Please ensure this form is annexed to the Report to the Standardization Management Board if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

A. **State title and scope of TC**

Are there any new or emerging trends in technology that will impact the scope and work activities of the TC? Please describe briefly.

Do you need to update your scope to reflect new and emerging technologies? If yes, will these changes impact another TC’s scope or work activities?

If yes, describe how these will impact another TC(s) and list the TC(s) it would impact

Technical committee 80 – Maritime navigation and radiocommunication equipment and systems

Scope - To prepare standards for maritime navigation and radiocommunication equipment and systems making use of electrotechnical, electronic, electroacoustic, electro-optical and data processing techniques.

There are no emerging trends in technology that will impact the scope and activities of the TC.

B. **Management structure of the TC**

Describe the management structure of the TC (use of an organizational chart is acceptable) (should be integrated by CO automatically) and, if relevant (for example an unusual structure is used), provide the rationale as to why this structure is used.

Note: Check if the information on the IEC website is complete.

When was the last time the TC reviewed its management structure? Describe any changes made. When does the TC intend to review its current management structure? In the future, will the TC change the current structure, for example due to new and emerging technologies, product withdrawal, change in regulations etc. Please describe.

Make sure the overview includes:
- any joint working groups with other committees,
- any special groups like advisory groups, editing groups, etc.

**Working Groups, Project Teams and Maintenance Teams**

Management structure is reviewed at meetings of the Committee every two years. Latest changes made are to generate two new Working Groups to deal with the developing technologies of Bridge Alert Management (BAM) and Common Maritime Data Structure (CMDS).
C. BUSINESS ENVIRONMENT

Provide the rationale for the market relevance of the future standards being produced in the TC.

If readily available, provide an indication of global or regional sales of products or services related to the TC/SC work and state the source of the data.

Specify if standards will be significantly effective for assessing regulatory compliance.

| There is a need for standards for the systems and equipment carried by ships and the systems that communicate with ships, Aids to Navigation and shore based systems to enable them to efficiently navigate amongst one another in ways that protect the environment and the safety of life at sea. As some ships travel all over the world, there is a need for these standards to be internationally agreed. This eliminates unnecessary barriers to ensure trade is carried out smoothly, predictably and as freely as possible. The basic standards for radio-communication are set by the International Telecommunications Union (ITU) which is a specialised agency of the United Nations located in Geneva Switzerland. The basic standards for ships bridge equipment are set by the International Maritime Organization (IMO) which is another specialised agency of the United Nations located in London, UK. IMO does not generally produce detailed technical and test standards for maritime navigation and radiocommunication equipment and systems. Therefore in agreement with IMO, TC80 has adopted the role of producing these for maritime electronic navigation and radiocommunication equipment and systems. |
| The world market size for navigation and communication equipment is, for merchant ships of $1.7 billion, for fishing vessels $0.5 billion and for pleasure craft $1.3 billion. |
| TC80 standards are widely used by Administrations for type approval of equipment which is a regulatory requirement under the IMO International Convention for the Safety of Life at Sea (SOLAS). |

D. MARKET DEMAND

Provide a list of likely customers of the standards (suppliers, specifiers, testing bodies, regulators, installers, other TC/SC’s etc.). Do not specify company names, only categories of customers.

| The customers for TC80 standards are the manufacturers of the navigation and communication systems, the test houses which provide the test reports and Administrations which use the standards for type approval purposes. |

E. TRENDS IN TECHNOLOGY AND IN THE MARKET

If any, indicate the current or expected trends in the technology or in the market covered by the products of your TC/SC.

| A major trend is an increasing focus on improving collaboration within the ship’s bridge team, between the bridge team and pilot and with shore-side sources of information. Associated with this is the development of smarter interfaces between sensors and workstation applications. This is leading to new developments for data transfer via Local Area Networks (LAN) and for Bridge Alert Management (BAM) for handling alarms. |
| A further trend is increasing integration of ship and shore services known as e-navigation. This is leading to new developments for the harmonized data transfer through communication equipment and inter-operability for the supporting various e-navigation services. |
| Reducing telecommunication costs is leading to increased mid-ocean use of broadband satellite communications enabling ships to access more data relevant to their needs. This together with the use of PC technology is leading to a greater awareness of cyber security issues for ships. |
F. **SYSTEM APPROACH ASPECTS (REFERENCE - AC/33/2013)**

Does your TC/SC have a need for a systems approach?

If so:
- Will the Systems work be in a single TC or in multiple TCs?
- Will a Systems Evaluation Group (SEG), Systems Committee (SyC), or Systems Resource Group be required?
- Is your TC/SC work of relevance to ISO?
- Is or are there fora or consortia working in parallel to IEC? Is there a chance to integrate this work in your TC/SC?

This should not only be restricted to the customer/supplier relationships with other TC/SCs indicating types of co-operation (e.g. liaisons, joint working groups) but be of a more generic nature.

If there is no need for a systems approach as outlined in AC/33/2013, is it intended a TC would not be requested to report on general systems approach considerations such as customer/supplier relationships, liaisons, joint WGs, etc. as referenced in the system approach matrix illustrated in slide 14 of the presentation attached to AC/37/2006?

TC80 has liaisons with all the major International maritime organisations including:
- International Maritime Organization (IMO);
- International Mobile Satellite Organization (IMSO);
- International Chamber of Shipping (ICS);
- International Hydrographic Organisation (IHO);
- International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA);
- International Telecommunication Union (ITU);
- International Organization for Standardization (ISO TC 8);
- International Association for Marine Electronic Companies (CIRM) and
- International Sailing Federation (ISAF).

In addition there are liaisons with:
- Radio Technical Commission for Maritime Services (RTCM);
- National Marine Electronics Association (NMEA) of the USA and
- International Search and Rescue Satellite System (Cospas-Sarsat).

TC80 has established liaison with the International Association of Classification Societies through individual members.

TC80 maintains dialogue and cooperation with other IEC TC/SCs and liaison organizations as shown below:

<table>
<thead>
<tr>
<th>Component Committees</th>
<th>IEC SC 18A</th>
<th>Electrical cables</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC TC 18A</td>
<td>IEC TC 18</td>
<td>Sound measuring equipment</td>
</tr>
<tr>
<td>ISO TC 8</td>
<td></td>
<td>Ship installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ship bridge installations</td>
</tr>
</tbody>
</table>

| System Committees     | IEC TC 70  | Safety protection |
|                       | IEC TC 77  | EMC               |
|                       | CISPR      | Environmental conditions |
|                       | IEC TC 104 | Equipment performance standards |
|                       | IMO        | Electronic charts |
|                       | IHO        | Aids to navigation and e-navigation |
|                       | IALA       | Radio recommendations |
|                       | ITU-R      |                  |

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G. CONFORMITY ASSESSMENT

With reference to clause 6.7 of Part 2 of the ISO/IEC directives, are all you publications in line with the requirements related to conformity assessment aspects?

Will the TC/SC publications be used for IEC Conformity Assessment Systems (IECEE, IECEx, IECQ, IECRE)?

Will any of your standards include test specifications, reproducible test requirements, and test methods?

Are there likely to be special conformity assessment requirements generated by any standards projects? If yes, list which projects.

At the current time conformity assessment is conducted by notified bodies set up by Administrations with a responsibility for maritime matters.

H. 3-5 YEAR PROJECTED STRATEGIC OBJECTIVES, ACTIONS, TARGET DATES

<table>
<thead>
<tr>
<th>STRATEGIC OBJECTIVES 3-5 YEARS</th>
<th>ACTIONS TO SUPPORT THE STRATEGIC OBJECTIVES</th>
<th>TARGET DATE(S) TO COMPLETE THE ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revise and update existing standards as necessary</td>
<td>Maintenance programme in place</td>
<td>2018</td>
</tr>
<tr>
<td>Investigate needs for cybersecurity on ships</td>
<td>TC to join ACSEC as a member</td>
<td>2018</td>
</tr>
<tr>
<td>Produce standards for Bridge Alert Management (BAM)</td>
<td>Standard IEC 62923-1in preparation</td>
<td>2018</td>
</tr>
<tr>
<td>Produce standards to support e-navigation</td>
<td>Monitor developing requirements within IMO, IHO, ITU and IALA</td>
<td>2020</td>
</tr>
<tr>
<td>Produce standards to support Common Maritime Data Structure (CMDs).</td>
<td>New working Group set up</td>
<td>2020</td>
</tr>
</tbody>
</table>

Note: The progress on the actions should be reported in the RSMB.