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## **Terrestrial Services Department**

### MARITIME MOBILE ACCESS AND RETRIEVAL SYSTEM (MARS)

http://www.itu.int/en/ITU-R/terrestrial/mars/Pages/MARS.aspx

#### Summary

This document introduces the online information system "Maritime mobile Access and Retrieval System" (**MARS**), which has been developed by the Radiocommunication Bureau of the International Telecommunication Union (ITU). It provides examples of how users can access and retrieve information as well as how administrations can notify information for inclusion into the ITU maritime database.

#### Introduction



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. It is updated on a daily basis.

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, which have

been notified to the ITU Radiocommunication Bureau by the Administrations of ITU Member States.

In this context, administrations should note that changes to operational information and station particulars are to be notified immediately to the Radiocommunication Bureau (BR) by administrations, as provided for in provision of No. 20.16 of the Radio Regulations (RR):

20.16 § 12 1) 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. In the case of the data published in List V, which is also made available online through MARS, administrations shall communicate those changes at least once a month. In the case of other publications, administrations shall communicate the changes in the information contained in them as soon as possible.

Any errors observed or requests for updates should be transmitted to ITU through the telecommunication administration having jurisdiction over the station(s) concerned, as the information to be published has to be notified to the Radiocommunication Bureau by administrations of the Member States of the ITU.

MARS provides information on the following, as well as providing links to other maritime-related sites within the Radiocommunication Bureau.

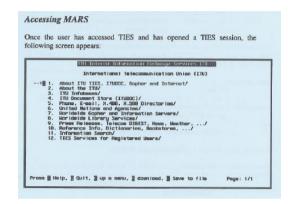
- Particulars of over 800 000 ship stations. This information may be of use to the maritime community to contact individual ships at sea and/or assist maritime Search and Rescue (SAR) authorities in their activities.
- Particulars of over 2 100 coast stations. The operational information provided may be useful for ships at sea to contact coast stations and also for authorities involved in Search and Rescue (SAR) operations including the Global Maritime Distress and Safety System (GMDSS).
- Particulars of Search and Rescue (SAR) aircraft assigned an MMSI, such as their licensing administration, registration mark/call sign of the aircraft, type of aircraft, the maritime radio equipment on board and contact information.
- Particulars of AIS Aids to Navigation (AtoN) assigned an MMSI, such as their licensing administration, type of AtoN (whether it is real, synthetic or virtual), its dimension (height, width, length) in metres, its geographical position, the type of electronic position fixing device (e.g. GPS, Loran-C, etc.) and contact information.
- Contact information of Accounting Authorities.
- Contact information of administrations which notify data for inclusion into this system as well as the ITU maritime related Service Publications (List IV and List V).
- Compilation of amendments to Lists IV and V.
- Links to letters concerning maritime affairs issued by the Radiocommunication Bureau.
- Maritime related ITU-R Recommendations and Reports; and
- the ITU Global Administrations Database (GLAD). GLAD is an online data-retrieval system and a central repository of ITU-R common information concerning administrations and geographical areas.

#### Background

For many years, ITU has been gathering and disseminating information, concerning ship, coast and special service stations, through the paper-based ITU Service Publications.

With the advent of the Internet, administrations requested ITU to study the possibility of providing ship station information not only as a paper publication, but also through an electronic online service.

In 1994 the ITU created the MARS system. This system was made available to all members that were registered with the ITU TIES (Telecom Information Exchange Services). Users connected to the Internet using the TIES Gopher server (a system that pre-dates the World Wide Web for organizing and displaying files on Internet servers. A Gopher server presents its contents as a hierarchically structured list of files. With the ascendance of the web, many gopher databases were converted to websites which can be more easily accessed via web search engines).



In 1995, ITU MARS became operational on the World Wide Web (WWW). Over the past years, numerous changes have taken place to the information that is available via MARS.

In 1997, WRC-97 adopted Resolution 340. Based on this Resolution the Radiocommunication Bureau incorporated additional information in order to support and facilitate search and rescue activities in the Global Maritime Distress and Safety system (fully implemented in 1999), and to allow Rescue Coordination Centres immediate access to this database.

In 2001, based on an ITU-R Working Party 8B recommendation, the functionality of the MARS system was further enhanced for search and rescue (SAR) purposes by the introduction of a search facility using the EPIRB (Emergency Position Indicating Radio Beacons).

In 2003, WRC-03 adopted Resolution 353. Based on this Resolution the Radiocommunication Bureau incorporated information concerning Maritime Mobile Service Identities (MMSI) for equipment other than ship-borne mobile equipment (aircraft stations participating in search and rescue operations, AIS Aids to Navigation (AtoN) and craft associated with the parent ship).

In 2007, WRC-07 made substantive changes to Article 20. One of the changes made to this article was the introduction of the "ITU Maritime mobile Access and Retrieval System (MARS) (WRC-07)" in a new section entitled "Section II – Online information systems (WRC-07)".

Furthermore, through Resolution 356, WRC-07 instructed BR to maintain the online information system for rescue coordination purposes.

#### The Maritime mobile Access and Retrieval System (MARS)



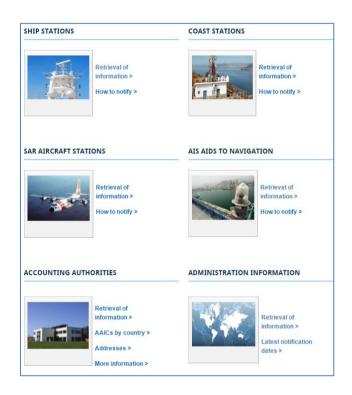
MARS provides search functions to retrieve information concerning ship and coast stations, contact information of accounting authorities and notifying administrations, as well as information concerning SAR aircraft and AIS Aids to Navigation (AtoN) that have been assigned an MMSI.

This system provides administrations with the possibility to download all their ship stations and coast stations that are currently registered with ITU as well as a table that shows the date of receipt of the most recent notification (operational information) submitted to the Radiocommunication Bureau.

In addition, the notification forms used for updating the information published in the maritime related ITU Service Publications and MARS, are also available.

#### **Retrieval of information**

In the MARS system, users have to click on the links marked as "Retrieval of information", in order to access the appropriate search screen.



Retrieving data is very straightforward and as an example, the following shows how to retrieve information concerning a ship station with the MMSI.

- Example (Retrieve ship station data using an MMSI):
  - Click on the "Retrieval of information" link.





- The following screen appears:

f У 💩 🕶 in 8° 📞 📾		MARS BACK TO ITU MAIN
Q Ship Station - Search		
Ship Name	Call Sign	MMSI (incl. Parent Ship Craft)
Identity for handheld VHF	Administration <select one=""></select>	Geographical Area  select one>
EPIRB Id Code	EPIRB Hex Id Code	Vessel Number
		Q Submit Query 🗙 Clear Query
≣ Ship Station List Please, enter search criteria.		
Ship Name J₂ Call Sign MMSI	Administration Geographical Area	Vessel Number EPIRB Update Date

Type the information (i.e. MMSI) into the appropriate field and submit the query

- In case an administration (flag state) has not yet notified the information to ITU, the following information is displayed.

f	y	ò	••	in	8+	¢	$\bowtie$					MARS	BACK TO ITU MAIN
Q	Ship Si	tation - S	Search										
lde		OWN SH		łF				Call Sign Administration <select one=""> EPIRB Hex Id Code</select>		Ţ	MMSI (incl. Parent St Geographical Area <select one=""> Vessel Number</select>	nip Craft)	•
	44 15											<b>Q</b> Submit (	Query Clear Query
	Ship S	tation Li	st Nor	ecord fou	nd!								
_	S	õhip Nan	ne 🗜		Call Sig	n	MMSI	Administration	Geographical Area		Vessel Number	EPIRB	Update Date

- Otherwise, a window containing brief details of the retrieved station is displayed.

<b>≣</b> Ship	Station List							1
	Ship Name 🔓	Call Sign	MMSI	Administration	Geographical Area	Vessel Number	EPIRB	Update Date
۲	ALIANCA SAN MARTIN	A8UG5	636014960	LBR	LBR	9301988	636014960	22/09/2016

- Click on the "eye icon" button of the retrieved ship name. The following screen appears containing all the notified information.

f У 🖮 🕶 in 8 <sup>+</sup> 5	22		NEW SHIP STATION SEARCH	MARS	BACK TO ITU MAIN
Back to list Tview Address of Administration	View Emergency Contact				
Ship Station Particulars					
Ship Name	Call Sign	MMSI			
ALIANCA SAN MARTIN	A8UG5	636014960	Sele	ective Call N	lumbers
Administration	Geographical Area		Sate	ellite Numb	er(s)
LIBERIA (REPUBLIC OF) (LBR)		EPUBLIC OF) (LBR)	463	721019-21	l -
Life Boats	EPIRB BE1G2				
				RB Hex Nb(	s)
General Classification	Primary Individual Classification	Secondary Individual Classif	CF8	88D74A0D	534D1
Primary Nature of Service	Secondary Nature od Service	Available Service			
CP		CD	Par	ent Ship Cra	aft(s) (MMSI)
Hours of Service	RTG Band	RTF Band	Ide	ntity(ies) fo	r handheld VHF
H24		STUV			
AAIC	AAIC for Satellite				
DP03					
Owner					
PSARA NAVIGATION LTD					
Former Ship Name	Former Call Sign				
EPIRB Identifier	Vessel Identification Number	Gross Tonnage			
636014960	9301988				
Capacity for persons					
Radio Installation					
INMARSAT C, VHF, MF/HF/DSC					

The procedure for retrieving information, concerning other types of stations, is rather similar.

#### Notification of data

# The Radiocommunication Bureau accepts only notifications that have been submitted by the responsible administration of an ITU Member State.

Clicking on any of the highlighted links below directs the user to the appropriate screen containing the notification forms as well as some complimentary information necessary to complete the forms (such as the Preface, etc.).



- As an example the following shows how to access notification forms concerning the "List V - List of Ship Stations and Maritime Mobile Service Identity Assignments".
- Example (Access notification forms for notifying ship station data): Click on the link "Notification" The following screen appears:

List of Ship Stations and Maritime M Identity Assignments - Notification	Iobile Service
YOU ARE HERE HOME > ITU-R > TERREBITIAL SERVICES > MARS > LIST O SERVICE IDENTITY ASSIGNMENTS - NOTIFICATION	
IMPORTA	IT NOTICE
Only notifications submitted by the responsible Administration or by an Account D.90), will be accepted by the Ra	
Provision No. 20.16 of the Radio Regulations states that:	
<ul> <li>Administrations shall take all appropriate measures to notify the Radiocommunication f and V, in view of the importance of this information, particularly with regard to safety.</li> <li>In the case of the data published in List V, which is also made available online through I</li> </ul>	
In the case of other publications, administrations shall communicate the changes in the	
GENERAL INFORMATION	PAPER NOTIFICATION FORM
Preface and Reference tables	Notification form (MSWord)
Symbols which designate classes of ships and other abbreviations	Notification form (PDF)
Description of fields	Example
ELECTRONIC NOTIFICATION	NOTIFICATIONS SHOULD BE ADDRESSED TO
Data elements for electronic notification (PDF)	The Director of Radiocommunication Bureau-ITU, Place des Nations. CH-1211 Geneva 20, Switzerland.
Example	Direct Telefax. No.: +41 22 730 5785, Email: <u>brmail@itu.int</u>

- Under General information complementary information is provided.

#### All notifications, sent via post, email or fax, should be addressed to:

The attention of "The Director of Radiocommunication Bureau-ITU"

Postal address: Place des Nations, CH-1211 Geneva 20, Switzerland

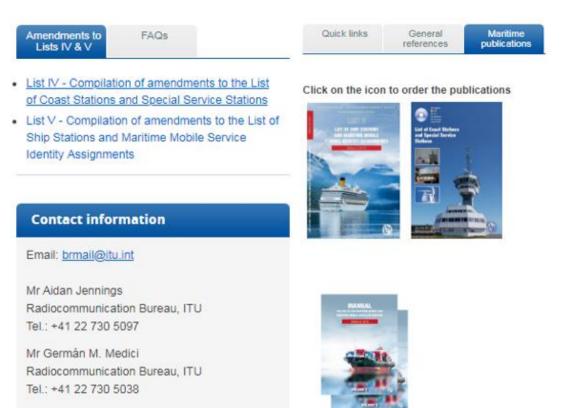
Direct telefax: +41 22 730 5785

Direct e-mail: <u>brmail@itu.int</u>

#### Other information provided

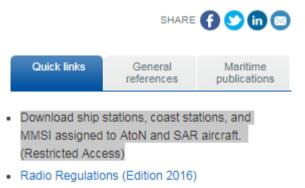
Quick links	General references	Maritime publications	Quick links	General references	Maritime publications		
MMSI assigned (Restricted Acc	stations, coast sta to AtoN and SAR ess) ons (Edition 2016)	l aircraft.	<ul> <li>Maritime related (ITU-R M series</li> <li>Maritime related (ITU-R M series)</li> </ul>	) I Reports	ons		
International Ca	ication Digits (MIE III Sign Series d use of identities		<ul> <li>Preparation and amendment of service publications and online information systems (provisions 20.15 to 20.17)</li> <li>Documents with which stations on board ship and aircraft shall be provided (Appendix 16)</li> <li>Resolution 355 (WRC-07)</li> <li>Resolution 356 (WRC-07)</li> </ul>				
	ion ITU-R M.585)						
Accounting Aut (Recommendat	horities ion ITU-T D.90)						
BR Maritime Ci (CM Series)	rcular Letters		Global Administ	enter enter e	em (GLAD)		

#### 10 WRS18/1-Е



#### **Retrieving notified information (Restricted Access)**

Under the "Quick links" tab, an administration can download all their ship, coast and other maritime stations that have been notified for inclusion into this system as well as the ITU maritime related Service Publications (List IV and V).



Maritime Identification Digits (MID)

By clicking on this link, the following screen appears. By using the unique username and password, which has been provided by the BR, an administration can access their notified data.

#### 11 WRS18/1-Е

# Download ship stations, coast stations and MMSI assigned to AtoN(s) (Restricted Access)

YOU ARE HERE HOME > ITU-R > TERRESTRIAL SERVICES > MARS > DOWNLOAD SHIP STATIONS, COAST STATIONS AND MMSI ASSIGNED TO ATON(S) (RESTRICTED ACCESS)



#### SCOPE

The purpose of this service is to enable Administrations to download a file containing all ship stations that they have notified to the ITU for further review.

GENERAL INFORMATION	DOWNLOAD
Only Administrations, that have ship stations registered in this database, can access this service. Administrations can download only those ship stations, for which they have jurisdiction. Administrations shall be provided with an account number, on receipt of a formal request.	Downloaded data is in the same format as described in Annex 2 to Circular Letter CM/18. MPORTANT
Please refer to Circular letter CM/10.	Please note that the character * (star) , in the user name, is no longer valid. It has been replaced with the character _ (underscore). Please use the character _ in the username, from now on
	Example: mars*country symbol is replaced with mars_country symbol,
	Download (Restricted Access)

#### **Circular letters**

The Radiocommunication Bureau informs administrations on changes that have occurred in the ITU maritime database and related ITU Service Publications. These letters may refer to the development of new forms for submission of data or new features that are made available on MARS, etc.

#### Maritime Identification Digits (MID), call sign series, etc.

Finally, MARS provides a link to the online data retrieval-system GLobal Administration Data system (GLAD), which is the central repository of ITU-R common information concerning administrations and geographical areas.

#### Conclusion

As for any database system, the quality of the information that is disseminated depends on the quality of information submitted.

#### Importance of the information



Notified information has in the past and will in the future assist in saving lives at sea



Provide ship and shore-based information that facilitates communications for global shipping

Administrations should note that maritime rescue coordination centres (MRCC) consider MARS as a provider of information. It is therefore imperative that MARS provides them with the most comprehensive data. If a situation arises where the information provided is not up to date, it may impact the efficient response provided by MRCCs and SAR services.

The Bureau is of the opinion that administrations, being the sole source of information, should review their submission practices and fulfil their obligations as stipulated in Article 20 of the Radio Regulations cited below:

20.16 § 12 1) 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. In the case of the data published in List V, which is also made available online through MARS, administrations shall communicate those changes at least once a month. In the case of other publications, administrations shall communicate the changes in the information contained in them as soon as possible. (WRC-07)

This will ensure that MARS provides its users with the most up-to-date and accurate information, which can only enhance its position as a reliable global provider of data for the MRCCs and SAR services in carrying out their duties with regard, in particular, to safety at sea, and for all members of the maritime community.

As in the past, the Radiocommunication Bureau shall continue to provide the necessary infrastructure and services to update the maritime databases with the information submitted by administrations, and to publish this information on time, while at the same time providing electronic access to the same via the MARS system.