



EU LRIT Data Centre

Technical specifications

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EU Data Centre – tender particularities:

- EU DC - complying with IMO requirements;
- EU DC - complying with EU requirements (SSN/AIS integration);
- EU DC – user friendly - facilitating MS operational requirements (set of operational functions);
- EU DC - monitoring capabilities for Administrator (COM/EMSA);
- EU DC - hosting environment:
 - contractor – first two years
 - EMSA – from the 3rd year



EU DC - IMO compliance

- Reference to IMO LRIT documents included in the tender;
- Explanations on IMO requirements provided in the tender;
- IMO LRIT documents attached as annexes to the tender;
- Contractor requested to describe his understanding of IMO LRIT requirements in the bid;
- Level of understanding and compliance with IMO LRIT documents – a main element of awarding criteria;
- IMO compliance certified by LRIT Co-ordinator during EU DC commissioning / audit process;



EU DC – EU requirements

- EU DC is developed to cover maritime security, Search and Rescue (SAR), maritime safety and protection of the marine environment through integration with other applications provided by EMSA (SSN, CleanSeaNet);
- Technical specifications covers the development and operation of EU DC by the COM, with the assistance of EMSA, and full ownership of the system;
- EU DC is designed for the participation of the overseas countries and territories and for further participation of other third countries, if decided so by the MS;
- EU DC is developed to meet the financial requirements of both the IMO and COM regarding charging, billing and invoicing matters;

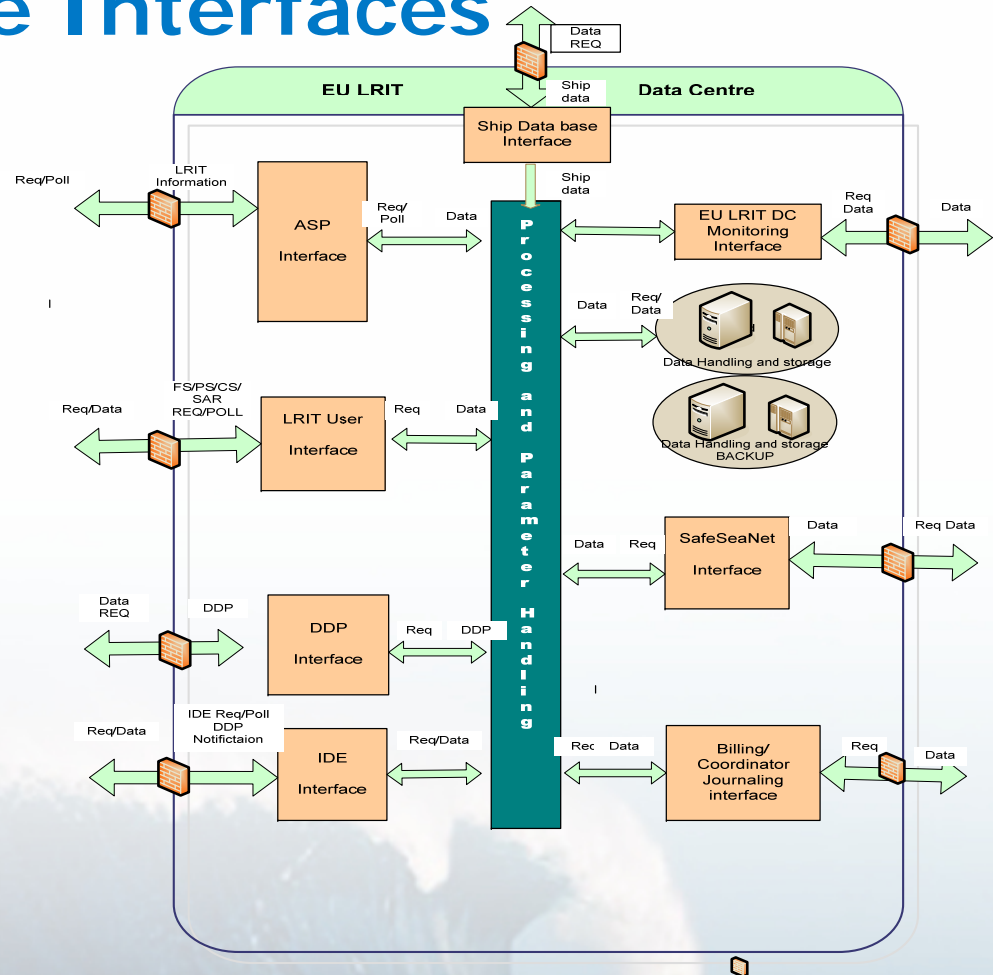


EU DC main functionalities:

- Collect LRIT data from ships instructed to report to EU DC (new messages foreseen between ASP and EU DC if different contractors);
- Distribute LRIT data in accordance with DDP rules (data sharing option available);
- Manage LRIT data exchange with other DCs, via IDE (verification of NoA – option available to MS);
- Storage and archiving of LRIT data;
- Meeting IMO performance, communications and security standards;
- Data visualisation for users;
- System monitoring by EMSA operators (24/7 assistance to users);

EU Data Centre Interfaces

1. EU Ship Database
2. ASP
3. EU User Interface
4. Data Distribution Plan
5. IDE
6. Billing and invoicing
7. SafeSeaNet/
Stires
8. System Monitoring





User interface:

- Two possibilities to communicate with the EU DC:
 - a web based Graphical User Interface (GUI), enabling the EU LRIT users to manually request and receive position reports;
 - a XML message-based interface, enabling the EU LRIT users, **through their own applications**, to send XML messages fulfilling their needs;
- User able to:
 - Access the LRIT data he is entitled to received in accordance with the DDP provisions;
 - Handling specific user requests on basis of assigned user rights (polling, on demand transmission, stopping);
 - Access to the relevant journal maintained for an identified LRIT user,
 - Check the pricing lists applicable to EU DC and other DCs;
 - Be notified when a ship stops transmitting the LRIT information or in case of malfunctioning;
 - Visualize the LRIT data on electronic chart;
- Roles and access rights of the NCA/main users are managed by the EU DC MI Operator;
- Roles and access rights of the national users are managed by each NCA;
- Searching functionality for:
 - Specific ship selected by IMO number and/or ship's name;
 - Type of ship;
 - Area of search of a specific ship or for all fleet;
 - Period of time for a specific ship or for all fleet;
 - Last position available;

Further requirements ?

Users code I:

Role Code	Description
LRIT_ADMIN	Role of the EU LRIT Monitoring interface operators, EMSA staff responsible for the monitoring and administration of the entire EU LRIT system; this role is equivalent to a system administrator
LRIT_NCA	Role of a LRIT National Competent Authority operator, responsible for its list of national LRIT users
LRIT EU User	Role of an EU Flag State, Port State, Coastal State or SAR users
LRIT EU Institutions	Role of COM

Access rights:

Role	LRIT- ADMIN	LRIT- NCA	EU user	EU COM
Consult performance	Y	N	N	Y
Consult Journal	Y	N	N	Y
Consult Journal per flag	Y	Y*	Y	N
Consult Statistics	Y	N	N	Y
Consult Statistics per flag	Y	Y*	Y	N
Consult message	Y	N	N	N
Consult message per flag	Y	Y*	Y	N
Consult Message History	Y	N	N	N
Add/Update/Delete User	Y	Y*	Y**	N
Search User	Y	Y	Y	Y
Access right	Y	Y*	N	N
Search Vessel	Y	Y	Y	Y



Users code II:

Role Code	Description of attributes
LRIT_ADMIN	Role assigned to the EU LRIT Monitoring interface operator, acting as System Administrator.
LRIT_NCA	Role assigned to a National Competent Authority operator, responsible for the management of its national LRIT users.
LRIT_FLAG	Role assigned to a Flag State user of the EU DC, entitled to receive Flag State LRIT information.
LRIT_PORT	Role assigned to a Port State user of the EU DC, entitled to receive Port State LRIT information.
LRIT_COAST	Role assigned to a Coastal State user of the EU DC, entitled to receive Coastal State LRIT information.
LRIT_SAR	Role assigned to a SAR user of the EU DC, entitled to receive SAR LRIT information.
LRIT_COM	Role assigned to EU Commission entitled to check the performance and statistics of the EU DC.

Access rights:

Role	LRIT_ADMIN	LRIT_NCA	LRIT_FLAG	LRIT_PORT	LRIT_COAST	LRIT_SAR	EU_COM
Request position report (one time poll)	N	N	Y**	Y**	Y**	Y**	N
Manage Standing Order	N	N	Y**	Y**	Y**	N	N
Request SAR SURPIC	N	N	N	N	N	Y**	N
Consult ship position (most recent only)	Y	N	Y**	Y**	Y**	Y**	N
Consult ship position history	Y	N	Y**	Y**	Y**	Y**	N
Manage users	Y	Y*	N	N	N	N	N
Search users	Y	Y*	N	N	N	N	Y
Consult Performance	Y	Y	N	N	N	N	Y
Consult Journal	Y	Y*	N	N	N	N	Y
Consult Statistics	Y	Y*	N	N	N	N	Y
Search Vessel	Y	N	Y**	N	N	N	Y

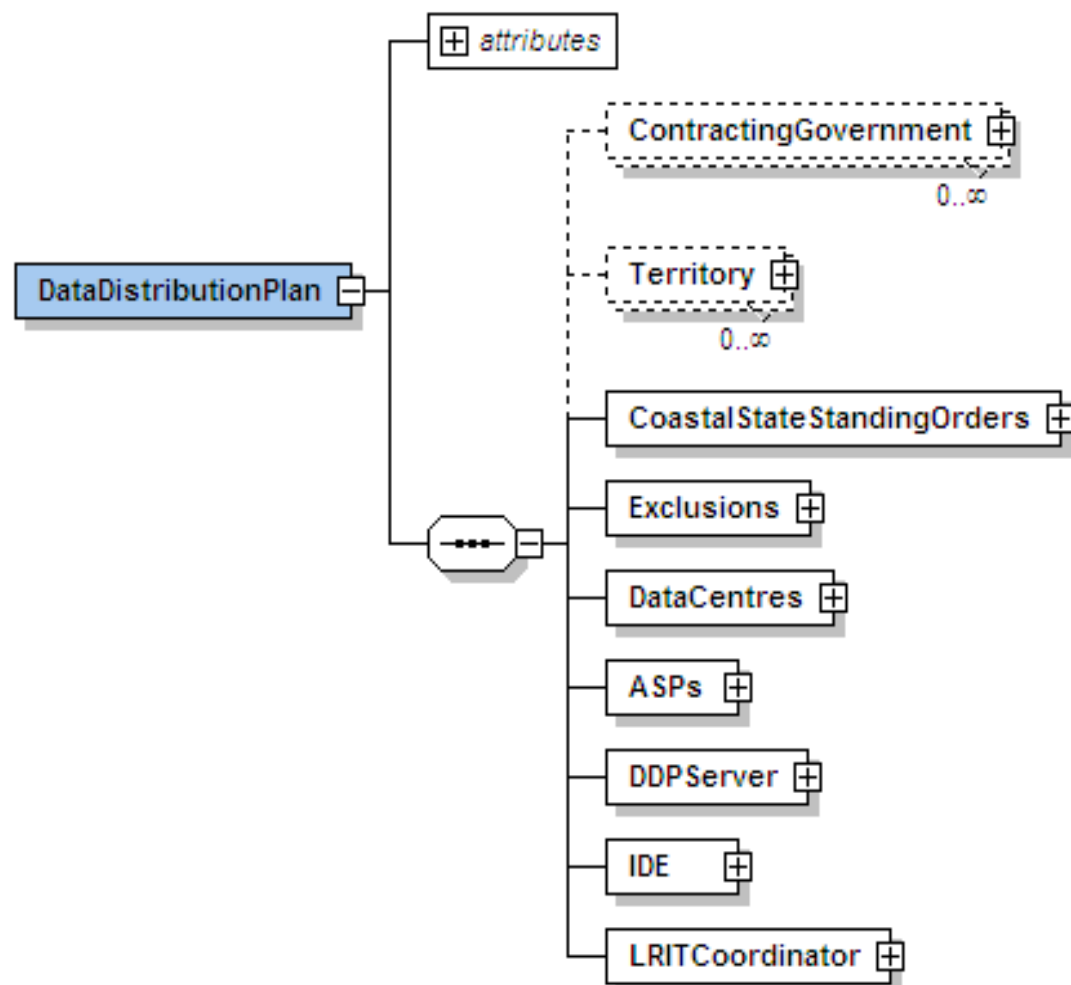


DDP matters:

- Data is entered directly by MS via IMO web interface
- EU LRIT Data Centre receives the DDP directly from IMO (DDP Server)
- Regular DDP update
 - on a daily base
 - cut-off time (23:55 UTC)
 - all information
- Immediate DDP update
 - any day/time (no cut-off)
 - only:
 - Custom Coastal de/activation
 - New exclusion list
 - Immediate application possible, even before receiving notification from DDP server, upon decision of MS



DDP content





Monitoring interface:

- 24/7 monitoring and user assistance provided by EMSA operators;
- Monitoring the quality of data:
 - LRIT data distribution as per DDP;
 - All ships report as required;
 - Journaling review;
 - Data back-up procedures;
 - Billing of data;
- and quality of service;
 - System performances;
 - Interfaces operation;
 - Communications;
 - Security and integrity of the system;
- Users management



Hosting of EU DC:

- 3 years service contract for EU DC development and operation;
- First 2 years EU DC will be hosted at Contractor premises and operated by the Contractor with EMSA operators monitoring the system;
- 3rd year the EU DC will be hosted/moved to EMSA controlled location and operated jointly by Contractor/EMSA operators (training phase) ;
- From the 4th year on, the EU DC will be hosted and operated by EMSA;



Awarding criteria:

- Technical capability (level of understanding and implementation of IMO requirements, security level);
- EU DC operational capabilities and performances (availability, response, capacity, user facilities);
- Management and quality assurance (level of project management, testing plan, professionalism of the team, quality plan/procedures, maintenance and errors management);
- Training capability (training plan, training materials, facilities);
- Price;

Comments from MS

- C1 Timetable/project planning – possible speed up of the implementation ?
- C2 EU LRIT DC hosting - is DIGIT still an option ?
- C3 The particulars of a Port request for archived LRIT data of a foreign flag vessel are not very clear in the tender specifications.
- C4 In 4.5.12.4 it is specified that the NCA will have the possibility to create their own internal /national user access rights but this might not be needed if there is f.ex. 2 possible EU-user profiles (1 read and request, 1 read-only).
- C5 On 4.5.4.4. b) – is a Port State always entitled to receive LRIT-data ?
- C6 EU flagged ships means EU-MS flagged ships (including overseas territories as well as Norway and Iceland) ?

Note: - comments received from 3 MS.

Comments from MS

- C7 The question is whether there is a need to introduce a new requirement on the EU flags ships engaged on voyages in GMDSS A1/A2 areas and obliged to transmit LRIT data, to have satellite radio communication terminal approved to transmit this data to the EU DC (INMARSAT C or INMARSAT D+)?
- C8 It is not necessary to built EMSA monitoring centre to duplicate functions assigned by IMO to ASP. What will be the tasks of this centre after three years, when EU DC will be transferred to the EMSA?
- C9 4.3.7.3 - according to this requirement ASP interface shall enable to establish a secure communication link between EU DC and the ships requesting to report to the EU DC. This will be possible when ASP and CSP functions will be performed by the same tender only. Is it EMSA intention to introduce this limitation?

Note: - comments received from 3 MS.

Comments from MS

C10 2.3.7 – According to this point:

- LRIT Billing System communication interface is a link between the LRIT Billing System and EU LRIT DC in order **to periodically receive all LRIT messages;**
- **Any message passing through this interface should also be recorded in a journal for monitoring and auditing purposes.**

These requirements are inconsistent with the IMO recommendations and should be changed.

Note: - comments received from 3 MS.