Leaflet

Notices to Skippers

Edition: 2008 – 22.10.2008

Leaflet
Edition 2008

Notices to Skippers

Contents

1. Basis

1.1 Purpose

The international Standard for Notices to Skippers shall boost the use of modern information technology on board of inland navigation vessels and in particular the distribution of notices to skippers by River Information Services. The distribution of notices to skippers without regard to borders and language areas is contributing to the increase of economic efficiency and safety in inland navigation. An international standard is necessary to ensure the effective and safe distribution of notices to skippers by River Information Services.

1.2 Terminology

Notices to Skippers means the international standard for the distribution of notices to skippers on inland shipping routes as established by the Central Commission for Navigation on the Rhine (CCNR) and by the Commission Regulation 416/2007 of 22 March 2007 concerning the technical specifications for Notices to Skippers.

Fairway and traffic related message means a notice, which provides information about a fairway section or an object.

Water level related message means a notice, which provides information on the water level, the least sounded depth, the vertical clearance, the barrage status, the discharge, the regime, the predicted water level, the least sounded predicted depth or the predicted discharge.

Ice message means a notice, which provides information on the ice situation.

Weather related message means a notice, which provides information on the weather situation. (The states are not required to provide weather data.)

XML means Extended Markup Language, a subset of SGML (Standard Generalized Markup Language, ISO 8879 : 1986(E) as amended and corrected) for use on the World Wide Web.

1.3 History and goal of standardization

Notices to skippers are among the most common means of information in inland navigation. Traditionally they have been distributed by VHF, in writing, on notice boards or by fax. Web services have been installed in most countries in the last years. But these services are providing the information in the national language only. While this may be acceptable on a river like the Rhine with only three languages, it causes a lot of problems on a European level. A skipper on the Danube for example would have to be able to read notices in German, Slovak, Hungarian, Croatian, Serbian, Bulgarian, Romanian, and Russian language. A standard, which provides automatic translation of the most important safety relevant information, was urgently needed therefore.

Due to the enormous variety of notices to skippers and the big differences in the grammar of the languages it was not possible to provide grammatically correct translations of sentences, but only translation of standardized pieces of information (i.e. code format, exemplary for the limitation: “overtaking prohibited”).

Information on restrictions and delays is not only read by skippers, but is also used in voyage planning applications. A second goal of standardization was the possibility to provide machine readable files, which can be used directly by these applications.

1.4 Features of the international standard for Notices to Skippers

The international standard for Notices to Skippers provides a standardized data format, which can be used for publishing notices to skippers on the internet (pull-services) or for distribution by e-mail (push services).

The content of the messages is encoded in a machine readable XML-file. This file can be used by software applications like voyage planning or Inland ECDIS on board of a vessel or by internet sites. The encoded information can be used directly for calculations, as for example in voyage planning, or be translated to the language of the user and displayed. The reference tables of the standard contain 21 languages of the member countries of the European Union, and additional 3 languages, namely Croatian, Serbian, and Russian language, and guarantee, that a skipper is able to read and understand the notices to skippers for all the major European waterways (facilitating safety of navigation).

2. International standard for Notices to Skippers

2.1 Purpose

The standardization of notices to skippers shall

- provide automatic translation of the most important content of notices in all the languages of the participating countries,
- provide a harmonized structure of data-sets in all the participating countries to facilitate the integration of notices in voyage-planning systems,
- provide a standard for water level information and weather information,
- be compatible with the data-structure of Inland ECDIS to facilitate integration of notices to skippers in Inland ECDIS,
- facilitate data-exchange between different countries.

Its purpose is to contribute to safety and efficiency on the inland shipping routes and thus also to protect the environment. In addition Inland ECDIS should simultaneously reduce the workload when navigating the ship as compared to traditional information methods.

2.2 Legal basis

- Resolution of the Central Commission for the Navigation on the Rhine of 28 May 2004: “Notices to Skippers – International Standard” (Resolution 2004-I-17).
- Commission Regulation 416/2007 of 22 March 2007 concerning the technical specifications for Notices to Skippers as referred to in Article 5 of Directive 2005/44/EC of the European Parliament and of the Council on harmonised river information services (RIS) on inland waterways in the Community

2.3 Current edition

The current edition is published on the internet under www.ccr-zkr.org.

2.4 Structure and content of the standard

The standard (Edition 2.0) comprises

- the edition overview,
- the description of the different messages,
- the description of the way of distributions,
- the description of the procedures for changes in the reference tables and the XML Scheme,
- the XML definition showing the structure of the messages,
- the explanation of the tags (structural elements of the messages),
- the explanation of the codes (standardized content of the messages),
- four appendices
  - Appendix A: Specifications of examples for the implementations of the Notices to Skippers Standard,
  - Appendix B: Interface Design Specification Online Hydro-Meteo Information,
  - Appendix C: Reference tables with the codes and their translation into 24 languages,
  - Appendix D: XML-scheme of the messages.

3. Modes of distribution

Notices to skippers according to this standard can be provided on the internet (pull services) or distributed by e-mail (push services).

3.1 Pull services

Internet services should provide a possibility to select:

- a specific waterway section or a specific part of a waterway, defined by the river-km of the starting and the end point,
- a time of validity and
- a date of publication of the notice.

Notices to skippers can be displayed

- as plain text, which is built from a text mask and standardized elements, in English, Dutch, French or German,
- as tags and values in – depending on implementation – up to 24 languages available in standardised translations of reference tables, incl. Bulgarian, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish or Swedish.

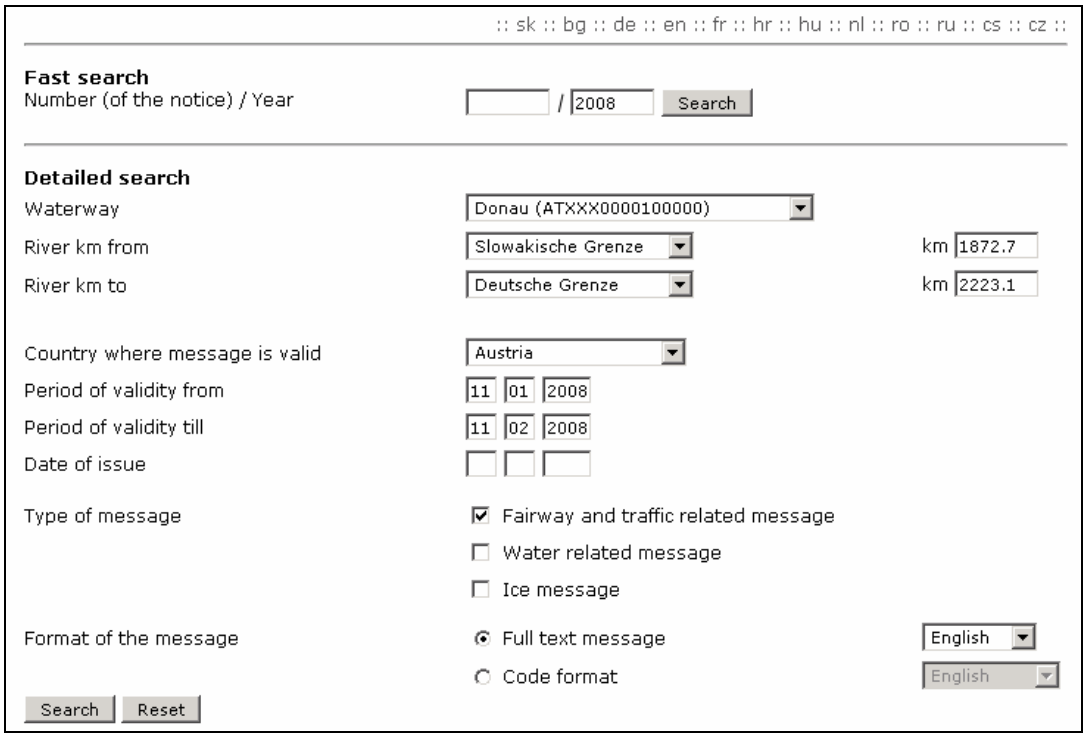

Figure 1: Example of a selection tool for display on the internet

Notices to skippers can be provided for download

- as plain text,
- as tags and values or
- as a machine readable XML file with minimum volume, which can be translated to the language of the user by a receiving application (specific software for Notices to Skippers) using the reference tables or used by an application like voyage planning for further calculations.

3.2 Push services

Notices to skippers according to this standard can be distributed by e-mail (as subscription)

- as plain text,
- as tags and values or
- as a machine readable XML file with minimum volume, which can be translated to the language of the user by a receiving application (specific software for Notices to Skippers) using the reference tables or used by an application like voyage planning or Inland ECDIS viewer for further calculations.

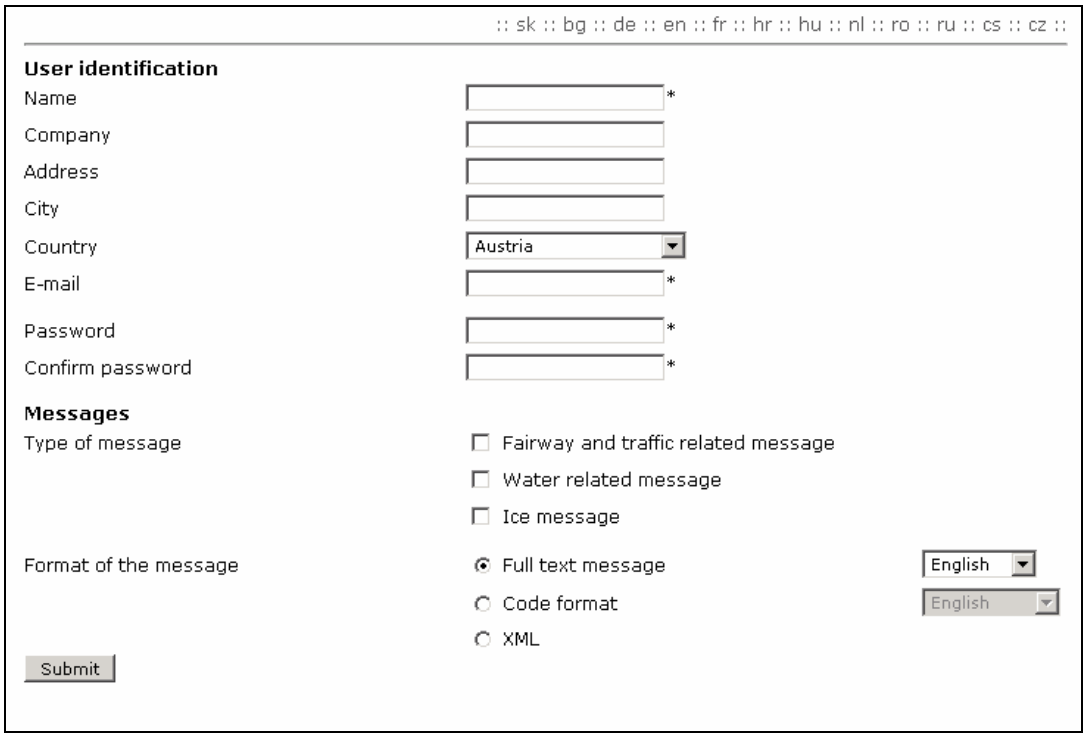

Figure 2: Screen example for the Notices to Skippers subscription

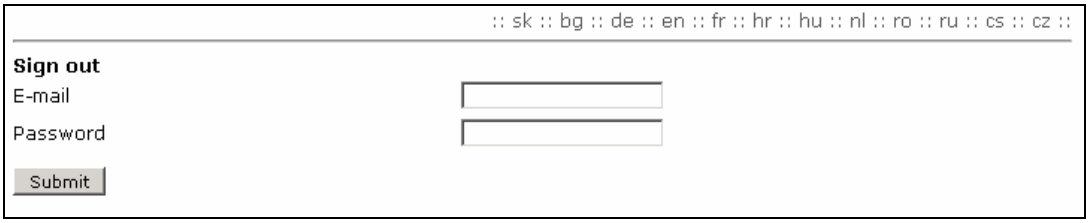

Figure 3: Screen example to unsubscribe from the Notices to Skippers

3.3 International data exchange between authorities

Data exchange between the authorities is recommended. All the authorities using this standard can integrate notices to skippers of other authorities and countries in their own services. The participating parties (authorities) can agree the procedure of transmitting the XML messages by push or pull services directly.

A standardized method for exchanging notices to skippers by means of Web Service (WS) technology is currently under elaboration. WS will enable an easier and more secure method for exchanging notices to skippers between authorities as well as private companies.

4. Content of the Notices to Skippers

Notices to skippers are messages with navigation information for inland skippers about a geographical object or a waterway section.

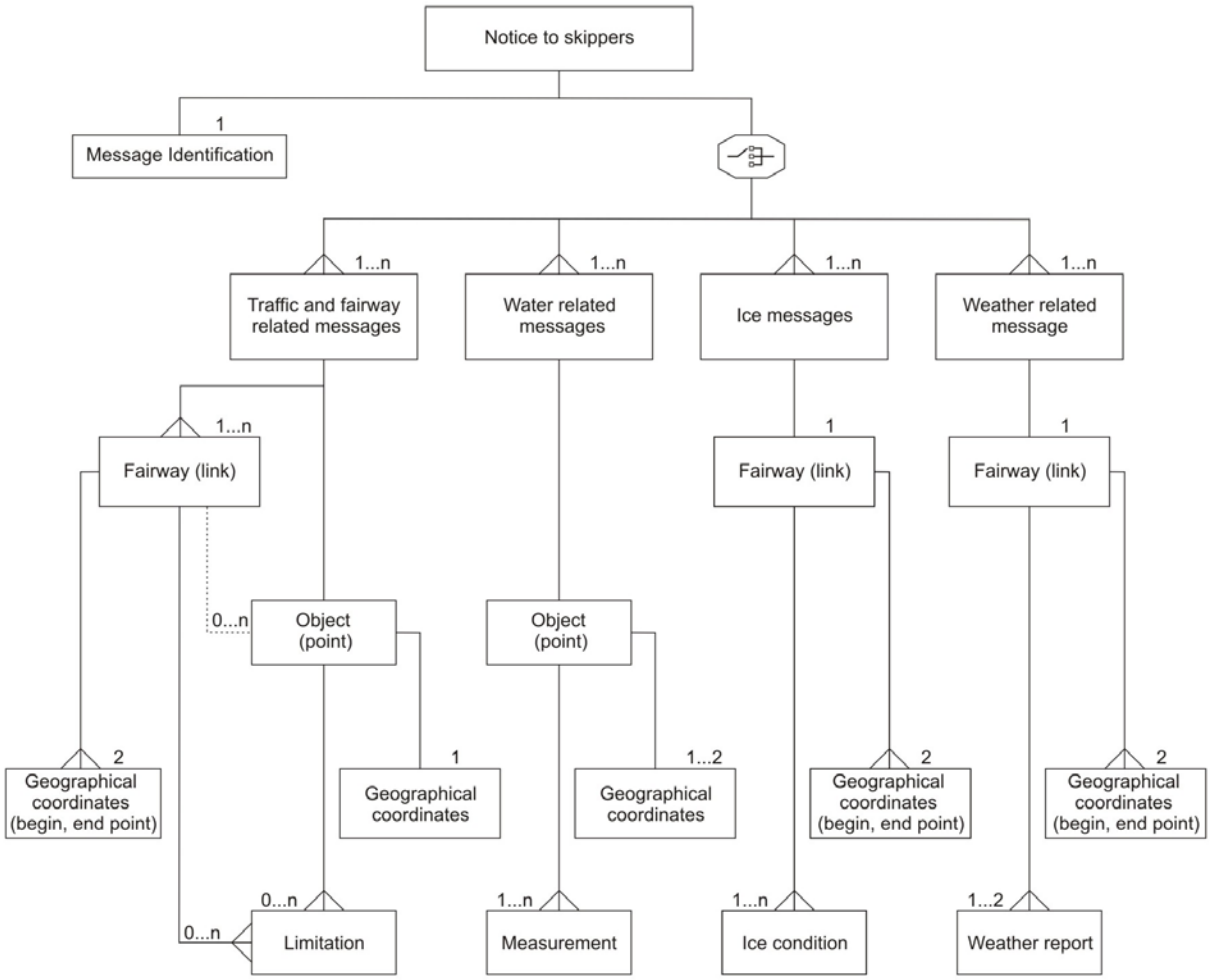

Figure 4: Message structure of the notices to skippers

A standardized notice to skippers in XML-format contains therefore 5 different sections:

- identification,
- fairway and traffic related messages,
- water level related messages,
- ice messages,
- weather related messages.

In one notice to skippers generally only two sections will be filled in: the identification section and at least one of the following sections (fairway and traffic related, water level related, ice, or weather related message).

4.1 Explanation of the subject codes of fairway and traffic related messages

Blockage

In case no form of navigation is possible:
- through all the lock chambers of a lock,
- through all the passages of a bridge,
- passing a specified point on the fairway,
- on a specified section of the fairway.

Partial obstruction

In case limited navigation is possible:
- through one or more lock chambers of a lock, leaving at least one open,
- through one or more passages of a bridge, leaving at least one open,
- passing a specified point on the fairway, leaving a part of the fairway open.

Delay

In case an obstruction occurs, limited in time, at a bridge, lock or on a section, between a specified start and end date.

For example: Delay of at most 2 hours on January 13 2008 between 08:00 and 17:00.

Encoded:

date_start:	*20080113*
date_end:	*20080113*
time_start:	*0800*
time_end:	*1700*
limitation_code:	*Delay*
position_code:	*all*
value:	*2*

No service

In case a movable bridge is not operated during a specified period. This period should lie within the normal operating hours.
No service of a lock is an ‘Obstruction’ or ‘Delay’.
No service of a movable bridge means that passing under the bridge still is possible. Otherwise it is an ‘Obstruction’.

Change service

In case a modification in the normal operating hours occurs at a lock or bridge.

A limitation in the operating hours of a lock usually implies an obstruction

For example if a lock normally is operated between 06:00 and 20:00, and the operating hours are now limited to between 10:00 and 14:00, then this will result in an obstruction between 06:00 and 10:00 and another obstruction between 14:00 and 20:00.

A limitation in the operating hours of a bridge usually implies ’No Service’.

Vessel length	In case somewhere a smaller maximum length for passing vessels is allowed / possible. Usually this occurs at a lock (half lock chamber).
Clearance width	In case somewhere a smaller maximum width for passing vessels is available. This occurs during work on a lock / bridge. This subject is also used if the available width of the fairway is less, even if this has no influence on the maximum available width of the waterway.
Vessel air draught	In case somewhere a smaller maximum height for passing vessels is allowed.
Clearance height	This occurs also if the vertical clearance is locally decreased by for example painting equipment.
Vessel draught	In case somewhere a smaller maximum draught for passing vessels is allowed.
Available depth	In case the least sounded depth is modified. This has no impact on the maximum draught.
No mooring	In case somewhere on the fairway mooring is not allowed.
Change of marks	In case a change occurs in the fairway marks used for navigational purposes, such as buoys, beacons, sector lights, notice marks, etc.
Work	Other activities on or near the fairway which do not fall within the mentioned subjects.
Dredging	Dredging activities for which none of the other mentioned subjects are valid.
Military exercising	Military exercises for which none of the other mentioned subjects are valid.
Event	Events (rowing competitions, fireworks etc.) where none of the other mentioned subjects are valid.
Announcement	All other notices where none of the other (structured) subjects are valid.
Notice withdrawn	The message has to be published as a serial number of the original message.

If for one single message more subjects are possible, then the limitation with the greatest impact on shipping traffic is selected.

4.2 Explanation of the ice condition codes in ice messages

The thickness indicated in column 2 of the ice_condition_code gives information on average thickness only. The description has to be used to select the code for a specific situation.

5. Implementation of Notices to Skippers

5.1 Austria

The Austrian Ministry of Transport, Innovation and Technology, Supreme Navigation Authority, is providing notices to skippers according to this standard. The service was improved and is in operation at www.doris.bmvit.gv.at since March 2007.

The notices can be displayed in German, English, French and Dutch plain text and as tags and values in the twelve languages of the standard.

The website offers the possibility to subscribe for an e-mail service. The e-mail service provides the notices in machine readable XML-format, too.

Competent authorities of other countries and private companies are allowed to include the notices in their own services.

At the moment the website provides fairway and traffic related messages, water related messages and ice messages.

At the moment an enhanced version of the standardised ice messages is implemented, whereas an operational usage is planned from the winter period 2008 on.

Additional service – provision of notices to skippers by means of standardised Web-Services (WS) – is envisioned. The establishment of a task force to elaborate a harmonised approach for notices to skippers WS was agreed in the Notices to Skippers expert group in 2007.

5.2 Belgium

Walloon Waterways

The General Management of Waterways already issues notices to skippers and the journal for inland waterways transport which provide pieces of information of general purpose and about discharge regimes, weirs, limitations, etc.

These data are directly sent to concerned services by means of mail, fax, e-mail, are broadcasted on radio and television and published on the website.

The current publishing of this information as well as its content will be adapted to the International Standard for Notices to Skippers and distributed on the web server or by e-mail. The opportunity of developing a specific RIS server will be studied during the implementation of the RIS directive.

The studies and developments of the new Walloon Notices to Skippers were postponed compared to the first schedule.

The new Walloon Notices to Skippers application, which generates notices to skippers in 4 languages (French, Dutch, English and German) and in XML format as described in the European RIS standards is currently in a test phase and should be operational by the end of 2008.

5.3 Bulgaria

In Bulgaria the telecommunication infrastructure is tendered in a first step. The specifications are in finalisation phase, and implementation to be finalised beginning of 2009. The specifications for the information systems (e.g. ERI, Notices to Skippers) will be elaborated in a next step starting in the beginning of 2008.

First test applications can be found under www.bulris.bg. River Information Services are provided in cooperation with APPD (Executive Agency for Exploitation and Maintenance of the Danube River). After the elaboration of the requirements the implementation will start.

No concrete date was provided for the start of the implementation of the information systems.

5.4 Croatia

Notices to skippers according to this standard for the rivers Danube and Drava are fully operational and accessible at http://nts.crup.hr/.

5.5 Czech Republic

The test implementation of NTS in the Czech Republic is accessible under www.lavdis.cz.

At the moment a new hectometre system is introduced, which requires in a next step the update of the notices to skippers application. Solution for solving problems related to the operational costs for RIS are under investigation.

5.6 France

VNF provides notices to skippers according to the standard on the website www.vnf.fr (under *Avis à la batellerie*). This concerns geographical information and up-to-date information such as restrictions (changes of water level ...) and blockage of navigation. This information can be retrieved per location, section and waterways.

Notices to skippers are available in France since 2003, able to send notices to skippers by fax or Mail in text format.

Since the end of 2007 the French Notices to Skippers application can generate notices to skippers in XML format based on European Standard, transmittable by Mail.

5.7 Germany

The Federal Waterways and Shipping Administration provides notices to skippers according to the NtS standard on the website www.elwis.de.

The website also offers the possibility to subscribe for the ELWIS-Abo-service. This service provides fairway and traffic related messages, water related messages and ice messages via e-mail and SMS also as e-mails with attached XML-files of these notices. A short instruction manual for the use of the ELWIS-Abo-service: http://www.elwis.de/abo/xml_kurz_en/index.html.

Competent authorities of other countries and private companies are allowed to include the notices into their own service.

5.8 Hungary

The test implementation of the standardised notices to skippers is available at http://nts-demo.rsoe.hu. (user: nts ; password: demo). The current version provides test messages in Hungarian, English and German.

The Hungarian National Transport Authority (NTA) is in the final stage of implementation of their new IT system at the moment. Notices to skippers will be integral part of this system. RSOE is working on a RIS website, which will be available in 2008.

Notices to skippers will be available on the new website of the Hungarian River Information Services. The official messages issued by NTA will be displayed on the site and users can also apply for the email service. Thus, the Hungarian notices to skippers messages will be broadcasted with the push and pull services as well.

5.9 The Netherlands

Static and dynamic information about the Netherlands fairways will be available at a central point, the RIS server (www.risserver.nl). It contains geographical information (ENCs) and up-to-date information such as water related messages, fairway and traffic related messages, ice messages and weather forecast.
This information can be retrieved per fairway, route, corridor or country. The RIS server in the Netherlands has been fully operational since March 2005. This version of the RIS server will get a minor update in 2008 and at the end of 2009 a new FIS portal will replace the RIS server.

On behalf of the Vessel Traffic Management Centre, the Information Centre for Inland Waters already provides fairway and traffic related messages, water related messages and ice messages in accordance with the XML standard by secured FTP.

To open a free FTP account, send an email to infocentrum@rws.nl, the information center for the inland waterways.

The information center also provides the dissemination of notices via e-mail. Specifically this means that the skipper can subscribe to messages that the center will transfer to subscribers as soon as these messages are available. To those skippers, who have the application BICS / BOS on board, a message will be displayed on the screen immediately after its reception.

5.10 Romania

Notices to skippers are implemented in Romania according to the Notices to Skippers Standard. Notices are available in the test phase under http://www.roris.ro.

Furthermore, provision of weather information is implemented at the moment. However, the weather messages implementation is in the test phase. Automatic weather measuring stations are to be connected to the system. Weather messages as implemented are not in line with the newly proposed Notices to Skippers Standard amendment.

5.11 Serbia

Notices to skippers are implemented according to the Notices to Skippers Standard version 1.1 and are in a testing phase. Currently only water level related messages (WRM) are published. A test implementation of the Notices to Skippers is available under http://nts.plovput.co.yu.

5.12 Slovakia

The State Navigation Administration provides within the test environment notices to skippers according to the Commission Regulation 416/2007 of 22 March 2007 (version 1.2). The URL address of the test environment is http://nts.slovris.sk.

The service provides fairway and traffic related messages, water level messages including vertical clearances, and ice messages. Furthermore, the user can_subscribe for notices to skippers delivery via email service.

The messages can be displayed as full text in English, Dutch, German and French; in code (tags and values) format in 12 languages and in XML format.

Operational phase of the notices to skippers is expected in the first quarter of the year 2008.

5.13 Switzerland

In their function as the Swiss navigation administration, the Swiss Rhine ports offer notices to skippers according to this standard on their webpage www.port-of-switzerland.ch and on the webpage of the German Federal Waterways and Shipping Administration www.elwis.de.

5.14 Ukraine

Notices to skippers in Ukraine are distributed by VHF broadcast especially for Danube region via UDP broadcast center in Izmail. The software solution to provide notices to skippers via web interface shall be elaborated.

Annex

Contact addresses of competent waterway authorities

Austria:
Bundesministerium für Verkehr, Innovation und Technologie, Oberste Schifffahrtsbehörde, Radetzkystrasse 2, 1030 Wien
Bernd Birklhuber, Tel.: +43 (0)171 162 655 902, Fax: +43 (0)171 162 655 999,
E-Mail: bernd.birklhuber@bmvit.gv.at

via donau - Österreichische Wasserstraßen-Gesellschaft mbH, Donau-City-Straße 1, A-1220 Wien
Mario Sattler, Tel.: +43 (0)504 321 16 13, Fax: +43 (0)504 321 10 50,
E-mail: mario.sattler@via-donau.org

Belgium:
Flanders
nv De Scheepvaart, Havenstraat 44, 3500 Hasselt
ir Johan Torfs, Tel.: +32 (0)496 578 511, Fax: +32 (0)112 212 77, E-mail: j.torfs@descheepvaart.be

Wallonia
Ministère de l'Equipement et des Transports, Direction générale des Voies hydrauliques, Direction de la Coordination, Boulevard du Nord 8, 5000 Namur,
Pascal Moens, Tel.: +32 817 730 29, Fax: +32 817 737 99, E-mail: pmoens@met.wallonie.be
Gianni Ferrara, Tel.: +32 817 730 20, Fax: +32 817 737 99, E-mail: gferrara@met.wallonie.be

Bulgaria:
Executive Agency Maritime Administration, Directorate Ruse, ul. Pristanishtna 20, 7000 Ruse
Pavlin Marchevski, Tel.: +359 828 158 19, E-mail: pmarchevski@marad.bg

Czech Republic:
Ministerstvo dopravy České republiky (Ministry of Transport), nábřeží L. Svobody 12, 110 15 Praha 1
Vojtech Dabrowski, Tel.: +420 (0)972 231 335, Fax: +420 (0)972 231 110
E-mail: vojtech.dabrowski@mdcr.cz

Croatia:
CRUP (Centar za razvoj unutarnje plovidbe d.o.o.), Trnjanska cesta 37, 1000 Zagreb, Croatia
Vedran Bolfek, Tel.: +385 (1)631 44 46, Fax: +385 (1)631 44 44, E-mail : bolfek@crup.hr

France:
Voies Navigables de France, 175 rue Ludovic Boutleux, 62400 Béthune,
Virginie Taffin, Tel.: +33 (0)321 632 974, Fax: +33 (0)321 632 950, E-mail : virginie.taffin@vnf.fr

Germany:
Wasser- und Schifffahrtsverwaltung des Bundes
Wasser- und Schifffahrtsdirektion Südwest, Fachgruppe Telematik (Binnen), Brucknerstraße 2, 55127 Mainz,
Michael Brunsch, Tel.: +49 (0)613 197 92 96, Fax: +49 (0)613 197 91 55,
E-Mail: michael.brunsch@wsv.bund.de

Hungary:
National Transport Authority, VI. Andrássy u. 1, H-1389 Budapest
Csaba Bellyei, Tel.: +36 148 621 50, Fax: +36 126 803 98, E-mail: bellyei.csaba@nkh.gov.hu
Róbert Kojnok, Tel.: +36 148 621 55, Fax: +36 126 803 98, E-mail: kojnok.robert@nkh.gov.hu

The Netherlands:
RWS Waterdienst, Infocentrum Binnenwateren, Zuiderwagenplein 2, P.O. Box 17, 8200 AA Lelystad,
Daniël Hoekstra, Tel.: +31 (0)320 298 550 or Tel.: +31 (0)320 298 888, Fax: +31 (0)320 298 580,
E-mail: daniel.hoekstra@rws.nl or infocentrum@rws.nl

Romania:
Romanian Naval Authority, Constanta Port No.1, 900900 Constanta,
Mihai Ghiba, Tel.: +40 252 316 493 or +40 252 312 720, Mob.: +40 722 369 535,
E-mail: mghiba@rna.ro

Serbia:
Plovput, Francuska 9, 11000 Belgrade
Zoran Lukic, Tel.: +381 113 029 888, Fax: + 381 113 092 808, E-mail: zlukic@plovput.co.yu

Slovakia:
Štátna plavebná správa (State Navigation Administration), Prístavna 10, 821 09 Bratislava 2
Štefan Chalupka, Tel.: +421 (0)255 56 63 36 ext. 123, Fax: +421 (0)255 566 335,
E-mail: stefan.chalupka@sps.sk

Switzerland:
Schweizerische Rheinhäfen, Hochbergerstrasse 160, 4019 Basel,
Peter Sauter, Tel.: +41 (0)61 639 95 94, Fax: +41 (0)61 639 95 11, E-Mail: peter.sauter@portof.ch

Ukraine:
State Hydrographic Service of Ukraine, Elektrikov Street 26, 04176 Kiev
Sergey Simonenko, Tel.: +38 044 425 68 74, Tel./fax: +38 044 425 40 68
Igor Gladkykh, E-mail: frm@onma.edu.ua