

```

```

    }
  }
},
"lastPortDeliveredDate": {
  "type": "string"
},
"wasteDeliveryStatus": {
  "type": "string"
},
"correctDetailsConfirmation": {
  "type": "boolean"
},
"sufficientCapacityConfirmation": {
  "type": "boolean"
},
"items": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "wasteType": {
        "type": "object",
        "properties": {
          "code": {
            "type": "string"
          },
          "category": {
            "type": "string"
          },
          "subcategory": {
            "type": "string"
          },
          "description": {
            "type": "string"
          }
        }
      }
    }
  },
  "freeText": {
    "type": "string"
  },
  "wasteToBeDelivered": {
    "type": "string"
  },
  "maximumCapacity": {
    "type": "string"
  },
  "amountOnBoard": {
    "type": "string"
  },
  "portOfDelivery": {
    "type": "object",
    "properties": {
      "name": {
        "type": "string"
      },
      "locode": {
        "type": "string"
      },
      "region": {
        "type": "string"
      },
      "regions": {
        "type": "array",

```

```
"items": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "code": {
      "type": "string"
    },
    "countryCodes": {
      "type": "array",
      "items": {
        "type": "string"
      }
    }
  }
}
},
"amountToBeGenerated": {
  "type": "string"
}
}
}
},
"security": {
  "type": "object",
  "properties": {
    "hasValidISSC": {
      "type": "boolean"
    },
    "reasonForNoISSC": {
      "type": "string"
    },
    "ISSCType": {
      "type": "string"
    },
    "ISSCIssuerType": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        }
      }
    },
    "ISSCIssuer": {
      "type": "string"
    },
    "ISSCExpiryDate": {
      "type": "string"
    },
    "shipSecurityLevel": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        }
      }
    }
  }
},
"matterToReport": {
```

```
"type": "string"
},
"hasApprovedSSP": {
  "type": "boolean"
},
"companySecurityOfficer": {
  "type": "object",
  "properties": {
    "givenName": {
      "type": "string"
    },
    "familyName": {
      "type": "string"
    },
    "phone": {
      "type": "string"
    },
    "fax": {
      "type": "string"
    },
    "email": {
      "type": "string"
    }
  }
},
"calls": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "dateOfArrival": {
        "type": "string"
      },
      "dateOfDeparture": {
        "type": "string"
      },
      "port": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "locode": {
            "type": "string"
          },
          "region": {
            "type": "string"
          },
          "regions": {
            "type": "array",
            "items": {
              "type": "object",
              "properties": {
                "name": {
                  "type": "string"
                },
                "code": {
                  "type": "string"
                }
              }
            },
            "countryCodes": {
              "type": "array",
              "items": {
                "type": "string"
              }
            }
          }
        }
      }
    }
  }
}
```

```

    }
  }
}
}
},
"portFacility": {
  "type": "string"
},
"securityLevel": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    }
  }
},
"additionalSecurityMeasures": {
  "type": "string"
}
}
},
"activities": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "port": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "locode": {
            "type": "string"
          },
          "region": {
            "type": "string"
          },
          "regions": {
            "type": "array",
            "items": {
              "type": "object",
              "properties": {
                "name": {
                  "type": "string"
                },
                "code": {
                  "type": "string"
                },
                "countryCodes": {
                  "type": "array",
                  "items": {
                    "type": "string"
                  }
                }
              }
            }
          }
        }
      }
    }
  }
},

```

```
"latitude": {
  "type": "string"
},
"longitude": {
  "type": "string"
},
"dateFrom": {
  "type": "string"
},
"dateTo": {
  "type": "string"
},
"activity": {
  "type": [
    "object",
    "array"
  ],
  "cstype": [
    "object",
    "array"
  ],
  "properties": {
    "code": {
      "type": "string"
    },
    "name": {
      "type": "string"
    },
    "details": {
      "type": "string"
    }
  },
  "items": {
    "type": "object",
    "properties": {
      "code": {
        "type": "string"
      },
      "name": {
        "type": "string"
      },
      "details": {
        "type": "string"
      }
    }
  }
},
"securityMeasuresApplied": {
  "type": "string"
},
"purposeOfCall": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "code": {
        "type": "string"
      },
      "name": {
        "type": "string"
      },
      "details": {
        "type": "string"
      }
    }
  }
}
```

```

    }
  }
}
},
"ataToPortOfCall": {
  "type": "string"
},
"atdFromPortOfCall": {
  "type": "string"
},
"portFacilityOfArrival": {
  "type": "string"
}
}
}
}
},
"person": {
  "type": "object",
  "properties": {
    "numberOfPersons": {
      "type": "string"
    },
    "numberOfPassengers": {
      "type": "string"
    },
    "numberOfCrew": {
      "type": "string"
    },
    "hasStowaways": {
      "type": "boolean"
    },
    "crew": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "familyName": {
            "type": "string"
          },
          "givenName": {
            "type": "string"
          },
          "rank": {
            "type": "object",
            "properties": {
              "name": {
                "type": "string"
              }
            }
          }
        }
      },
      "nationality": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          }
        }
      }
    }
  }
},

```



```
"dateOfBirth": {
  "type": "string"
},
"placeOfBirth": {
  "type": "string"
},
"idDocument": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    }
  }
},
"idNumber": {
  "type": "string"
},
"visaOrResidencePermitNumber": {
  "type": "string"
},
"crewEffects": {
  "type": "string"
}
}
},
"passengers": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "familyName": {
        "type": "string"
      },
      "givenName": {
        "type": "string"
      },
      "nationality": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          }
        }
      },
      "dateOfBirth": {
        "type": "string"
      },
      "placeOfBirth": {
        "type": "string"
      },
      "idDocument": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          }
        }
      },
      "idNumber": {
```

```
"type": "string"
},
"embarkationPort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "region": {
      "type": "string"
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          },
          "countryCodes": {
            "type": "array",
            "items": {
              "type": "string"
            }
          }
        }
      }
    }
  }
},
"disembarkationPort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "region": {
      "type": "string"
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          },
          "countryCodes": {
            "type": "array",
            "items": {
              "type": "string"
            }
          }
        }
      }
    }
  }
}
```

```

    }
  }
}
},
"isTransitPassenger": {
  "type": "boolean"
},
"visaOrResidencePermitNumber": {
  "type": "string"
}
}
}
}
},
"$reference": {
  "type": "string"
},
"$area": {
  "type": "string"
},
"$version": {
  "type": "integer"
},
"$created": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$updated": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$random": {
  "type": "integer"
},
"$schemaVersion": {
  "type": "string"
},
"relatedNotification": {
  "type": "string"
}

```

```
},  
"origin": {  
  "type": "string"  
},  
"emsaUpdates": {  
  "type": "string"  
}  
}  
}
```

Appendix: PlannedOperation Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/plannedOperation",
  "contentType": "plannedOperation",
  "type": "object",
  "properties": {
    "code": {
      "type": "string"
    },
    "description": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Port Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/port",
  "contentType": "port",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "isEu": {
      "type": "boolean"
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          }
        }
      }
    }
  }
}
```

```
},
"countryCodes": {
  "type": "array",
  "items": {
    "type": "string"
  }
},
"$schemaVersion": {
  "type": "string"
},
"$reference": {
  "type": "string"
},
"$area": {
  "type": "string"
},
"$version": {
  "type": "integer"
},
"$created": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$updated": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
}
}
}
}
"$schemaVersion": {
  "type": "string"
}
}
}
```

Appendix: PurposeOfCall Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/purposeOfCall",
  "contentType": "purposeOfCall",
  "type": "object",
  "properties": {
    "code": {
      "type": "string"
    },
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "details": {
      "type": "string"
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```


Appendix: QuantityUnit Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/quantityUnit",
  "contentType": "quantityUnit",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Region Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/region",
  "contentType": "region",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "code": {
      "type": "string"
    },
    "$schemaVersion": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "countryCodes": {
      "type": "array",
      "items": {
        "type": "string"
      }
    }
  }
}
```

Appendix: SecurityLevel Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/securityLevel",
  "contentType": "securityLevel",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Ship Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/ship",
  "contentType": "ship",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "imo": {
      "type": [
        "string",
        "integer"
      ],
      "cstype": [
        "string",
        "integer"
      ]
    },
    "mmsi": {
      "type": [
        "string",
        "integer"
      ],
      "cstype": [
        "string",
        "integer"
      ]
    },
    "callSign": {
      "type": "string"
    },
    "flag": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "code": {
          "type": "string"
        }
      }
    },
    "registryPort": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "locode": {
          "type": "string"
        }
      }
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    }
  }
}
```

```
},
"$created": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$updated": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$schemaVersion": {
  "type": "string"
}
}
```

Appendix: ShipType Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/shipType",
  "contentType": "shipType",
  "type": "object",
  "properties": {
    "code": {
      "type": "string"
    },
    "description": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: Sts Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/sts",
  "contentType": "sts",
  "type": "object",
  "properties": {
    "loadingShip": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "imo": {
          "type": [
            "string",
            "integer"
          ],
          "cstype": [
            "string",
            "integer"
          ]
        },
        "mmsi": {
          "type": [
            "string",
            "integer"
          ],
          "cstype": [
            "string",
            "integer"
          ]
        },
        "callSign": {
          "type": "string"
        },
        "flag": {
          "type": "object",
          "properties": {
            "name": {
              "type": "string"
            },
            "code": {
              "type": "string"
            }
          }
        },
        "registryPort": {
          "type": "object",
          "properties": {
            "name": {
              "type": "string"
            },
            "locode": {
              "type": "string"
            }
          }
        }
      }
    },
    "dischargingShip": {
      "type": "object",
      "properties": {
```

```
"name": {
  "type": "string"
},
"imo": {
  "type": [
    "string",
    "integer"
  ],
  "cstype": [
    "string",
    "integer"
  ]
},
"mmsi": {
  "type": [
    "string",
    "integer"
  ],
  "cstype": [
    "string",
    "integer"
  ]
},
"callSign": {
  "type": "string"
},
"approvedPlan": {
  "type": "string"
},
"flag": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "code": {
      "type": "string"
    }
  }
},
"registryPort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    }
  }
}
},
"cargo": {
  "type": "array",
  "items": {
    "type": "object",
    "properties": {
      "transportDocumentNumber": {
        "type": "string"
      },
      "loadingPort": {
        "type": "object",
```



```
"properties": {
  "name": {
    "type": "string"
  },
  "locode": {
    "type": "string"
  },
  "regions": {
    "type": "array",
    "items": {
      "type": "object",
      "properties": {
        "name": {
          "type": "string"
        },
        "code": {
          "type": "string"
        },
        "countryCodes": {
          "type": "array",
          "items": {
            "type": "string"
          }
        }
      }
    }
  }
},
"dischargePort": {
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "locode": {
      "type": "string"
    },
    "regions": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "type": "string"
          },
          "code": {
            "type": "string"
          },
          "countryCodes": {
            "type": "array",
            "items": {
              "type": "string"
            }
          }
        }
      }
    }
  }
},
"descOrHS": {
  "type": "string"
},
```

```
"quantity": {
  "type": "object",
  "properties": {
    "amount": {
      "type": "integer"
    }
  }
},
"packageType": {
  "type": "string"
},
"weight": {
  "type": "object",
  "properties": {
    "amount": {
      "type": "integer"
    },
    "unit": {
      "type": "string"
    }
  }
},
"measurement": {
  "type": "object",
  "properties": {
    "amount": {
      "type": "integer"
    },
    "unit": {
      "type": "string"
    }
  }
},
"location": {
  "type": "string"
},
"transportUnitId": {
  "type": "string"
}
},
"details": {
  "type": "object",
  "properties": {
    "position": {
      "type": "object",
      "properties": {
        "area": {
          "type": "string"
        },
        "lat": {
          "type": "string"
        },
        "lon": {
          "type": "string"
        }
      }
    }
  }
},
"time": {
  "type": "object",
  "properties": {
    "start": {
```

```
    "type": "string"
  },
  "end": {
    "type": "string"
  }
}
},
"contact": {
  "type": "object",
  "properties": {
    "agent": {
      "type": "string"
    },
    "agentAsStsOperator": {
      "type": "boolean"
    },
    "stsOperator": {
      "type": "string"
    }
  }
},
"status": {
  "type": "string"
},
"$reference": {
  "type": "string"
},
"$area": {
  "type": "string"
},
"$version": {
  "type": "integer"
},
"$created": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
"$updated": {
  "type": [
    "string",
    "float",
    "integer",
    "boolean",
    "object",
    "array",
    "null",
    "any"
  ],
  "cstype": "date",
  "properties": {}
},
```

```
"$schemaVersion": {  
  "type": "string"  
}  
}  
}
```

Appendix: WasteDeliveryStatus Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/wasteDeliveryStatus",
  "contentType": "wasteDeliveryStatus",
  "type": "object",
  "properties": {
    "name": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix: WasteType Schema

```
{
  "$schema": "https://nsw.safeseanet.dk/api/schema/wasteType",
  "contentType": "wasteType",
  "type": "object",
  "properties": {
    "code": {
      "type": "string"
    },
    "category": {
      "type": "string"
    },
    "subcategory": {
      "type": "string"
    },
    "description": {
      "type": "string"
    },
    "$reference": {
      "type": "string"
    },
    "$area": {
      "type": "string"
    },
    "$version": {
      "type": "integer"
    },
    "$created": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$updated": {
      "type": [
        "string",
        "float",
        "integer",
        "boolean",
        "object",
        "array",
        "null",
        "any"
      ],
      "cstype": "date",
      "properties": {}
    },
    "$schemaVersion": {
      "type": "string"
    }
  }
}
```

Appendix 2: Validation Rules

This appendix contains a list of validation rules for the following content types.

- notification
- ship

Appendix: Notification Validation

contentType: notification

Port of Call Fields

- port.portOfCall.name : max length 256
- port.portOfCall.locode : required, length 5, match `^[a-zA-Z]*$`
- port.isAnchored : required, boolean
- port.isCruiseShip : required, boolean
- port.isduetoinspection : required, boolean
- port.itinerary : be array
- port.etdFromLastPort : dateTime
- port.etaToPortOfCall : dateTime
- port.ataToPortOfCall : dateTime
- port.atdFromPortOfCall : dateTime
- port.etdFromPortOfCall : required, dateTime
- port.etaToNextPort : dateTime
- port.lastPort.name : max length 256
- port.lastPort.locode : required, length 5, match `^[a-zA-Z]*$`
- port.nextPort.locode : length 5, match `^[a-zA-Z]*$`
- port.positionInPortOfCall : max length 50
- port.portFacilityOfArrival : max length 4
- port.lastInspection : date
- port.descriptionOfCargo : max length 256
- port.volumeAndNatureOfCargo : max length 256
- port.plannedWorks : max length 256
- port.conditionOfCargoAndBallastTanks : max length 256
- port.configuration : be in(sht, dht, sht with sbt)
- When type is Arrival
 - port.purposeOfCall[*].code : required, be in referenceData(purposeOfCall)
- When port.itinerary is defined
 - port.itinerary[*].eta : date
 - port.itinerary[*].port.name : max length 256
 - port.itinerary[*].port.locode : length 5, match `^[a-zA-Z]*$`

Ship Details Fields

- ship.imo : be unique(ship) on mmsi
- ship.mmsi : be unique(ship) on imo
- ship.name : max length 35, match `^[a-zA-Z0-9 .'-]*$`
- ship.callSign : length 4-7, match `^[a-zA-Z0-9]*$`
- ship.flag.code : length 2, match `^[a-zA-Z]*$`
- ship.registryPort.name : max length 256
- ship.registryPort.locode : length 5
- ship.description : max length 256
- ship.inmarsatCallNumber : max length 50
- ship.registryDate : date
- ship.certificateOfRegistryNumber : length 1-35
- ship.grossTonnage : match `^[0-9]+([.][0-9]+)?$`
- ship.netTonnage : match `^[0-9]+([.][0-9]+)?$`
- ship.company : max length 70
- When ship.imo not defined
 - ship.mmsi : required, length 7, match `^[0-9]*$`
- When ship.mmsi not defined
 - ship.imo : required, length 9, match `^[0-9]*$`

Security Fields

- security.companySecurityOfficer.fax : max length 20, match `^\+[0-9]*$`

- `security.ISSCissuer` : length 1-256
- `security.ISSCexpiryDate` : date
- `security.matterToReport` : max length 256
- When `security.hasValidISSC` is false
 - `security.reasonForNoISSC` : required
- When `security` is defined
 - `security.companySecurityOfficer.familyName` : required, max length 50
 - `security.companySecurityOfficer.givenName` : required, max length 50
 - `security.companySecurityOfficer.phone` : required, max length 20, match `^\+[0-9]*$`
 - `security.companySecurityOfficer.email` : required, max length 50, be valid email
 - `security.hasValidISSC` : required, boolean
 - `security.ISSCissuerType` : be in referenceData(isscIssuerType)
 - `security.ISSCtype` : be in referenceData(isscType)
 - `security.shipSecurityLevel` : be in referenceData(securityLevel)
 - `security.hasApprovedSSP` : required, boolean
- When `security.calls` is defined
 - `security.calls[*].dateOfArrival` : required, date
 - `security.calls[*].dateOfDeparture` : required, date
 - `security.calls[*].portFacility` : required, length 4
 - `security.calls[*].securityLevel` : be in referenceData(securityLevel)
 - `security.calls[*].additionalSecurityMeasures` : max length 256
- When `security.activities` is defined
 - `security.activities[*].dateFrom` : required, date
 - `security.activities[*].dateTo` : required, date
 - `security.activities[*].activity` : required, be in referenceData(purposeOfCall)
 - `security.activities[*].securityMeasuresApplied` : max length 256
 - `security.activities[*].latitude` : max length 40
 - `security.activities[*].longitude` : max length 40
 - `security.activities[*].port.locode` : length 5, match `^[a-zA-Z]*$`
 - `security.activities[*].port.name` : max length 256

Crew and Passenger Fields

- `person.hasStowaways` : boolean
- When `person` is defined
 - `person.numberOfPersons` : required, number
 - `person.numberOfPassengers` : required, number
 - `person.numberOfCrew` : required, number
- When `person.crew` is defined
 - `person.crew[*].familyName` : required
 - `person.crew[*].givenName` : required
 - `person.crew[*].gender` : required
 - `person.crew[*].rank.name` : required
 - `person.crew[*].nationality.code` : required, be in referenceData(flagstate)
 - `person.crew[*].dateOfBirth` : required, date
 - `person.crew[*].placeOfBirth` : required
 - `person.crew[*].idDocument.name` : required, be in referenceData(idDocument)
 - `person.crew[*].idNumber` : required
 - `person.crew[*].visaOrResidencePermitNumber` : required, match `^(([A-Z]{3}|D)[0-9]{9})?.$`
- When `person.passengers` is defined
 - `person.passengers[*].isTransitPassenger` : boolean
 - `person.passengers[*].familyName` : required
 - `person.passengers[*].givenName` : required
 - `person.passengers[*].nationality` : required, be in referenceData(flagstate)
 - `person.passengers[*].dateOfBirth` : required, date

- person.passengers[*].placeOfBirth : required
- person.passengers[*].idDocument : required, be in referenceData(idDocument)
- person.passengers[*].idNumber : required
- person.passengers[*].embarkationPort.name : required
- person.passengers[*].embarkationPort.locode : required, length 5
- person.passengers[*].disembarkationPort.name : required
- person.passengers[*].disembarkationPort.locode : required, length 5
- person.passengers[*].visaOrResidencePermitNumber : match ^(((A-Z){3}|D)[0-9]{9})?\$\$

Dangerous and Poluting Goods Fields

- dpg.contact.location : length 5, match ^[a-zA-Z]*\$\$
- dpg.contact.fax : max length 20, match ^\\+[0-9]*\$\$
- dpg.contact.email : max length 50, be valid email
- When doNotProvideDpg is false
 - dpg.items : min items 1
- When dpg is defined
 - dpg.infShipClass.name : be in referenceData(InfShipClass)
 - dpg.confirmDPGListOnBoard : required, boolean
 - dpg.contact.givenName : max length 50
 - dpg.contact.familyName : max length 50
 - dpg.contact.phone : required, max length 20, match ^\\+[0-9]*\$\$
- When dpg.items is defined
 - dpg.items[*].dgClassification.name : be in referenceData(dgClassification)
 - dpg.items[*].imoHazardClass.name : be in referenceData(imoHazardClass)
 - dpg.items[*].technicalName : max length 350
 - dpg.items[*].unNumber : match ^[0-9]{4}\$\$
 - dpg.items[*].grossQuantity.unit : be in(KGM, TNE, M3)
 - dpg.items[*].grossQuantity.amount : match ^[0-9]+(\\. [0-9]+)?\$\$
 - dpg.items[*].netQuantity.unit : be in(KGM, TNE, M3)
 - dpg.items[*].netQuantity.amount : match ^[0-9]+(\\. [0-9]+)?\$\$
 - dpg.items[*].placement : max length 25
 - dpg.items[*].transportUnitId : max length 17

Waste Fields

- waste.lastPortDelivered.name : max length 256
- waste.lastPortDelivered.locode : length 5, match ^[a-zA-Z]*\$\$
- waste.lastPortDeliveredDate : date
- waste.wasteDeliveryStatus : be in referenceData(wasteDeliveryStatus)
- waste.items : be array
- When waste is defined
 - waste.correctDetailsConfirmation : boolean, true
 - waste.sufficientCapacityConfirmation : boolean, true
- When waste.items is defined
 - waste.items[*].wasteType.code : be in referenceData(wasteType)
 - waste.items[*].wasteToBeDelivered : required, match ^[0-9]+(\\. [0-9]+)?\$\$
 - waste.items[*].maximumCapacity : match ^[0-9]+(\\. [0-9]+)?\$\$
 - waste.items[*].amountOnBoard : match ^[0-9]+(\\. [0-9]+)?\$\$
 - waste.items[*].amountToBeGenerated : match ^[0-9]+(\\. [0-9]+)?\$\$
 - waste.items[*].portOfDelivery.name : max length 256
 - waste.items[*].portOfDelivery.locode : length 5, match ^[a-zA-Z]*\$\$

Cargo Fields

- cargo : be array
- When cargo is defined
 - cargo[*].loadingPort.name : max length 256

- `cargo[*].loadingPort.locode` : length 5, match `^[a-zA-Z]*$`
- `cargo[*].dischargePort.name` : max length 256
- `cargo[*].dischargePort.locode` : length 5, match `^[a-zA-Z]*$`
- `cargo[*].descOrHS` : required, length 1-256
- `cargo[*].quantity.amount` : match `^[0-9]*$`
- `cargo[*].weight.amount` : match `^[0-9]+(\.[0-9]+)?$`
- `cargo[*].weight.unit` : be in(KGM, TNE, M3)
- `cargo[*].measurement.amount` : match `^[0-9]+(\.[0-9]+)?$`
- `cargo[*].measurement.unit` : be in(KGM, TNE, M3)
- `cargo[*].transportUnitId` : max length 17

Appendix: Ship Validation

contentType: ship

- **ship.imo** : be unique(ship) on mmsi
- **ship.mmsi** : be unique(ship) on imo
- When **ship.imo** not defined
 - **ship.mmsi** : required, length 7, match `^[0-9]*$`
- When **ship.mmsi** not defined
 - **ship.imo** : required, length 9, match `^[0-9]*$`

Appendix 3: Document Examples

This appendix contains a list of document examples.

Appendix: Notification Example 1

```
{
  "ship": {
    "name": "Doller Fin",
    "callSign": "DF42",
    "mmsi": "123456789",
    "imo": "1234567",
    "flag": {
      "code": "LU",
      "name": "LUXEMBOURG",
      "id": "454c603a-f305-e511-bc4f-d8d385bff7cc",
      "contentType": "flagstate"
    },
    "id": "f38fc440-ad18-e511-a485-d8d385bff7cc",
    "contentType": "ship"
  },
  "port": {
    "portOfCall": {
      "name": "Esbjerg",
      "locode": "DKEBJ",
      "id": "11ef8548-7907-e511-bc4f-d8d385bff7cc",
      "contentType": "port",
      "isEu": true
    },
    "lastPort": {
      "name": "Esbjerg",
      "locode": "DKEBJ",
      "id": "11ef8548-7907-e511-bc4f-d8d385bff7cc",
      "contentType": "port",
      "isEu": true
    },
    "etdFromLastPort": "2015-06-14 09:07",
    "purposeOfCall": [
      {
        "code": "1",
        "name": "Cargo operations",
        "details": "Discharging and/or loading of cargo",
        "id": "500f10b0-f505-e511-bc4f-d8d385bff7cc",
        "contentType": "purposeOfCall"
      }
    ],
    "isAnchored": false,
    "isCruiseShip": false,
    "isduetoinspection": false,
    "ataToPortOfCall": "2015-06-26 16:09",
    "etaToPortOfCall": "2015-06-25T09:07:00",
    "etdFromPortOfCall": "2015-06-26T16:09:00"
  },
  "type": "Arrival",
  "status": "COMPLETED",
  "createdBy": {
    "user": "SSN\\super-reporter-42",
    "organisations": [
      {
        "name": "Super Org 42",
        "id": "28ec555d-08fe-0000-0000-d4856447a6ec",
        "parent": "4db10eef-f9fd-0000-0000-d4856447a6ec",
        "identifier": "ORG-00000X/ORG-00000X",
        "values": null,
        "roles": [
          {
            "id": "6355b7f8-fafd-e411-a8ad-d4856447a6ec",
```

```

        "name": "Data Provider"
      }
    ]
  }
},
"userDisplayName": "Super Reporter (SSN\\super-reporter-42)",
"userFullName": "Super Reporter"
},
"updatedBy": {
  "user": "SSN\\super-reporter-42",
  "organisations": [
    {
      "name": "Super Org 42",
      "id": "28ec555d-08fe-0000-0000-d4856447a6ec",
      "parent": "4db10eef-f9fd-0000-0000-d4856447a6ec",
      "identifier": "ORG-0000X/ORG-0000X",
      "values": null,
      "roles": [
        {
          "id": "6355b7f8-fafd-e411-a8ad-d4856447a6ec",
          "name": "Data Provider"
        }
      ]
    }
  ]
},
"userDisplayName": "Super Reporter (SSN\\super-reporter-42)",
"userFullName": "Super Reporter"
},
"id": "f48fc440-ad18-e511-a485-d8d385bff7cc",
"contentType": "notification",
"doNotProvideDpg": true,
"doNotProvideWaste": true,
"doNotProvideSecurity": false,
"security": {
  "shipSecurityLevel": {
    "name": "SL1"
  },
  "companySecurityOfficer": {
    "familyName": "Duck"
  },
  "hasValidISSC": false,
  "hasApprovedSSP": false,
  "calls": [
  ]
},
"person": {
  "crew": [
    {
      "familyName": "Duck",
      "givenName": "Donald",
      "dateOfBirth": "1934-06-09",
      "placeOfBirth": "Burbank, California",
      "idDocument": {
        "name": "Passport",
        "id": "a36c9959-9eff-e411-a8ad-d4856447a6ec",
        "contentType": "idDocument"
      }
    },
    "idNumber": "313",
    "rank": {
      "name": "Master",
      "id": "a19d533d-f705-e511-a8ad-d4856447a6ec",
      "contentType": "crewRank"
    }
  ]
}

```

```
    },
    {
      "familyName": "Mouse",
      "givenName": "Mickey",
      "dateOfBirth": "1928-11-18",
      "placeOfBirth": "Burbank, California",
      "idNumber": "MMUS42"
    }
  ],
  "hasStowaways": false
},
"$reference": "7U",
"$area": "content",
"$version": 7,
"$created": "2015-06-22T07:05:54.197",
"$updated": "2015-11-09T10:28:06.437",
"$schemaVersion": "3"
}
```


Appendix: Notification Example 2 - Dangerous and Poluting Goods.

```
{
  "ship": {
    "name": "Jylland",
    "imo": "1000000",
    "mmsi": "100000000",
    "callSign": "FrJyl",
    "flag": {
      "name": "DENMARK",
      "code": "DK"
    },
    "registryPort": {
      "name": "Hirtshals",
      "locode": "DKHIR",
      "id": "79dcb98c-3f76-e411-97e7-4439c48eba4f"
    },
    "grossTonnage": 3215484,
    "netTonnage": 3215484,
    "shipType": {
      "code": "50",
      "description": "General cargo vessel"
    },
    "id": "578e7e60-1782-e511-82a4-4439c48e9598"
  },
  "port": {
    "portOfCall": {
      "name": "Aarhus",
      "locode": "DKAAR",
      "isEu": true,
      "regions": [
        {
          "name": "Europe",
          "code": "EU",
          "countryCodes": ["DK", "DE", "GB", "FR", "SE", "NO"],
          "id": "bb8e7e60-1782-e511-82a4-4439c48e9598",
          "contentType": "region"
        }
      ]
    },
    "id": "c78e7e60-1782-e511-82a4-4439c48e9598"
  },
  "isAnchored": false,
  "isCruiseShip": false,
  "isduetoinspection": false
},
"type": "Arrival",
"status": "DRAFT",
"createdBy": {
  "user": "systematicgroup\\jmd",
  "userDisplayName": "Jens Melgaard (systematicgroup\\jmd)",
  "userFullName": "Jens Melgaard",
  "organisations": [ ]
},
"updatedBy": {
  "user": "systematicgroup\\jmd",
  "userDisplayName": "Jens Melgaard (systematicgroup\\jmd)",
  "userFullName": "Jens Melgaard",
  "organisations": [ ]
},
"id": "7cc41dac-a387-e511-82a4-4439c48e9598",
"contentType": "notification",
"visibleStatus": "DRAFT",
"doNotProvideDpg": false,
```

```

"doNotProvideWaste": false,
"doNotProvideSecurity": false,
"dpg": {
  "items": [
    {
      "technicalName": "Technical name 2",
      "unNumber": "1234",
      "imoHazardClass": {
        "name": "5.1",
        "id": "f3bc8c66-1782-e511-82a4-4439c48e9598"
      },
      "dgClassification": {
        "name": "MARPOL_ANNEX1",
        "id": "2bbd8c66-1782-e511-82a4-4439c48e9598"
      },
      "grossQuantity": {
        "amount": 500,
        "unit": "M3"
      },
      "netQuantity": {
        "amount": 500,
        "unit": "M3"
      },
      "placement": "Placement 2",
      "transportUnitId": "tid2"
    },
    {
      "technicalName": "Technical Name 1",
      "dgClassification": {
        "name": "IMDG",
        "id": "28bd8c66-1782-e511-82a4-4439c48e9598"
      },
      "placement": "Placement",
      "transportUnitId": "tid1",
      "grossQuantity": {
        "amount": 1000,
        "unit": "TNE"
      },
      "netQuantity": {
        "amount": 1000,
        "unit": "TNE"
      },
      "imoHazardClass": {
        "name": "3",
        "id": "e5bc8c66-1782-e511-82a4-4439c48e9598"
      },
      "unNumber": "1234"
    }
  ],
  "confirmDPGListOnBoard": false
},
"emsaUpdates": null,
"$schemaVersion": "3",
"$reference": "28",
"$area": "content",
"$version": 2,
"$created": "2015-11-10T13:07:55.16",
"$updated": "2015-11-10T13:09:40.613"
}

```