



The provision of UNLOCODE information to mariners via:

ITU Service Publications (maritime) and MARS
(Maritime mobile Access and Retrieval System) and;

its contribution to the:

Monitoring of ship movements.



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General introduction to the work of ITU

- **ITU is the United Nations specialized agency for information and communication technologies.**
- **ITU coordinates the shared global use of the radio spectrum and satellite orbits.**
- **It works to improve Telecommunication infrastructure in the developing world, it develops and coordinates worldwide technical standards.**
- **ITU is committed to connecting all the world's people – wherever they live and whatever their means. Through our work, we protect and support everyone's fundamental right to communicate.**



General introduction to the work of ITU

ITU has three main areas of activity organized in 'Sectors' which work through conferences and meetings:

- **The Radiocommunication sector (ITU-R);**
- **The Standardization sector (ITU-T);**
- **The Development sector (ITU-D).**

ITU's work in the sphere of radiocommunications is performed in the ITU-R Sector, which:

- **Establishes and updates international regulations on spectrum/orbit use by radio services.**
- **Produces global standards and associated material (recommendations, reports and handbooks) on spectrum and orbit use.**
- **Informs and assists countries on radiocommunication matters.**

The Radiocommunication Bureau is a part of ITU secretariat dealing with radio matters.



ITU-R

World Radiocommunication Conference (WRC)

- Are held every four years, they review and revise the Radio Regulations, the international treaty governing the use of the radio frequency spectrum and the satellite orbits;
- They consider the results of the studies to improve the international spectrum regulatory framework.
- 25% of the content of the Radio Regulations is devoted to maritime radio. A close relationship exists between the Radio Regulations and various IMO conventions such as the SOLAS (Safety Of Life At Sea) convention.
- Provision 20.16 of the Radio Regulations requires:
“Administrations shall take all appropriate measures to notify the Radiocommunication Bureau immediately of any changes in the operational information contained in Lists IV and V, in view of the importance of this information, particularly with regard to safety.”





ITU-R

Study Groups

- **These study Groups are assigned study Questions by a Radiocommunication Assembly (RA) to prepare draft Recommendations, etc. for approval by ITU Member States.**
- **More than 5000 specialists, representing ITU Member States, Sector Members, Associates and Academia throughout the world, currently participate in the work of ITU-R Study Groups.**
- **Maintains strong cooperation with the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO) and the World Meteorological Organization (WMO).**
- **ITU-R Study Group 5 deals with: Maritime mobile service including the Global Maritime Distress and Safety System (GMDSS); the aeronautical mobile service and the radiodetermination service.**
- **ITU-R Study Group 5 – Working Party 5B is the lead group for developing and maintaining ITU-R Recommendations, Reports and Handbooks that enable the effective operation and protection for different applications, including distress and safety applications of the above services;**



Usage of UNLOCODE for Mariners

Monitoring of ship movements

- In order to overcome potential incorrect or confusing abbreviations being used in AIS (Automatic Identification System) destination fields, the IMO agreed in 2004 that the use of the UNLOCODE should be adopted for this purpose, and their use encouraged.
- This was driven by the use of onboard AIS radio systems, as detailed in Recommendation, ITU-R M. 1371 and later from 2006 by the implementation of the LRIT (Long Range Identification and Tracking) system.
- ITU-R continues to coordinate the development of new systems that complement AIS and LRIT and that also use UNLOCODE.
- For example the VDES VHF Data Exchange System currently under discussion at ITU and which is on the agenda for WRC-19 as item 1.9.2. under RESOLUTION 360 (REV.WRC-15) will use UNLOCODE in its messaging.



Usage of UNLOCODE for Mariners

The UNLOCODE system allows mariners to designate geographical locations with precision and without ambiguity, this is important to the ongoing development of the monitoring and tracking of maritime traffic worldwide.

Monitoring and tracking systems such as LRIT rely on communications links either using VHF AIS, or satellite based systems.

Examples of the type of maritime information that uses UNLOCODE to designate geographical locations are:

- **Communications and SAR, Marine Casualties and Incidents**
- **Maritime Security, Piracy and Armed Robberies**
- **LRIT messaging including, Port State Control, Port Reception Facilities**
- **Ship Particulars, Dangerous Goods Carriage, Port reception**



ITU Radiocommunication Bureau

- Provides administrative and technical support to Radiocommunication Conferences, Assemblies and Study Groups, including Working Parties and Task Groups
- The Radiocommunication Bureau publishes lists of maritime radio communications stations, their name, callsign and other relevant details.
- The publications are available on board ships and at maritime coast radio stations CRS and Maritime Rescue Coordination Centers MRCC worldwide.
- Currently the operational information on over 700,000 ship radio communication stations and over 2000 coast stations is published.
- In addition information is also published on AIS (Automatic Identification System) aids to navigation , SAR aircraft and accounting authorities.
- An online facility is also available, it provides a free of charge, online access and retrieval system, that allows users to consult the information currently registered in the ITU's maritime database system (MARS) <http://www.itu.int/ITU-R/go/mars/en>



MARS webpage

- During the November 2016 meeting of ITU Study Group, Working Party 5B it was agreed that information should be provided to mariners with a centralized location where the information could be accessed. ITU made this available to mariners via the MARS webpage.

<http://www.itu.int/ITU-R/go/mars/en>



The screenshot shows the ITU MARS webpage. At the top is the ITU logo and the tagline "Committed to connecting the world". Below this is a search bar and a navigation menu with tabs for ITU, General Secretariat, Radiocommunication, Standardization, Development, ITU Telecom, Members' Zone, and Join ITU. The main heading is "Maritime mobile Access and Retrieval System (MARS)". Below this is a sub-header "YOU ARE HERE" with a breadcrumb trail: HOME > ITU-R > TERRESTRIAL SERVICES > MARS. The main content area is divided into two columns. The left column contains the "ITU MARS" section, which describes the system as a free of charge, online access and retrieval system for ship and coast stations, MMSI assigned to AIS Aids to Navigation and SAR Aircraft, and contact information of Accounting Authorities. It also mentions that the webpage provides operational information of Ship and Coast stations, MMSI assigned to AIS Aids to Navigation and SAR Aircraft, and contact information of Accounting Authorities, that have been notified to the ITU Radiocommunication Bureau by the Administrations of ITU Member States. It is updated on a daily basis. Below this are three small images of ships. The right column contains a "Quick links" section with a list of links: Download ship stations, coast stations, and MMSI assigned to AtoN and SAR aircraft (Restricted Access); Radio Regulations (Edition 2016); Maritime Identification Digits (MID); International Call Sign Series (Appendix 42 to the RR); Assignment and use of identities in the maritime mobile service (MMSI) (Recommendation ITU-R M.585); Accounting Authorities (Recommendation ITU-T D.90); and BR Maritime Circular Letters (CM-Series). Below this is a section titled "UNECE - UN/LOCODE" which describes the "United Nations Code for Trade and Transport Locations" as commonly known as "UN/LOCODE". It includes a link to "UN/LOCODE - Code List by Country". At the bottom of the page are sections for "SHIP STATIONS", "COAST STATIONS", "SAR AIRCRAFT STATIONS", and "AIS AIDS TO NAVIGATION". Each of these sections has a small image and a link to "Retrieval of information >" and "How to notify >".

ITU MARS

MARS is a free of charge, online access and retrieval system that allows users to consult the information currently registered in the ITU's maritime database system.

This webpage provides operational information of Ship and Coast stations, MMSI assigned to AIS Aids to Navigation and SAR Aircraft, and contact information of Accounting Authorities, that have been notified to the ITU Radiocommunication Bureau by the Administrations of ITU Member States. It is updated on a daily basis.

SHIP STATIONS

COAST STATIONS

SAR AIRCRAFT STATIONS

AIS AIDS TO NAVIGATION

UNECE - UN/LOCODE

The "United Nations Code for Trade and Transport Locations" is commonly more known as "UN/LOCODE".

UN/LOCODE - Code List by Country

Amendments to Lists IV & V

Maritime Publications

FAQs

- List IV - Compilation of amendments to the List of Coast Stations and Special Service Stations
- List V - Compilation of amendments to the List of Ship Stations and Maritime Mobile Service



ITU Service Publications (maritime) and MARS

<http://www.itu.int/ITU-R/go/mars/en>

implementation



ITU
maritime
database



List IV - List of Coast Stations and Special Service Stations (RR 20.7)



List V - List of Ship Stations and Maritime Mobile Service Identity Assignments (RR 20.8)



MARS - Maritime mobile Access & Retrieval System



Maritime Manual - Manual for use by the Maritime Mobile and Maritime Mobile-Satellite Services (RR 20.14)



Conclusion

- **The UNLOCODE system provides a definitive identification of geographical positions, it is very important for mariners.**
- **One of the key concepts in maritime transport worldwide is safety of navigation.**
- **The UNLOCODE system removes any ambiguity on the precise geographical position that a navigator is referencing in the exchange of important information, his port of origin and port of destination.**
- **It improves the efficiency of the global maritime transport system by reducing uncertainties that may cause delay or misunderstandings.**
- **The ITU is pleased to provide a central point for mariners worldwide to access information on UNLOCODE's in cooperation with UNECE.**



Thank you.

Questions

