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| IALA Guideline |

G-XXXX

GUIDELINE ON COMMUNICATION FRAMEWORKs FOR THE PROVISION OF MARITIME SERVICES IN THE CONTEXT OF E-NAVIGATION

Edition 1.0

Date (of approval by Council)

Revisions to this IALA Document are to be noted in the table prior to the issue of a revised document.

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| Date | Page / Section Revised | Requirement for Revision |
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# INTRODUCTION

## SCOPE

This Guideline provides guidance on the establishment of a communications framework for the provision of digital maritime services.

The recommendation that thos refers to is R -XXXX

Further text if needed.

## BACKGROUND

There is currently a strong trend in digitalisation in the maritime domain at large. For instance, digital maritime services, e-maritime, autonomation, smart shipping, etc.

Furthermore, everyone and everything is getting connected, in general and also in the maritime domain.

# REQUIREMENTS OF A COMMUNICATIONS FRAMEWORK FOR MARITIME SERVICES IN THE CONTEXT OF E-NAVIGATION

Explanatory opening text to have words that promote the use of

1. Service oriented architecture
2. Web Service based
3. IP-based communications

## HARMONISED

What does this mean? Broadly defined, it means minimising redundant or conflicting standards or solutions.

It also means that there are they need to operate in same fundamental principles in all systems (i.e. service oriented architecture and IP based).

If there are several systems, then all elements of para xx are the same.

Service discoverability is a

## INTEROPERABLE

The ability to provide services to and accept services from other systems (ITU definition, please don’t delete) and to use the services exchanged to enable them to operate effectively together. Compatible with other systems that are similar. Ability for seamless information exchange across different systems. Vendor agnostic.

## EFFICIENT AND ROBUST

Efficient means high throughput, with minimum overheads or losses.

Robustness means the ability to cope with errors and function with less than optimum conditions

To be able to reliably deliver information on unreliable physical communication layers/channels (store and forward).

Recoverability of the system

## CYBERSECURITY

* What does CS mean – authenticity, integrity and confidentiality
* Say something here about identity management
* Say words on chain of trust
* Traceability
* Encryption
* Standards (references of some standards to be provided)

## GOVERNANCE

Good governance means that the governing body abides by the following principles:

1. Vendor agnostic
2. Non political
3. Non commercial
4. Open and transparent decision-making

# MARITIME CONNECTIVITY PLATFORM (MCP) – A CANDIDATE FRAMEWORK

## WHAT IS THE MCP

The Maritime Connectivity Platform (MCP) is a communication framework enabling efficient, secure, reliable and seamless electronic information exchange between all authorized maritime stakeholders across available communication systems.

The MCP is an open source, vendor neutral technology in the digital maritime domain. It brings common internet standards to maritime navigation and transportation systems. It comprises the following components:

### web service based communications

Text

### The Maritime Identity Registry

For secure and reliable identity information, it provides a single login to all services, using identity information provided by trusted stakeholders.

### the maritime service registry

For registering, discovering and using all relevant e-Navigation and e-Maritime services, commercial and non-commercial, authorised and non-authorised, for free and against payment. It can be seen as a sophisticated yellow pages phone book or the equivalent of an App Store.

### the maritime messaging service

Maritime Messaging Service is a messaging component that allows authorized maritime stakeholders to send and receive message in an efficient, reliable and seamless manner within the MCP to solve the problems of the current maritime wireless data communication system.

The Maritime Identity Registry facilitates authenticity, integrity and confidentiality, and the Maritime Service Registry together with the Maritime Messaging Service facilitates efficient and robust connectivity. Therefore the MCP is a potential solution that addresses the above stated compelling need.

## SUITABILITY OF MCP

How the MCP meets the requirements of Section 2

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| **Criteria** | **Suitability of MCP** |
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## THE MARITIME CONNECTIVITY PLATFORM CONSORTIUM (MCC)

The MCP is governed by the MCP consortium (MCC).

The MCC governs the standards relating to MCP, including the MCP source code. The MCC operates a testbed for MCP (done by a member on behalf of the consortium), but does not operate an operational instance of the MCP. Rather, the MCC authorises other organisations to run operational instances of the MCP.

The definitions of terms used in this Guideline can be found in the International Dictionary of Marine Aids to Navigation (IALA Dictionary) at http://www.iala-aism.org/wiki/dictionary and were checked as correct at the time of going to print. Where conflict arises, the IALA Dictionary should be considered as the authoritative source of definitions used in IALA documents.

# CLOSING REMARKS

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# ACRONYMS

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