Hydrographic Services and Standards Committee

IEC Activities affecting HSSC

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Topics

- Status of IEC 61174 ECDIS standard

- Role of IEC for IMO SOLAS vessels

- IEC process to create a new revision

- IEC TC80 plans about S-100 and e-Navigation

ECDIS - Introduction

- IEC ECDIS standard IEC 61174 Ed4 was published in August 2015

- For IHO related items it:

  - Refers to IHO S-52, S-57 and S-63 as source of requirements

  - Requires testing of IHO related items as specified in IHO S-64

- Type approvals based on the 4th edition have been going on for over two year:

  - No reported issues within IHO related items

  - Reported issues are around Route Exchange, which is 100% internal item of IEC

    - Is implementation of Route Exchange mandatory ?

    - Discrepancies in naming between printed and machine readable version

    - Requests to add more attributes

ECDIS – Role of IEC

✦ To provide type approval testing standard for compliance with IMO and IHO requirements

✦ IMO requires for SOLAS vessels

  – ECDIS being of type approved model

  – ECDIS being compliant with latest related IHO standards in force

  – Result is that all historical type approved ECDIS models are acceptable as long their software is updated to latest related IHO standards in force

✦ IEC has published 4 editions of IEC 61174

  – Ed1, 1998

  – Ed2, 2002

  – Ed3, 2008

  – Ed4, 2015

ECDIS – IEC and 'IHO compliance check'

- Alternatives for compliance check for latest IHO standards in force

  - All IEC 61174 editions require that an ECDIS has a facility to show the edition number of the S-52 Presentation Library in use

  - Testing of the IHO compliance with different editions of IEC 61174

    - Latest edition 3.0 of IHO S-64 covers compliance test with all ECDIS related IHO standards (S-52, S-57 and S-63)

    - Ed 4 of IEC 61174 include requirement for testing by IHO S-64 Ed 3.0

      - Type approval certificate based on IEC 61174 Ed4 is enough

    - Ed 1, 2, or 3 of IEC 61174 do not require testing by IHO S-64 Ed 3.0

      - A separate test report, statement or certificate of IHO S-64 Ed 3.0 is required in addition to the original type approval certificate based on Ed 1, 2 or 3 of IEC 61174

ECDIS – Concept of stability date

- ✦ Concept of stability date

  - IEC publish for all IEC standards a stability date

  - Stability date informs the market when, <u>at earliest</u>, a new revision of the standard could be published

  - Only extreme conditions could cause publishing before the declared stability date

  - Technical Committee (TC) Plenary meeting set the stability dates

    - IEC TC80 has plenary meetings every two years

    - Last meeting was in Aug 2017

    - Next meeting planned for 2019

- ✦ Stability date of IEC 61174 is 2020

  - No new edition before 1st Jan 2020

ECDIS – Time to develop new revision

+ Typical time to draft a new major revision

  – Including S-100 concept into ECDIS would be a major revision

  – Assigned project time would be 3 years

    – 2 years to draft the technical content

      – Multiple committee drafts (CD)

      – Process will end for publishing of committee draft for voting (CDV)

    – 1 year to pass CDV and FDIS commenting and voting phases

+ Preconditions to initiate a new revision

  – All underlying and referenced standards must be officially published within the first project year of IEC process to publish a new revision

  – IEC project for inclusion of S-100 could start at earliest when IHO technical workgroups have submitted final, complete and mature enough revisions of the IHO standards for the HSSC approval

ECDIS - Action requested of HSSC

- To note the information provided

IEC TC80/WG17 CMDS WG

✦ CMDS (Common Maritime Data Structure)

✦ Workgroup was created in October 2015

✦ Convenor is Dr. Kwangil Lee (KMOU, Korea)

✦ Within IEC TC80 all CMDS works related with shipborne system will be handled in this new workgroup

✦ IEC TC80 was granted S-100 domain ownership in December 2016

IEC TC80 CMDS WG – Short-term work plan

- The short-term work plan of the IEC TC80/WG17 CMDS WG
  - Short-term work plan covers years from 2017 to 2019

  - Draft new standard on Route Plan based on already published Route Exchange model, IEC 61174 Ed4 ECDIS, Annex S
    - New work proposal (NP) is under voting until 17th Nov 2017

  - Contribute to the development of the S-100 framework for non-GI information
    - IEC TC80 attend the IMO/IHO HGDM process
    - There are concepts under debate in WG17, but none is mature enough to make it public

IEC TC80 and S-100

- IEC TC80 is already a domain owner for the S-100 framework

- As the S-10x process for Route Plan progress the IEC TC80 will register and maintain IEC TC80 work related items in the S-100 GI registry

- IEC TC80 need to register now S-10X Product Specification for Route Plan and in future IEC TC80 may need to list more S-10X Product Specifications

IEC TC80 and S-100 - Action requested of HSSC

- To note the information provided

- To assign a number range within the S-100 concept for S-10X Product Specifications originating from IEC TC80

  - Immediate need is a number for "Route Plan"

  - Future need might be around 10 – 20 Product Specifications

  - An assigned number range is preferred

  - "Route Plan" could be assigned to the first number in the number range