



Maritime Safety Department of Montenegro

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# Implementation of LRIT in Montenegro

## 12th LRIT NCA meeting

Wednesday, 14 October 2015 - Lisbon



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# Maritime Safety Department of Montenegro

## MONTENEGRO – key facts

**POPULATION:** 670.000  
**ADMINISTRATIVE CAPITAL:** PODGORICA  
**LAND AREA:** 13.812 km<sup>2</sup>

**MONTENEGRO APPLIED FOR EU MEMBERSHIP  
ON 2008**  
**MONTENEGRO CANDIDATE COUNTRY SINCE 2010**

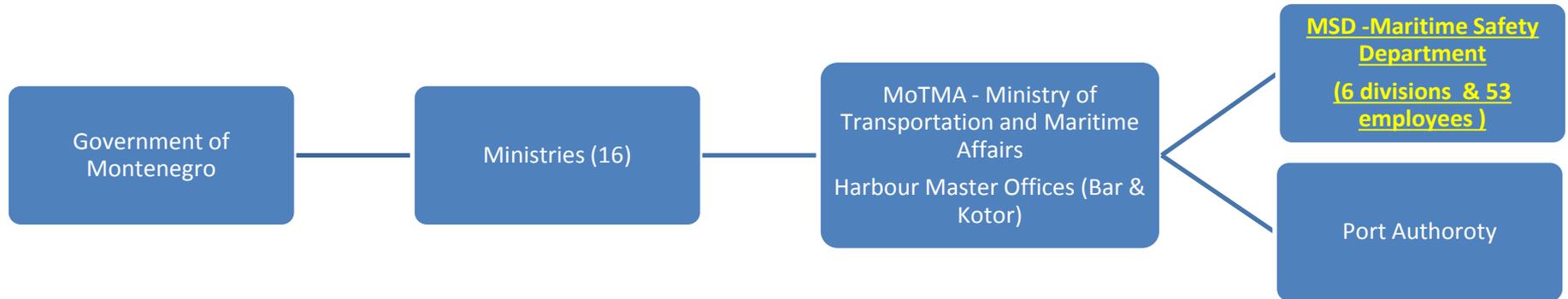
**ADRIATIC SEA:**  
**COASTLINE LENGTH:** 294 km  
**MARITIME BORDERS :** ITALY, CROATIA AND  
ALBANIA

**INLAND SEA AREA:** 362 km<sup>2</sup>  
**TERRITORIAL SEA AREA:** 2.099 km<sup>2</sup>  
**EPICONTINENTAL SHELF AREA:** 3.885 km<sup>2</sup>





## Montenegro Maritime Administration

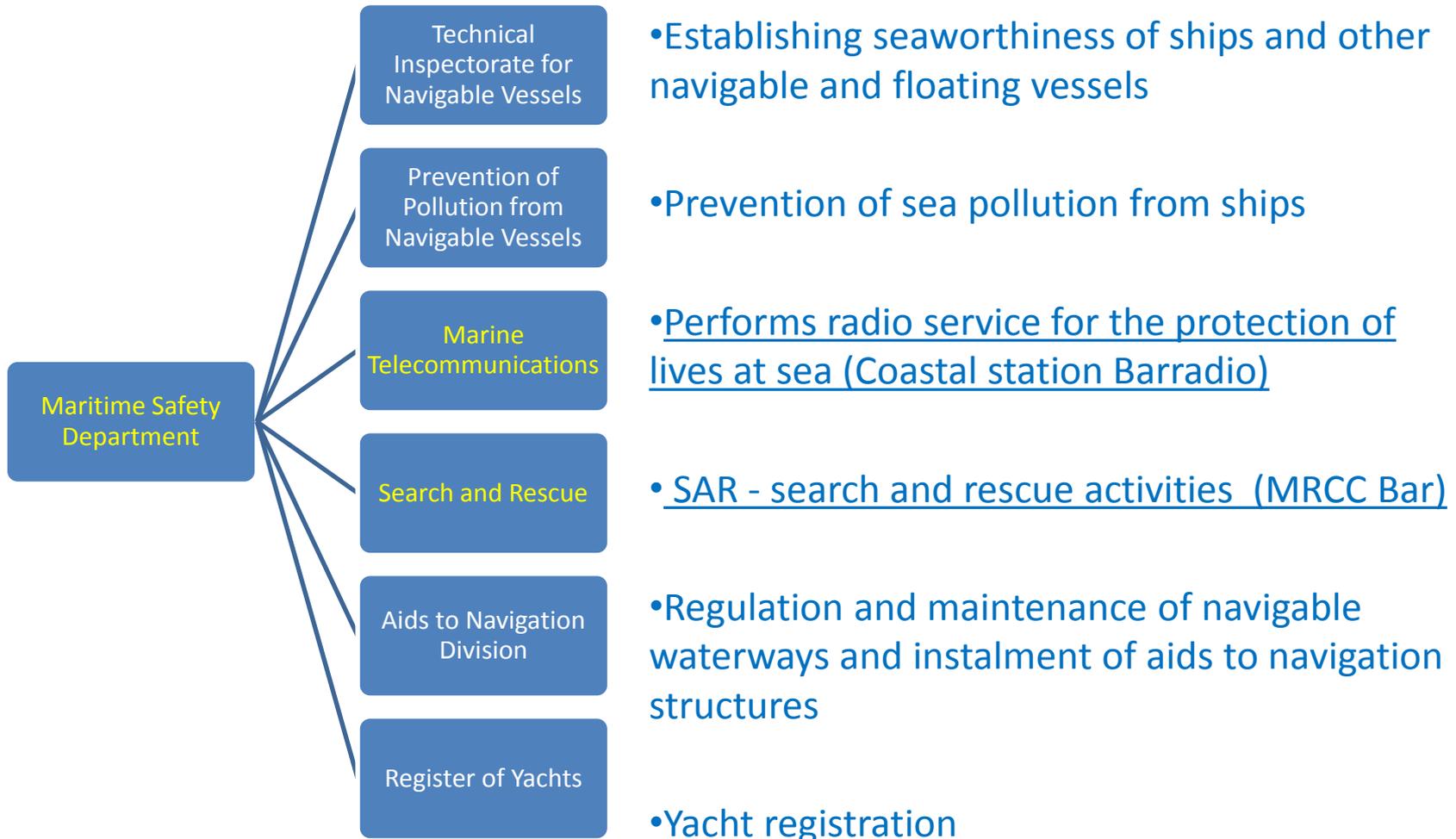


- Maritime Safety Department, in cooperation with MoTMA, is responsible for implementation of LRIT in Montenegro.
- Montenegro member of IMO and IMSO
- Montenegro participate in CleanSeaNet and EU LRIT Data Centre



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## Organisational structure of MSD (6 divisions)





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### Montenegro LRIT Data Center

- 2<sup>nd</sup> December 2008 Montenegro applied to be a part of EU LRIT Data Centre
  - Council Resolution of 9<sup>th</sup> December 2008 on EU LRIT Data Centre
- We have considered to make cooperative LRIT Data Centre with Croatia.
  - We have received positive feedback from Croatia.
- To comply in due course with “LRIT” regulations Montenegro decided to have national LRIT Data Centre (“outsource” solution)
  - On 2009 after procurement procedure MSD signed contract with **POLESTAR** for LRIT data centre and other LRIT services.
  - Contract with Polestar ended at beginning of 2015 when Montenegro joined EU LRIT Data centre



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# Montenegro LRIT Data Centre

Montenegro has appointed three ASPs (Application Service Providers) for testing ship borne LRIT equipment:

- CLS
  - Polestar
  - Transas
- 
- Obligations toward IMO related to LRIT are fulfilled (GISIS data),
  - Obligations toward IMSO (International Mobile Satellite Organization) are fulfilled
    - Integration fee (2009) and audit fees (2010-2014) have been paid
  - Obligations toward POLESTAR were fulfilled
  - Each year IMSO performed audit of Montenegro LRIT Data Centre and IMSO had not issued any observation or non-conformity notes. The Montenegro Data Centre had performed at a very high standard and IMSO reported it to the IMO Maritime Safety Committee



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### Process of joining EU LRIT Data Centre

- 2<sup>nd</sup> December 2008 Montenegro applied to be a part of EU LRIT Data Centre
  - Council Resolution of 9<sup>th</sup> December 2008 on EU LRIT DC
  - At that moment Montenegro as a “third country” didn’t meet all criteria from Council Resolution
- 29<sup>th</sup> November 2013 Montenegro applied again to be part of EU LRIT Data Centre after all criteria from Council Resolution are met
- At end of 2014 CoU for the EU LRIT DC signed
- From 14<sup>th</sup> January 2015 Montenegro started in Production in the EU LRIT CDC



### Number of Montenegro “LRIT” ships

- In 2008 and 2009 two “LRIT” ships
- In 2010 and 2011 one “LRIT” ship
  - During 2010 and 2011, as a policy of MSD, substandard ships were forced to abandon Montenegro flag. As a result no detentions from 2010 up to now.
- In 2012 two new ships added to Montenegro LRIT DC, in total 3 „LRIT“ ships
- In 2014 two new ships added to Montenegro LRIT DC, in total 5 „LRIT“ ships



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## Use of LRIT data

In Maritime Safety Department LRIT information is used in following Divisions:

- Marine Telecommunications – Coastal radio station BARRADIO
- Search and Rescue Division – MRCC Bar
- Prevention of Pollution from Navigable Vessels and
- Technical Inspectorate for Navigable Vessels

LRIT offered to other institutions in Montenegro which are in charge for maritime safety and/or security:

- Harbour master offices,
- Marine Police,
- Navy of Montenegro and
- Ministry of Defence.

Montenegro has good AIS coverage: SAR zone is fully covered with AIS BS that participate in National AIS network.

Montenegro participate as observer in MARES project



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### **Distribution of LRIT data**

LRIT data from Montenegro LRIT DC are distributed to NATO and EU NAVFOR forces

The IMO has set up a distribution facility for the provision of Flag State LRIT information to NATO and security forces operating in the Gulf of Aden and the Western Indian Ocean (MSC 298(87)), to help their efforts in the repression of piracy and armed robbery against ships.

Currently, there are 2 security forces that have been registered as recipients in the Information Distribution Facility: European Union Naval Force Somalia (EU NAVFOR) and the North Atlantic Treaty Organization (NATO).



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## VTMIS system in Montenegro

EU supported and funded implementation of VTMIS in Montenegro.

One VTMIS centre (Dobra Voda, Bar) and 3 site locations (Mavrijan, Crni Rt and Obosnik)

Following equipment is installed on the sites:

- Solid state radar (Terma Scanner 5202) with 21" antenna
- Direction finders
- AIS transceivers
- GMDSS equipment (VHF)
- Meteo sensors
- Shelter, masts, UPS, diesel generator etc.
- Radio links
  - For independent radio network
  - For redundant network through service provider





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## VTMIS system in Montenegro

Other data and/or functionalities are integrated to VTMIS system:

- AIS data streams from external sources,
- VMS data from fishing vessels (pending)
- ADRIREP mandatory ship reports
- VTMIS system has a role of National SafeSeaNet system
- LRIT data: both WEB services have been implemented: LRIT2ES and ES2RIT

The screenshot displays the VTMIS system interface. On the left is a map of Europe with a scale bar and a 'Targets not visible' notification. On the right is a 'Targets Info' panel with a 'Target Search' section. Below the search section is a table with the following data:

Select/Unselect All	S. Type	Sel.	AIS Class	Position DT	Flag	MMS
<input type="checkbox"/>	LRIT	<input type="checkbox"/>	Class A shi...	05 Oct 2015 07:02...		2620021
<input checked="" type="checkbox"/>	LRIT	<input type="checkbox"/>	Class A shi...	05 Oct 2015 06:34...		2620051
<input checked="" type="checkbox"/>	LRIT	<input type="checkbox"/>	Class A shi...	05 Oct 2015 05:20...		2620061
<input checked="" type="checkbox"/>	LRIT	<input type="checkbox"/>	Class A shi...	05 Oct 2015 08:22...		2620071
<input checked="" type="checkbox"/>	LRIT	<input type="checkbox"/>	Class A shi...	05 Oct 2015 08:08...		2620081

Below the table are buttons for 'Search', 'Clean', 'Show ON', and 'Tools'. At the bottom of the interface, there is a navigation menu with options like 'Target Information', 'Target History', 'DSC Messages Search', etc., and a status bar showing the date and time as '05 Oct 2015 10:29:07 UTC'.

The screenshot shows a 'Send LRIT Request' dialog box. It contains the following fields and options:

- Type of LRIT Request:** Radio buttons for 'Restart/reset', 'One-time poll of Ship' (selected), 'Most Recent Position Report', 'Archived data Request', 'Start or Stop LRIT Communication', and 'Change Rate of Position Report'.
- Type of Ship Identifier\*:** A dropdown menu with 'IMO' selected.
- Ship Identifier\*:** An empty text input field.
- Data User Provider\*:** A dropdown menu with 'Montenegro' selected.
- Type of Request:** Radio buttons for 'Flag State', 'Coastal State' (selected), 'Port State', and 'SAR'.

At the bottom of the dialog are 'Send' and 'Cancel' buttons.



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## Next steps

- Implementation of the XML interface with SafeSeaNet in order to be able to communicate with the SafeSeaNet system acting as a Data Provider.
  - At this stage Montenegro could implement only the Send Notification mechanism, while the Request/Response mechanism could be part of future implementations.
  - From 3 different types of notifications (Ship, Alert and PortPlus), only PortPlus notifications will be implemented at this stage.
- Adding new layers into VTMIS system like meteo data (wind speed and direction) and oceanographic data (sea state, wave direction, sea temperature etc).
- In second phase of VTMIS project additional sensors and sites will be added in order to cover Boka Bay and Skadarsko lake.
- Single window implementation in Montenegro



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**THANK YOU FOR ATTENTION !**



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