IALA WEBPAGE ON TESTBEDS

Seamus Doyle
Testbeds - A definition

A testbed is a platform for trialling development projects.

Testbeds generally involve rigorous, transparent and replicable testing of scientific theories, innovative solutions, computational tools and new technologies.

IALA Guideline 1107
Testbed function

- e-Navigation testbeds allow for early identification and assessment of new system functionality, operational usability, areas of enhancements, identification of weaknesses and socio-technical impact.

- Testbeds should not be limited or restricted by current architecture, data structures or procedures.

- There are testbeds that, while being not directly identified as e-navigation testbeds, are nevertheless relevant to e-navigation.

IALA Guideline 1107
Sharing of information

- As e-navigation evolves from concept to operational reality, the importance of testbeds continues to grow.

- Testbed managers are encouraged to share results (including interim and final reports) of testbeds with the maritime community through IALA.

IALA Guideline 1107
IALA will post testbed findings, including an executive summary and description as provided by the testbed manager at http://www.iala-aism.org/products-projects/e-navigation/testbedsprojects/.

This information can be used to inform on ongoing and prospective testbeds.

Sharing benefits everyone.
IALAGuideline 1107

CONTENTS

1. INTRODUCTION ..............................................................................................................
2. SCOPE OF THE GUIDELINE ............................................................................................
3. TESTBeds .........................................................................................................................
4. PLANNING OF TESTBEDS ............................................................................................... 4.1. Consideration when planning an e-navigation testbed .................................
4.2. Designing a testbed .....................................................................................................
4.3. Planning of tests ........................................................................................................
4.4. Analysis of results of test cases ..............................................................................
5. HARMONISATION OF REPORTING OF TESTBED RESULTS .................................
6. ACRONYMS ......................................................................................................................

ANNEX A EXAMPLES OF FACTORS TO BE TAKEN INTO ACCOUNT WHEN PLANNING TESTS AND TEST CASES ..............................................................8

ANNEX B REPORTING TEMPLATE ..................................................................................9

List of Tables

Table 1 Example test description ......................................................................................8
Table 2 Example sub-set test description ........................................................................8
ANNEX B REPORTING TEMPLATE

The purpose of this reporting template is to serve as a harmonised framework for reporting results from e-navigation testbeds. In order to assist with the reporting of testbed results and to ensure these are valuable to the e-navigation development community, it is advisable that all headings are completed - even those for which there is no information.

Testbed Information will assist other organizations to learn more about the solution being tested. It may also offer other ideas to expand and further develop the solution.

Note: Symbols used in the Reporting Template have the following meanings:

- Sub-section / Sub-heading
  - Tick box (choose one or more)
  - Free text field

B 1. CONTENTS OF THE REPORTING TEMPLATE

B 1.1. GENERAL INFORMATION

Name of testbed
Location of testbed
Time and duration of testbed
Contact person(s)
Testbed website
Organisation(s) involved
Funding programme and budget

B 1.2. EXECUTIVE SUMMARY

B 1.3. TESTBED INFORMATION

The type of user group(s) involved in the test
  - Shipboard users
  - Shore-based users
  - SAR users

Details of e-navigation gap/s considered for the testbed (some examples are given below. For a complete list, please refer to the IMO MSC 91 report)
  - Information/data management
  - Effective and robust voice communication and data transfer
  - Systems and equipment
  - Ship reporting
  - Traffic monitoring and/or
Harmonisation and Sharing go together