International Maritime Organization

IMO's role and developments on GNSS

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Cafer Ozkan Istanbullu
Technical Officer
Maritime Safety Division
International Maritime Organization

Global Navigation Satellite System

GNNS is a satellite-based navigation system capable of providing accurate and reliable:

- positioning information
- navigation information
- timing information

Regulatory framework *(continued…)*

IMO is the competent international organization that can recognize a GNSS as a component of the IMO World-Wide Radionavigation System (WWRNS).

SOLAS regulation V/19.2.1.6 *All ships, irrespective of size, shall have a receiver for a global navigation satellite system or a terrestrial radionavigation system, or other means, suitable for use at all times throughout the intended voyage to establish and update ships position by automatic means*

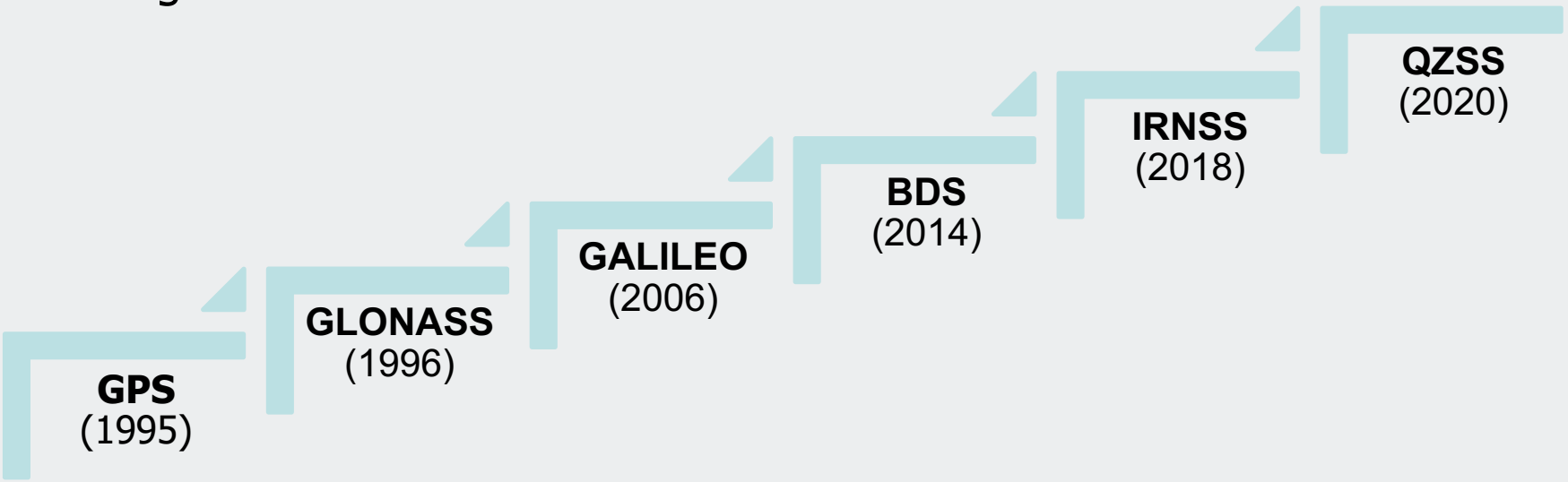
Resolution A.915(22) *Revised maritime policy and requirements for a future global navigation satellite system (GNSS)* (adopted in 2001)

Resolution A.1046(27) *Worldwide Radionavigation System* (adopted in 2011)

GNSSs recognized by IMO

IMO recognition process

- Application
- Evaluation
- Development of equipment performance standards
- Recognition



Performance standards for shipborne GNSS receiving equipment

Resolutions A.819(19) and MSC.112(73)

Performance standards for shipborne Global Positioning System (GPS) receiver equipment

Resolutions MSC 53(66) and MSC.113(73)

Performance standards for shipborne GLONASS receiver equipment

Resolutions MSC 74(69), annex I, and MSC.115(73)

Performance Standards for shipborne combined GPS/GLONASS receiver equipment

Resolution MSC 233(82)

Performance standards for Shipborne GALILEO receiver equipment

Performance standards for shipborne GNSS receiving equipment *(continued…)*

Resolution MSC 379(93)

Performance standards for shipborne BDS receiver equipment

Resolution MSC.401(95) *(as amended by resolution MSC.432(98))*

Performance standards for multi-system shipborne radionavigation receivers

Resolution MSC 449(99)

Performance standards for shipborne IRNSS receiver equipment

Resolution MSC 480(102)

Performance standards for shipborne Japanese Quasi-Zenith Satellite System (QZSS) receiver equipment

Ongoing work at IMO

Development of generic performance standards for shipborne satellite navigation system receiver equipment

Proposal for development of a terrestrial positioning system (VDES R-Mode) as a backup for GNSS

Overview of the 1974 SOLAS Convention

SOLAS Chapter IV - Radiocommunications

Wrap up

- General definition of a GNSS
- IMO's role
- Recognized GNSSs
- Ongoing work at IMO

IMO's World Maritime Theme for 2024:

"Navigating the future: safety first!"

NAVIGATING THE FUTURE: SAFETY FIRST!

International Maritime Organization

4 Albert Embankment
London
SE1 7SR
United Kingdom

Tel: +44 (0)20 7735 7611
Fax: +44 (0)20 7587 3210
Email: info@imo.org
www.imo.org

twitter.com/imohq facebook.com/imohq youtube.com/imohq flickr.com/photos/imo-un/collections