

CST Technical Specification

Specification for Water Navigation Equipment

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This technical specification is issued by The Communications, Space and Technology Commission in the Kingdom of Saudi Arabia in accordance with the provisions of the Communications and Information Technology Act issued by Royal Decree No. (M/106) dated 02/11/1443 AH and its bylaw, and the Commission's regulation.

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Document History Table

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Issue 1	January 2010	
Issue 2	July 2021	
Issue 3	October 2023	

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1- Scope

This specification applies to water navigation equipment.

2- Enforcement

2-1 This specification shall enter into force from issue date.

2-2 Any previous version of this technical specification is withdrawn.

3- General Requirements

- 3-1 All equipment must comply with the requirement of CST specification GEN001, be safe and must not adversely affect other electrical equipment.
- 3-2 All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CST. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. Please visit CST website for details.
- 3-3 If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.
- 3-4 It is mandatory that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

4- Limits and conditions

Testing should be carried out to ensure compliance with the listed specifications.

Frequency band	Max Output Power or Magnetic Field	Usage	Standard	Comments
90 – 110 kHz	Receiver only	Water navigation	EN 61075	
1563 – 1591 MHz	30 kW	Water navigation	IEC 62388 IEC 60936-2 IEC 60945	The maximum of the antenna gain shall not exceed 30 dBi.
1260 – 1300 MHz	25 kW	Water navigation	IEC 62388 IEC 60936-2 IEC 60945	The maximum of the antenna gain shall not exceed 30 dBi.

5- Licensing Requirements

A spectrum license is required.

6- Additional Requirements

There is no additional requirements for this technical specification.

7- References

The following referenced documents are indispensable for the application of this document. If no issue or revision number is quoted along with the title of a technical specification or standard, the latest published version should be used.

EN 61075 / IEC 61075

Loran-C receivers for ships - Minimum performance standards - Methods of testing and required test results.

EN 62388 / IEC 62388

Maritime navigation and radio communication equipment and systems - Shipborne radar - Performance requirements, methods of testing and required test results.

EN 60936-2 / IEC 60936-2

Maritime Navigation and Radio communication Equipment and Systems - Radar - Part 2: Shipborne Radar for High-Speed Craft (HSC) - Methods of testing and required test results.

EN 60936-1 / IEC 60936-1

Maritime navigation and radiocommunication equipment and systems - Radar - Part 1: Shipborne radar; Performance requirements; Methods of testing and required test results (IEC 60936-1:1999 + A1:2002)

EN 60945 / IEC 60945

Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results (IEC 60945:2002)