

Paper for Consideration by NIPWG

Initial draft data model for S-127

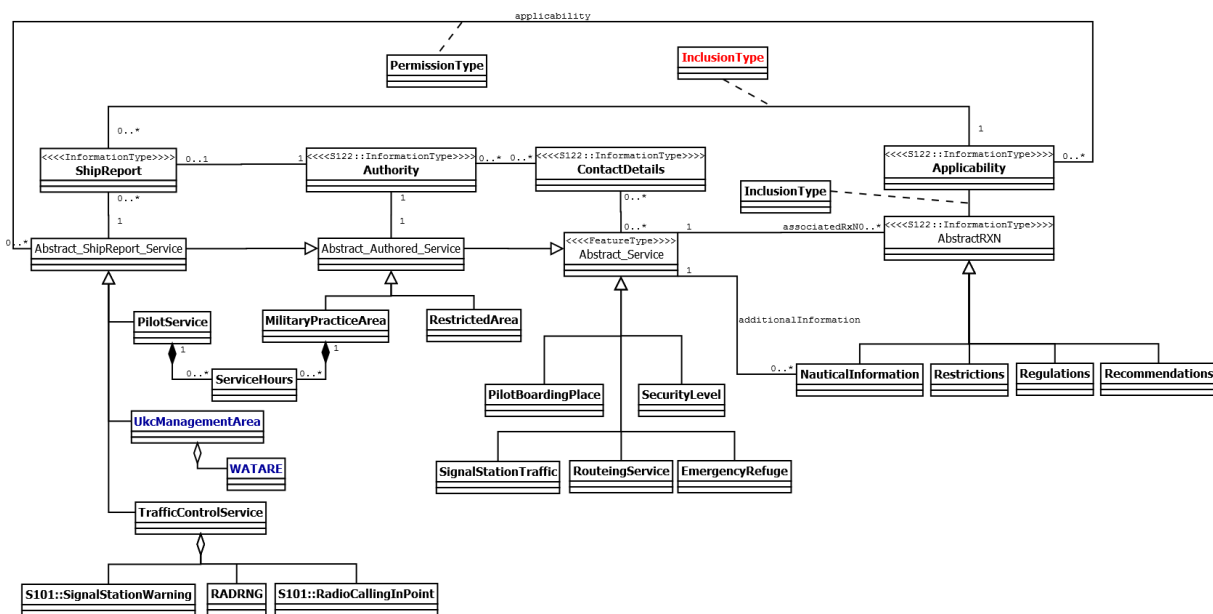
<b>Submitted by:</b>	S-127 team within NIPWG
<b>Executive Summary:</b>	The initial draft data model for S-127 explained
<b>Related Documents:</b>	S-127 model dataset
<b>Related Projects:</b>	S-122 and other NPUB- specifications

Introduction / Background

As an action item of NIPWG3, the modelling of Traffic Management test data was initiated.

Analysis/Discussion

Based on the latest version of the Traffic Management test data sample and the initial mapping, a set of objects relevant for S-127 was identified. The similarities to S-122 were also identified, and a basic data hierarchy was created. Similar structures already modelled in S-122 and other S-100 based products are re-used where appropriate. The initial data model draft strives to identify the relevant Feature Types needed for S-127. Due to technical requirements, especially restricted use of multiple inheritance within S-100, it is assumed the use of externally defined objects within the model might need further consideration.



- All objects are based on a common abstract feature; "Abstract service" (name could be changed later)
  - The Abstract Service itself contains only optional ; Abstract RxN [0..\*] and ContactDetails [0..\*]
    - This means: ALL objects will have possibility to include RxN and Contact details
    - This is to simplify design a bit. If contact details really must be disabled for some features, this can be added later.
- There is another abstract "supertype" "Abstract authored service" (name also can be changed later)
  - The "authored service" is a supertype for all services including authority information
  - The Authored service includes all data of the abstract service and additionally the Authority information.
- The third abstract "supertype" is "Abstract ShipReport service" (name also can be changed later)
  - The ShipReport service includes all data of the previous services and additionally optional; Applicability and ShipReport.
  - This abstract type was added when additional services nmaking use of ShipReports was added to the testdata (UkcManagement).

Note: FOR REASONS OF ECONOMY, DELEGATES ARE KINDLY REQUESTED TO BRING THEIR OWN COPIES OF THE DOCUMENTS TO THE MEETING

- For example ETA- notice to pilot is encoded as a Ship report
- Any instantiated object is either an Abstract Service, an Abstract Authored Service or an Abstract ShipReport service
- Abstract Services (having Abstract RxN [0..\*] and ContactDetails [0..\*]) are;
  - PilotBoarding
  - SecurityLevel
  - SignalStationTraffic
  - RouteingService
  - EmergencyRefuge
- Abstract Authored Services (having Abstract RxN [0..\*] , ContactDetails [0..\*] and Authority [1..1]) are;
  - MilitaryPracticeArea
  - RestrictedArea
- AbstractShipReport Services (having Abstract RxN [0..\*] , ContactDetails [0..\*], Authority [1..1], ShipReport [0..\*] and Applicability[0..\*]) are;
  - PilotService
  - TrafficControlService
  - UkcManagementArea
- Additionally, on the “object- level”;
  - PilotService and MilitaryPracticeArea can include ServiceHours- object
  - UkcManagementArea can include WaterArea- object

### **Action Required of NIPWG**

The NIPWG is invited to:

- a. Note and discuss the data model draft
- b. Provide feedback and guidance for further work