**Task 5.1.1 – Development of Maritime Services**

This paper reflects discussions on an initial strategy to develop Maritime Services within the IALA domain.

**Background**

When developing the International Maritime Organization (IMO) e-Navigation strategy to improve safety and efficiency of maritime transportation, it became clear that information services provided from coastal states to ships would be an essential part of this initiative.

The draft guideline developed with support from IALA members was submitted to the IMO/IHO Harmonisation Group on Data Modelling (HGDM) and was the foundation of the IMO resolution (ref?).

The resolution is a reproduction of the IALA draft guideline (“Guidance on the definition and harmonization of the format and structure of maritime services in the context of e-Navigation”). IMO MSC 101 also endorsed the circular on initial descriptions of Maritime Services (MS) in the context of e-Navigation.

The basic descriptions were submitted by IALA, IMPA, WMO and IHO. The MS without coordination body were submitted by Norway. The template and context of the MS is basically harvested from the IALA draft guideline.

The ARM Committee recognises the latest developments in IMO related to operational descriptions of MS. MSC 101 adopts the draft MSC resolution on Guidance on the definition and harmonisation of the format and structure of Maritime Services in the context of e-Navigation. The IMO resolution contains a guideline, as well as a template for describing the MS.The ARM committee has followed the development of MS descriptions in IMO.

Based on the new, central role/initiative in IMO, as expressed in the MSC resolution, the ARM committee recognises that IALA can contribute and provide subject matter expertise to the development and implementation of MS, both within IALA domain, to the IMO and to other coordinating bodies.

**Focus / strategy / task?**

Currently, the IMO MS related to VTS is divided into three services, MS1, MS2 and MS3. The IALA VTS committee is currently revising the guideline for VTS and in the future this might be merged into one MS service containing all known maritime services for VTS.

The ARM Committee has the capacity to coordinate the development within already existing relationships and cooperation with experts from coordinating bodies, industrial and national members. The ARM committee will support IMO in the development towards operationalization of MS.

The descriptions of the MS form the basis for the development of product specifications. Some of the product specifications are under development in ARM, with support from experts and IHO.

The committee should be tasked to focus on the support and delivery to IMO progress. This also includes the need for IALA to liaison with relevant coordinating bodies.

VTS and ARM committees are responsible for content and development (operational requirements) of Maritime Services within their expertise, e.g. Maritime Services related to VTS is the responsibility of the VTS committee. Management of product specifications and the support and delivery to IMO progress will be the responsibility of the ARM committee.

**New Maritime Services under IALA**

The work on ship reporting has already been fruitful. The committee has provided input to IMO NCSR and IMO FAL regarding Maritime Service no. 8 (MS8 - ship reporting). IALA members have emphasised the need for coordination of MS8. This has also been part of the background for including this task in the ARM Committee work program. The ARM committee will continue to develop a guideline.

IALA has been developing S-201 (AtoN Product Specification) (and its derivative S-125 (Nautical Services Product Specification)). It is recommended that the ARM Committee continues to support IHO on the provision of MS11 (Nautical Chart Service) and MS12 (Nautical Publications Service). MS17 (AtoN Service) is to be developed within the ARM committee.

Similarly, MS18 (PNT Service) will also be developed. To that end, one Product Specification has been created (S-240 – DGNSS Station Almanac Product Specification) which supports further development of this Service.

Additional considerations should focus on interoperability as an important aspect of e-navigation and the implementation of Maritime Services as well as include mechanism to identify and submit new services based on user needs revealed by members.

**Recommendations / conclusions**

The ARM Committee will provide a roadmap that reflect the support and development towards operationalisation of Maritime Services, using practical solutions based on user needs. Examples of successful test and evaluation of Maritime Services, such as Smart Navigation project in Korea, STM and SESAME projects, among others, should serve as role models and examples of effective implementations of Maritime Services derived from specific user needs.

A development and delivery roadmap and strategy should take into considerations and/or include the elements highlighted in this document.

The roadmap work will commence in ARM 11.