

Leaflet

Notices to Skippers

Leaflet Edition 2014

Notices to Skippers

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1. Introduction

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 the Navigation of the Rhine (CCNR) and by the Commission Regulation (EC) 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.

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 and navigability.

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).

1.5 Notices to Skippers Expert Group

Since 20 December 2010 the newly approved Terms of Reference are available for the Notices to Skippers Expert Group. The Expert Group has more than 80 members and the community portal for Notices to Skippers is available for the members of the EG with username and password under <u>http://eg.ris.eu/nts/</u>.

Various information is published at the RIS Portal under <u>http://www.ris.eu/expert_groups/nts</u>, where the available RIS indexes can also be downloaded.

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 of the Rhine of 28 May 2004: "Notices to Skippers – International Standard" (Resolution 2004-I-17).
- Commission Regulation (EC) 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 Police Committee and the RIS Working Group of the CCNR adopted Edition 2.0 in October 2008 and, most recently, Edition 3.0 in October 2009. Edition 3.0 is being applied by nearly all states. The application of this edition is planned for the same date as of which it is applied by the European Commission.

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

2.4 Structure and content of the standard

The standard (Edition 3.0) 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),
- three appendices
 - Appendix A: Specifications of examples for the implementations of the Notices to Skippers Standard,
 - Appendix B: Reference tables,
 - Appendix C: XML scheme.

Remark: At the moment (July 2014) a new Standard (4.0) is being elaborated by the NtS Expert Group and will be provided to the European Commission and to other international organizations (river commissions, UNECE). The structure of the standard document will differ highly from version 3.0. Reference tables containing the translations and explanations of tags and codes will no longer be present in the appendices of the standard document. These shall be located on the ris.eu website and referred to from the standard document.

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.

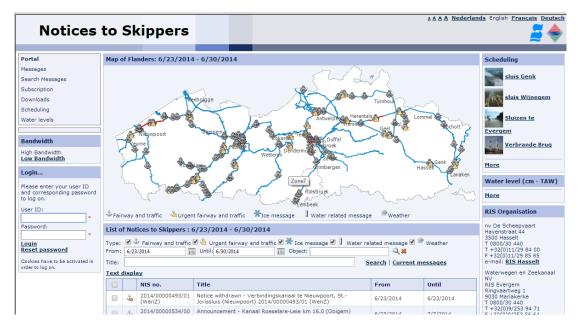


Figure 1: Examples of tools for display on the internet (Flanders)

D O R I S Nachrich	ten für die Binnen	schifffahrt		Password Regi	stration	e-mail : en pas	Login : service : ssword :	л л л
Search for messages from other countries		Fairway and traffic related messages	All mes	sage types			jes from countries	
The notices are retrieved directly from the authorities of the to the search mask) Country Germany Value Val	ated message (FTM)]	e please visit the i	espective, nati	Gei Sli Hu Cr Se Rc BL Fr BL Na	ite. (se ermany ovakia ungary oatia erbia omania ulgaria ance elgium etherlar rech Re	nds	ĸt
Identification	Waterway section	Date issue	Valid from	Valid till	:			
621 / 00 / 2014, Clearance height; building work	Rhein (km 293.7)	09.04.2014	14.04.2014	14.07.2014	text	code	xml	•
619 / 00 / 2014, Blockage; building work	Mosel (km 78.4)	09.04.2014	09.04.2014	17.04.2014	text	code	xml	
618 / 00 / 2014, Warning; fireworks	Weser (km 266.0 - 268.0)	08.04.2014	03.05.2014	03.05.2014	text	code	xml	
617 / 00 / 2014, Announcement; event	Rhein (km 622.0 - 655.0)	08.04.2014	03.05.2014	04.05.2014	text	code	xml	
616 / 03 / 2014, Blockage; lowering water level	Lahn (km 76.6), Lahn (km 83.2)	08.04.2014	21.04.2014		text	code	xml	
614 / 00 / 2014, Partial obstruction; inspection	Wesel-Datteln-Kanal (km 59.5)	08.04.2014	15.04.2014	15.04.2014	text	code	xml	E
613 / 00 / 2014, Partial obstruction; repair	Ruhr (km 2.8)	08.04.2014	15.04.2014	15.04.2014	text	code	xml	
612 / 01 / 2014, No service; under water works	Elbe (Hafen Hamburg) (km 615.0)	08.04.2014	14 <mark>.</mark> 04.2014	14.04.2014	text	code	xml	
609 / 00 / 2014, Blockage; work	Untere Havel-Wasserstraße (Spandau - Plaue) (km 55.6)	07.04.2014	07.04.2014		text	code	xml	
608 / 00 / 2014, Blockage; event	Saale (km 37.8 - 39.0)	07.04.2014	12.04.2014	12.04.2014	text	code	zml	

Figure 2: Display of German NtS in the Austrian web application

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.

ption Notices to Skippers
ave a user account, please log on
ed users that do not have a user account
E-mail address: *
Password: * [Forgot password?]
login
istered users
E-mail address: *
Password: *
Password (confirmation): *
register
The minimum length is 6 and the maximum length is 16. Each character can only be used 3 times. A minimum of 1 special (non alphanumeric) characters must be used.
istered users E-mail address: Password: Password: * Password (confirmation): register The minimum length is 6 and the maximum length is 16. Each character can only be used 3 times.

Figure 3: Screen example for the Notices to Skippers subscription (Flanders)

Registration e-mail service	
Email★	
Password★	Here you can register for the notices to skippers e-mail service which is free of charge. Fill the text fields and click "Register" to receive an e-mail with a link to activate your user account. After successful activation you can subscribe for the different notices in the desired format.
Repeat password 🖈	

NOLHRA

Code from picture★		
ر Register ر Cancel	l	

Figure 4: Screen example for the Notices to Skippers subscription (Austria)

nail★	New password ★	Repeat new password★
bert.rafael@rsoe.hu		
st name	Last name	
bbert	Rafael	
dress	City	Zip Code
ök utca 1.	Budapest	1089
ntry	Company	Default language 🖈
ngary 💌	RSOE	English
hone	Fax	
13030168	+3614770549	

Figure 5: Screen example to manage the user account in the Notices to Skippers subscription (Austria)

3.3 International data exchange of NtS messages

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 was developed and approved by the NtS Expert Group on 15.11.2011. The NtS Web Services General Concept - Version 1.0.3.0 - was implemented and is in operation in Austria, Germany and Slovakia (status April 2014).

The WS enables an easier and more secure method for exchanging notices to skippers between authorities as well as private companies and applications (e.g. integration of NtS display in Inland ECDIS viewers). All information can be found on ris.eu in the category NtS.

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.

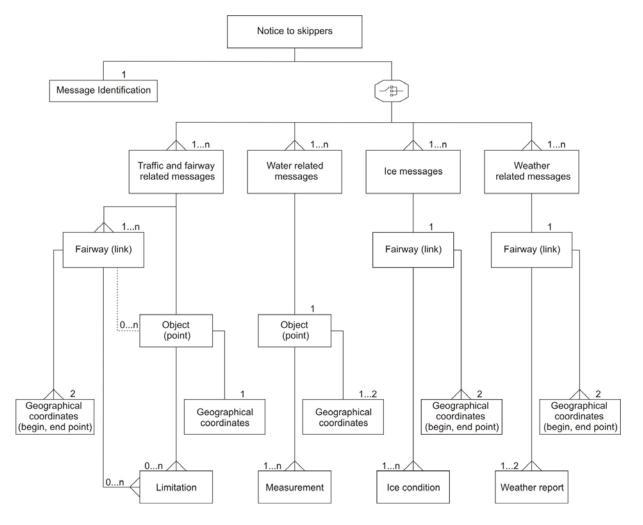


Figure 6: Message structure of the notices to skippers

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

An Encodig Guide is currently elaborated to support a similar encoding of fairway and traffic related messages. The guide will be available at the beginning of 2015. This guide can be downloaded from www.ris.eu in the category NtS and subcategory Guides.

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 Notices to Skippers are provided by the Supreme Navigation Authority and viadonau on behalf of the Austrian Ministry of Transport, Innovation and Technology according to the international Standard for Notices to Skippers. A new Notices to Skippers application (Notices to Skippers Edition 3.0) was put in operation in March 2011 in the framework of the project IRIS Europe II and is accessible at http://nts.doris.bmvit.gv.at.

Standardized notices to skippers are provided in full text format in German, English, French and Dutch and in code format (tags and values) in all the 24 languages of the standard. Also machine-readable notices in XML-format are available.

In Austria standardized fairway and traffic related messages, water level related messages and ice messages are published. In addition enhanced ice reports and the fairway information overview including lock status and shallow section information are available (not standardized).

The website offers the possibility to subscribe to the Notices to Skippers e-mail service. The standardized NtS web service (1.0.3.0) was implemented in 2011. After a successful test phase the retrieval and display of NtS from Germany and Slovakia was enabled in the Austrian NtS web application.

In order to make Notices to Skippers even better accessible to users, the Smartphone application 'DoRIS mobile' is available free of charge for Apple and Android devices from May 2014. DoRIS mobile is an initiative of viadonau together with the Austrian Ministry of Transport within the EU co-funded TEN-T project IRIS Europe 3.

5.2 Belgium

Flemish waterways

On 25 of May 2010, Flanders has officially introduced notices to skippers according to the Notices to Skippers Standard Edition 2.0 (XSD Edition 3.2). The website itself is available in four languages, i.e. Dutch, French, German and English and can be consulted via http://nts.flaris.be.

A map of Flanders on the front page shows all actual messages, giving an immediate impression of the current situation of the Flemish waterways. Besides exploring the website, users can also register themselves and indicated their preferences (incl. time period) to receive only messages they are interested in.

Besides the notices to skippers, visitors can also look up the operating times of locks and bridges and in the near future, water level information will be available.

Walloon Waterways

Notices to skippers have been adapted to the RIS directive in Wallonia. The Notices to Skippers along the inland waterways in Wallonia are available in 4 languages (French-Dutch-English-German) as well as in an XML format for downloading. A notice to skippers notification mailing list is also available to any user (Skippers, Waterways network manager, ...) wishing to subscribe to it.

There is a project to show on a map of Wallonia relevant NtS messages giving a real-time status of the current and forthcoming situation of the waterways in Wallonia (enhanced queries, ...).

On the website (<u>http://voies-hydrauliques.wallonie.be</u>) skippers can also find hydrological information such as water level and flow rate and infrastructure operating information (operating schedule of locks, bridges, ...).

Ice status and discharge regimes will be available in a short future.

Up to now, journals for inland waterways transport which provide summarized data of notices to skippers and discharge regimes are directly send to different services (private and public) by means of e-mail or fax. They are also broadcasted on VHF radio and television teletext and published on different websites.

Westerscheldt River area

Notices to Skippers is implemented in the Westerscheldt River area (RIS Gemeenschappelijk Nautisch Beheer - GNB) according to the Commission Regulation (EC) No 416/2007 and is fully integrated in the existing RIS (FIS) Portal <u>www.vts-scheldt.net</u>. The RIS GNB authority has the possibility to create notices to skippers message via an extended and user-friendly Notices to Skippers Editor. Users have the possibility to query Notices to Skippers in a grid view through many selection criteria that are provided. The notices to skippers are shown on an interactive map as an additional functionality and are available in HTML, XML and PDF format. A notices to skippers mailing list is publicly available. Users can subscribe to this mailing list.

The most frequently used message to inform the skippers in the Westerscheldt River area, is the existing BASS (Messages to River Scheldt shipping and Mutual Publications) messages. The BASS messages will also be used in the future. It is available on the RIS (FIS) Portal <u>www.vts-scheldt.net</u> and can also be automatically converted and distributed as a notices to skippers message on demand of the RIS GNB authority.

The IVS (Informatie- en Volgsysteem voor de Scheepvaart) information system is responsible for keeping track of the voyage related information. This system has also the capability to inform its users with special notifications. A functionality is foreseen to translate these IVS notifications in notices to skippers messages and make them available like any other notices to skippers message.

Machine to machine integration with other systems/third-party authorities is possible via the Notices to Skippers web services, as defined by the Notices to Skippers Web Taskforce. The WSDL files and documentation are available on www.ris.eu.

The GNB authority uses for many years the Central Broker System (CBS) to exchange information, different types of messages, with the sea ports and neighbouring authorities in the Westerscheldt area. The CBS is also ready to exchange the notices to skippers messages between the involved partners.

The Notices to Skippers application is based on the Notices to Skippers Standard Edition 2.0 (http://www.ris.eu/sites/default/files/documents/_International_Standard.pdf) and the accompanying XML Schema files (Edition 3.0).

5.3 Bulgaria

Implementation of the River Information System BULRIS on the Bulgarian stretch of Danube river started in 2010. It is developed with regard to Directive 2005/44/EC on RIS and technical specifications of the BULRIS correspond to the Commission Regulations 414/2007, 415/2007, 416/2007, 164/2010.

Notices to Skippers is a subsystem of BULRIS implemented according to the Notices to Skippers Standard Edition 3.0. Input, publishing, change of notices are made via web based GUI accessible with appropriate user rights. The system supports a pull service by means of a website (www.bulris.bg) and also offers a push service by e-mail service on subscription. Following messages are implemented: fairway and traffic related messages (FTM), water level related messages (WRM), ice messages (ICEM) and weather related messages (WERM).

Standardized notices to skippers are provided in all three formats defined in the standard - full text format in German, English, French and Dutch, code format (tags and values) in all the 24 languages of the standard, and machine-readable XML-format. The system also provides a web service allowing external systems to search and retrieve notices to skippers as XML messages using the same search criteria as in the pull service.

First tests are undertaken in July 2011. The system is expected to be fully operational in the beginning of 2012.

5.4 Croatia

A Notices to Skippers application was implemented in Croatia as a part of the CRORIS (Croatian River Information Services), which was initiated by the Ministry of the Sea, Transport and Infrastructure and executed by Inland Navigation Development Centre (CRUP). The project started in 2003, while electronic notices to skippers were introduced in 2005.

Notices to skippers are provided by four harbour master's offices on Croatian inland waterways (Osijek, Vukovar, Slavonski Brod, Sisak) for all navigable inland waterways in Croatia (Danube, Sava, Drava and Kupa). The notices are published by the Agency for Inland Waterways on its website http://nts.vodniputovi.hr/.

The Notices to Skippers application in Croatia is developed according to the international standard of the Central Commission for the Navigation of the Rhine (CCNR). The current application is based on Edition 2.1 of the Standard, while the new Edition 3.0 will be implemented in summer 2011.

Three types of messages are available in Croatian notices to skippers: fairway and traffic related messages (FTM), water level related messages (WRM) and ice messages (ICEM). Besides Croatian, all the information is available in 11 foreign languages: English, German, Bulgarian, French, Hungarian, Dutch, Romanian, Russian, Slovenian, Serb and Czech.

The website <u>http://nts.vodniputovi.hr/</u> offers a possibility to subscribe to the Notices to Skippers e-mail service for those who wish to receive regular updates by e-mail.

5.5 Czech Republic

The implementation of notices to skippers service according to the Edition 3.0 of the Notices to Skippers Standard is finalised and in test operation. Following messages are implemented: WRM, ICEM, WERM and FTM. Notices to skippers in the Czech Republic are accessible under <u>www.lavdis.cz</u>. The Notices to Skippers application can generate notices to skippers in the XML format based on the European standard, transmittable by e-mail.

Works on the development of the hydrological model of the Elbe-Moldau waterway allowing better specifications of the water levels forecast have been finalised.

An analysis of the possibility of using meteorological information available on the waterway to be included into the WERM was performed. An analysis of the potential of a model for ice phenomena has been undertaken. Based on the conclusions of the analysis, the development of the ice phenomena model has been started.

5.6 France

VNF provides notices to skippers according to the standard on the website <u>www.vnf.fr</u> (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 e-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 the European standard, transmittable by Mail.

Furthermore, France has developed different tools on the VNF website:

- users can consult the notices to skippers on a map,
- a French route planner, which takes notices to skippers into account, is available since August 2010.

France will implement an exchange system by web service before the end of 2011.

5.7 Germany

The Federal Waterways and Shipping Administration provides notices to skippers according to the Notices to Skippers Standard on the website <u>www.elwis.de</u>.

Standardized German notices to skippers (fairway and traffic related messages) are provided in code format (tags and values) in the languages: Croatian, Czech, Dutch, English, French, German, Hungarian, Polish, Romanian and Slovak.

The website also offers the possibility to subscribe for the ELWIS-Abo-service. This service is free of charge and provides fairway and traffic related messages, water related messages and ice messages via e-mail (with or without an attached message file in XML-format). A short instruction manual for the use of the ELWIS-Abo-service can be found here: http://www.elwis.de/abo/xml_kurz_en/index.html.

The standardized notices to skippers web service for international notices to skippers data exchange is implemented and available. Currently a data exchange of Fairway and Traffic related messages is conducted with Austria and Slovakia.

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

5.8 Hungary

In the IRIS Europe 3 project the NtS editor interface is being updated to enable the National Transport Authority to issue standardized NtS – FTM message according to the XSD version 3.0. The service will be available under <u>http://www.pannonris.hu</u>. FTM will also be available in PDF and XML format.

Within the PannonRIS system the NtS webservice has been set up and is available for usage for WRM and ICEM.

Within the NEWADA duo project the Danube FIS Portal has been set up that is using the webservice interface of PannonRIS to retrieve and display e.g. water level information.

5.9 The Netherlands

Static and dynamic information about the Netherlands fairways will be available at a central point "Fairway Information Services" on <u>www.vaarweginformatie.nl</u>. 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 "Waterkamer" (Water Chamber) of the "Watermanagementcentrum" (Water Management Centrum) in the Netherlands provides fairway and traffic related messages, water related messages and ice messages in accordance with the XML standard.

The website www.vaarweginformatie.nl also offers the possibility to subscribe for a standard or personal subscription.

This service is free of charge and provides fairway and traffic related messages, water related messages and ice messages via e-mail.

The NtS webservice for international notices to skippers data exchange is implemented and available.

For a free ftp account send an email to <u>waterkamer@rws.nl</u>, part of Ministry of Infrastructure and the Environment, Rijkswaterstaat.

Information on the Notices to Skippers implementation in the Westerscheldt River area can be found in part 5.2 of this Leaflet.

5.10 Poland

The implementation of notices to skippers service according to the Edition 3.0 of the Notices to Skippers Standard is in operation. Following messages are implemented: WRM, ICEM, WERM and FTM. Notices to skippers in Poland are accessible under nts.ris-odra.pl. The Notices to Skippers application can generate notices to skippers in the XML format based on the European standard, transmittable by e-mail.

Notices to skippers in Poland are also available at the website of the Water Management Authorities <u>www.rzgw.szczecin.pl</u>. They are prepared in the PDF format in the Polish language and they do not comply to the Notices to Skippers Standard.

5.11 Romania

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

The next step, RoRIS II, is now in the final period of implementation. It contains the latest version of the Notices to Skippers Standard (Edition 3.0). There are available fairway messages, water level messages, ices messages and weather messages in five languages: Romanian, French, German, English and Russian.

5.12 Serbia

Notices to skippers are implemented according to the Notices to Skippers Standard Edition 1.1 and are in a test phase. The upgrade to the Edition 2.1 of the Notices to Skippers Standard is ongoing and will be finalized in September 2011. Currently only water level related messages (WRM) are published. Full implementation of the Notices to Skippers will soon be available under http://nts.risserbia.rs.

5.13 Slovakia

The Notices to Skippers in Slovakia are provided by the Transport Authority. A new application, complying with the Notices to Skippers Standard Edition 3.0, was put in operation from the beginning of 2012 and is available at http://nts.slovris.sk.

The service provides fairway and traffic related messages (FTM), water level messages (WRM), ice messages (ICEM) and weather messages (WERM).

The messages can be displayed on the website as full text in English, Dutch, German and French; in code (tags and values) format in 12 languages and in XML format. Furthermore, the user can_subscribe for notices to skippers delivery via e-mail service.

The web services interface for exchange of notices to skippers was also successfully implemented within the IRIS Europe II project. Currently the international exchange of notices to skippers is running with Austria and Germany.

Within the IRIS Europe 3 project it is planned to develop a new NtS application for mobile devices.

5.14 Switzerland

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

5.15 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.

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: <u>bernd.birklhuber@bmvit.gv.at</u>

via donau - Österreichische Wasserstraßen-Gesellschaft mbH, Donau-City-Straße 1, A-1220 Wien Christoph Plasil, Tel.: +43 (0)504 321 1612, Fax: +43 (0)504 321 1050, E-mail: <u>christoph.plasil@via-donau.org</u> or <u>nts@via-donau.org</u>

Belgium:

<u>Flanders</u> nv De Scheepvaart, Havenstraat 44, 3500 Hasselt Jan Gilissen, E-mail: j.gjlissen@descheepvaart.be

<u>Wallonia</u>

Service Public de Wallonie, Direction Générale Opérationnelle de la Mobilité et des Voies hydrauliques, Boulevard du Nord 8, 5000 Namur, Contact: <u>info.batellerie@spw.wallonie.be</u> ou Tel.: +32 4 2316500 Pierre Salmon, Tel.: +32 4 2316544 , Fax: +32 4 2316571, E-mail: <u>pierre.salmon@spw.wallonie.be</u> Jean-Louis Boutry, Tel.: +32 81 772972, E-mail: jeanlouis.boutry@spw.wallonie.be

Bulgaria:

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

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: <u>vojtech.dabrowski@mdcr.cz</u>

Croatia:

Centar za razvoj unutarnje plovidbe (CRUP), Nova cesta 180, 1000 Zagreb, Croatia Vedran Bolfek, Tel.: +385 1 631 4445, Fax: +385 1 631 44 44, E-mail : bolfek@crup.hr

Agencija za vodne putove (Agency for Inland Waterways) Parobrodska 5, 32 000 Vukovar, Croatia Tel.: +385 32 450 613, Fax: +385 32 450 653, E-mail: <u>vodniputovi@vodniputovi.hr</u>

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: <u>virginie.taffin@vnf.fr</u>

Annex

Germany:

Wasser- und Schifffahrtsverwaltung des Bundes Generaldirektion Wasserstraßen und Schifffahrt Außenstellen Mitte, West, Südwest, Süd und Ost Dezernat Verkehrstechnik (Binnen) Dienstsitz Generaldirektion Wasserstraßen und Schifffahrt Außenstelle Südwest, 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, Shipping Department, 1387 Budapest 62, Pf.: 30 Róbert Kojnok, Tel.: +36 148 621 55, Fax: +36 126 803 98, E-mail: <u>kojnok.robert@nkh.gov.hu</u>

The Netherlands:

RWS Watermanagementcentrum Nederland, Water Chamber, Zuiderwagenplein 2, P.O. Box 17, 8200 AA Lelystad, Jan de Leeuw van Weenen, Tel.: +31 (0)320 298 550 or Tel.: +31 (0)320 298 888, Fax: +31 (0)320 298 580, E-mail: jan.de.leeuw.van.weenen@rws.nl or wmcn-waterkamer@rws.nl

Poland:

Ministerstwo Infrastruktury i Rozwoju, ul. Wspólna 2/4, 00-926 Warszawa Urząd Żeglugi Śródlądowej w Szczecinie, Pl. Batorego 4, 70-207 Szczecin Piotr Durajczyk, Tel.: +48 91 44 03 254, Fax: +48 91 43 40 129, E-mail: pdurajczyk@szczecin.uzs.gov.pl

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: <u>mghiba@rna.ro</u>

Serbia:

Direkcija za vodne puteve, Francuska 9, 11000 Belgrade Zoran Lukic, Tel.: +381 113 029 888, Fax: + 381 113 092 808, E-mail: <u>zlukic@plovput.co.yu</u>

Slovakia:

Štátna plavebná správa (State Navigation Administration), Prístavna 10, 821 09 Bratislava 2 Štefan Chalupka, Tel.: +421 (0)2 33300218, Fax: +421 (0)2 33523913, E-mail: <u>stefan.chalupka@sps.sk</u>

Switzerland:

Port of Switzerland, Hochbergerstrasse 160, 4019 Basel, Roland Blessinger, Tel.: +41 (0)61 639 95 95, E-Mail: <u>roland.blessinger@portof.ch</u>, <u>http://www.port-of-switzerland.ch</u>

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: <u>frm@onma.edu.ua</u>