Information paper
Reference Data Management Service

This information paper describes the EU Reference Data Management Service. This Service provides a central database, web service web application for maintaining RIS reference data, which is used by various RIS-systems in inland shipping across Europe.

Introduction

RIS references and code tables are key elements in the RIS-standards and are an important link between the various RIS-services. The exchange of computerised data without direct human interference between the RIS users and the RIS services is facilitated by the use of codes and references. To ensure proper exchange of data are a number of pre-conditions has been established:

- Reference and code tables are not static, they may change by international and or local rules and regulations additional requirements, the need for harmonisation and other requests. However it is of the utmost importance that the maintenance of the reference and codes tables is executed in such way that maximum stability and consistency is achieved. No changes e.g. in the naming should be applied, the only changes that should be accepted are extra entrees and where necessary deletions and if possible minor corrections due to typos.
- In order to ensure interoperability, throughout the whole transport and logistics chain, there is the general principle that the components of the RIS reference data shall be kept in line with international standards such as the ISO, UN/TDED, UN/ECE recommendations, and other relevant standards as has been indicated in the RIS Directive. [(RIS Directive) For safety reasons and in the interest of Europe-wide harmonisation, the contents of these common requirements and technical specifications should build on work carried out in this field by relevant international organisations, such as the International Association for Navigation (PIANC), the Central Committee for Navigation on the Rhine (CCNR) and the UN Economic Commission for Europe (ECE).]
- Distribution of codes and reference data shall be executed in such way that all involved parties will have access to the data and will use the same reference and code tables to ensure compatibility. Where applicable this can be obtained through the principle of downwards compatible changes. Meaning that the last two versions of the tables before the change should be acceptable to all applications.

In order to achieve the above objectives, clear and unambiguous maintenance procedures and applicable processes and how to conduct these procedures are an essential requirement. For this reason a framework of documents have been elaborated:

- Maintenance procedure ref data. This document describes the detailed maintenance procedures and the underlying agreements regarding change management and maintenance of the reference data used in the RIS-standards.
- Functional Specification European Reference Data Management Service, Based on the maintenance procedures this document ‘Functional Specification Reference Tool’ has been elaborated. This document describes the functionalities of the European Reference Data Management Service
- RIS Data Management Service API Interface, This document describes the Web Service (API) interface functions of the so-called RIS Data Management Service (RDMS), including the required technical files like WDSL and XSD.

This framework is the basis for the establishment of the European Reference Data Management Service.

Purpose of European Reference Data Management Service

Using the correct reference data, such as the RIS index, Location code, ADN data, vessel types , NTS code lists and container types, is an important key to success for all RIS implementations all over Europe. All these services in the European inland shipping context have to support the same set of reference data and code lists. Because some of the data is changing frequently, a central point of maintenance and publication is of utmost importance.

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This focal point is the EU Reference Data Management Service (ERMDS Tool), which can be reached via the internet: http://risdatamanagement.ris.eu. The ERDMS web application is directly linked with a central database in which all actual reference data for electronic reporting is stored.

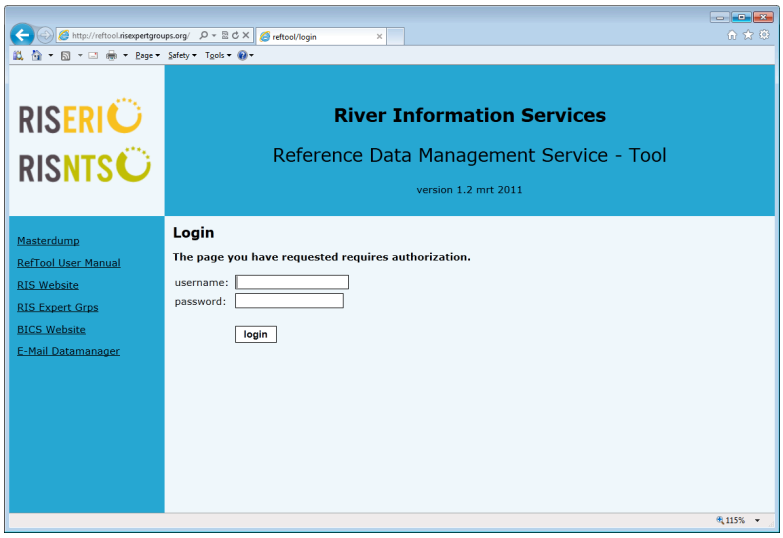

Figure 1: ERDMS Login screen

Functionality of ERDMS Tool

All interested parties can download actual reference data from ERDMS. This can be done by requesting a master dump or by searching for a specific record(s) in the database (account needed) both options are supported by the GUI and Web-services.

National Data Managers of the respective Member States are responsible for maintaining and using certain reference data (i.e. location codes for a certain country) can add, mutate or delete reference data..

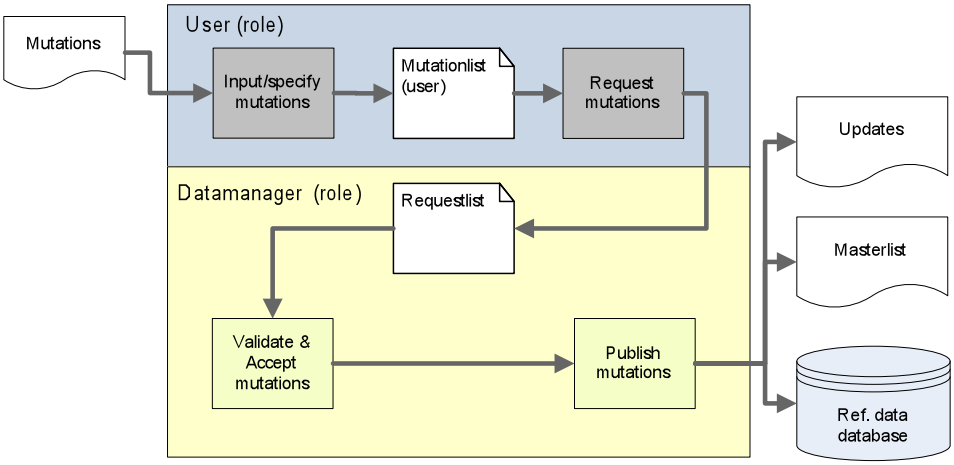

Figure 2: Reference Data Management Tool, system context and work flow

Finally the mutations will be published and distributed by the European Data manager.
The following RIS reference data is **maintained** by (within) the ERDMS:

- Ship Reporting Standard data:
  - RIS Index
  - ERI Location codes (UN Locode + fwcode + termcode + kmcode, as used in ERINOT messages for Electronic Reporting)
  - HS codes (non-dangerous goods)
  - ADN codes (dangerous goods)
  - Container types (ISO 6364)
  - (Inner) Pack types (UNECE Recommendation 21)

- Country codes (ISO 3166-1)
- Ship Types (UNECE Recommendation 28)

- Notice to skipper (NTS) data
  The ERDMS database contains lots of reference data for use in notice to skippers (NTS) messages as prescribe in the commission regulation. This data, such as ice conditions, limitation reasons and weather items, is not adjustable. Users can only view or download this data from the tool, but they cannot request changes.

From the Login screen (without logging in) everybody can download the actual reference data (request masterdumps) and download additional information such as the manual, using the hyperlinks on the left.

Requirements for using ERDMS Tool

First of all, a user account and password are needed to be able to login and use the ERDMS Tool. These can be requested by the EU datamanager: focalpoint@ris.eu

Without a user account it is only possible to download a masterdump from ERDMS. Other functionalities, like searching or submitting mutations, are not available.

To be able to reach and use the ERDMS, an internet connection (broadband, ADSL, UMTS, etc.) is needed. The ERDMS has been tested for use with the following internet browsers:

- Internet Explorer 6.0 or higher.
- FireFox 2.0 or higher.
- Google Chrome 4.0 or higher

ERDMS can be reached via the URL[1]: http://risdatamanagement.ris.eu

[1] There is also a Web Service interface available (separate documentation) to access the ERDMS Tool (database), so other applications can connect/interface directly (bypassing the GUI).

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Reference data Update procedure

This section provides an overview of the change procedure for the reference data as maintained by the ERDMS.

The schematic diagram below gives an overview of the general Update procedure regarding Electronic Reporting International (ERI) and especially for the so called ERI applications:

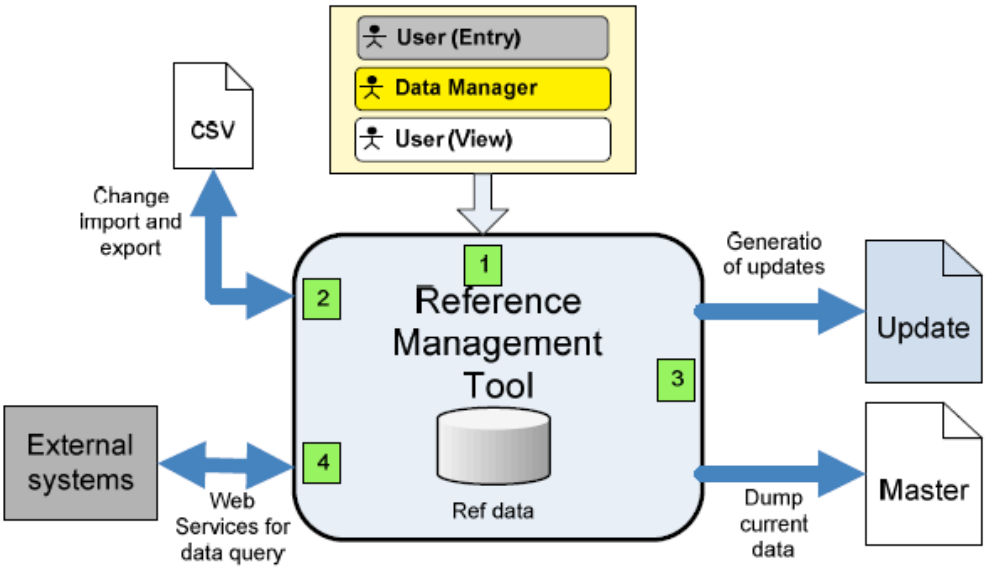

Figure 3: Reference data Update procedure

Changes, which include additions as well as deletions, can come from various sources, as shown in the figure. The information is supplied using the web forms of the ERDMS or an Excel Template. The Data Manager assesses and validates these changes. He may have experts check and complete the details of this data and will check where required with the involved international standardisation organisations. Any required deviations or remarks to the proposed changes are communicated with the originator. Finally, the Data Manager accepts the changes and he will publish the (changed) data. Partners can download the actual master tables from the ERDMS. The partners and database managers of the related services using the RIS Reference data are responsible to process and incorporate the published Updates (actual reference data) in their systems.

In summary, the change procedure consists of the following procedure:

The maintenance procedure consists of the following steps:
1. The RIS data administration focal point receives a request for modification to the code tables and registers the change request.
2. The RIS data administration focal point checks and completes the request.
3. The RIS data administration focal point forwards the change request to the competent responsible party (e.g. the RIS-expert-group, Member States etc)
4. Based on the response of this responsible party, the RIS data administration focal point sends feedback on required modifications of the request to the requestor.
5. After acceptance of the modification by the competent responsible party (e.g. RIS-expertgroups,

Member States etc) the RIS data administration focal point will process the change.
6. The RIS data administration focal point will through its maintenance administrator distribute an update of the modified code and reference data.

The Datamanager can be contacted at: : Focalpoint@ris,.eu

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