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via donau – Österreichische Wasserstraßen-Gesellschaft mbH

RIS in Austria



Dr. Michael Fastenbauer
Mantova, 19.10.2012

via donau in brief

- via donau is the **Austrian waterway management organisation** responsible for 351 km of the River Danube.
- via donau is the **RIS Provider in Austria** (DoRIS system).
- via donau has a rich **project portfolio in development** of the Danube waterway and Danube navigation.
- via donau was and is a main contributor to the **RIS development on national and European level.**

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RIS on the Danube



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DoRIS – Donau River Information Services



DoRIS in brief

- Implementation of the EU RIS Framework Directive and additional services
- Pilot project for system development and testing co-financed by TEN-T
- Specification by via donau based on European Standards
- Testing and Evaluation since 2002
- Start of DoRIS operation on the Austrian Danube in February 2006
- Mandatory transponder usage since 2008
- Ongoing evaluation and improvement as well as development of new services

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RIS in Austria – Services (1)

(1) Fairway Information Services

- *Electronic navigational charts*
- *Notices to Skippers (NtS)*
- *Water level information*



(2) Traffic Information and Management Services

- *Tracking and Tracing*
- *Lock management*
- *National hull database*

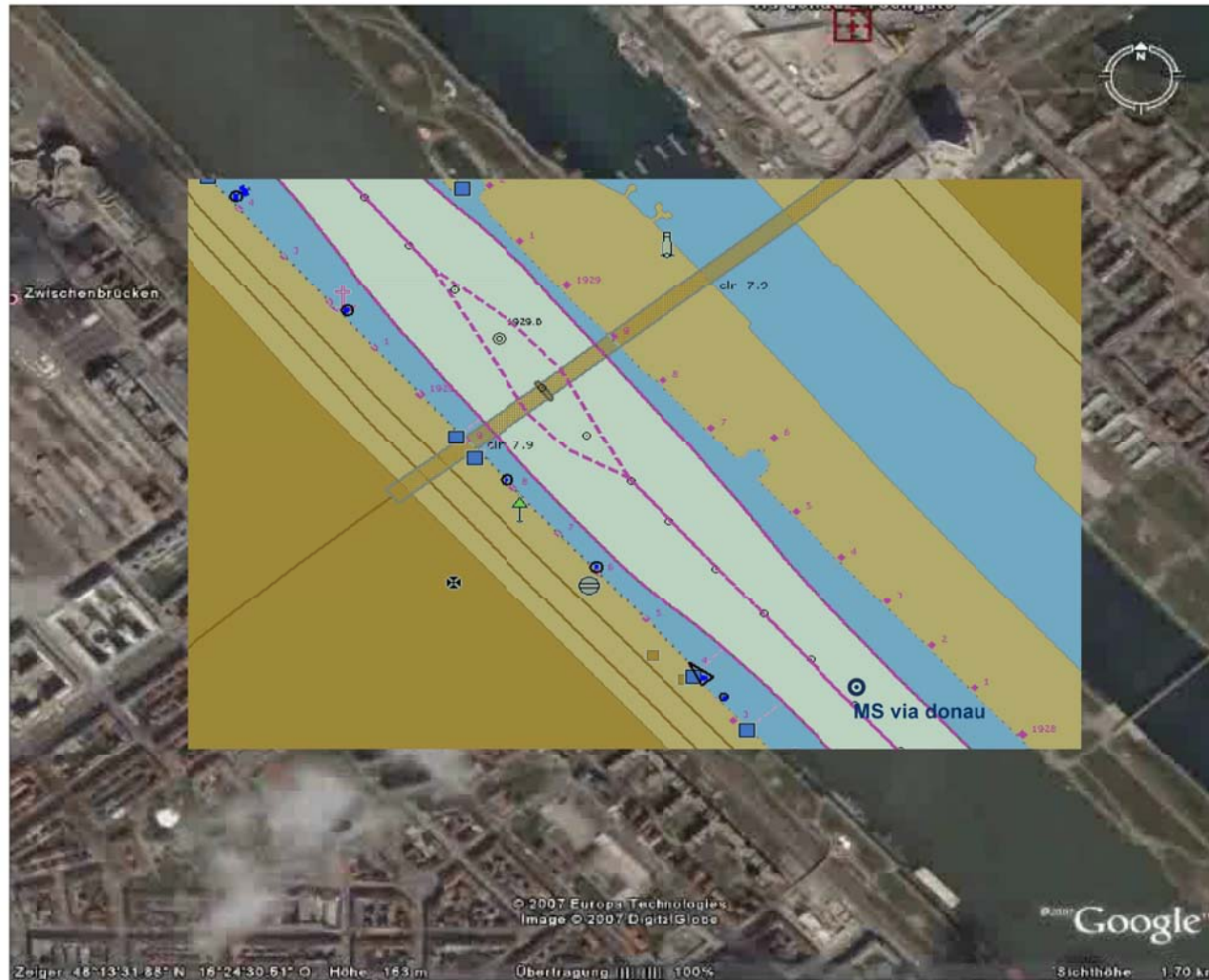
(3) Safety related services

- *Electronic Reporting of dangerous cargo*
- *Incident analysis*

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RIS in Austria – ENC



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RIS in Austria – Notices to Skippers

Notices to Skippers - Windows Internet Explorer

Notices to Skippers - Windows Internet Explorer

Notices to Skippers - Windows Internet Explorer

http://nrs.doris.bmvit.gv.at/#1227

Datei Bearbeiten Ansicht Favoriten Extras ?

Favoriten Notices to Skippers

D O R I S Nachrichten für die Binnenschifffahrt

Suche nach Wasserstraßen- und verkehrsbezogenen Nachrichten

Wasserstraßenabschnitt

Bereich von Stromkilometer von Gültig von Gültig bis

Bereich bis Stromkilometer bis Herausgabe von Herausgabe bis

Suchen Zurücksetzen

Identifikation	Wasserstraßenabschnitt	Herausgabe
157 / 02 / 2011, Arbeiten; Sperre der öffentlichen Länden, Vorhafen Lobau, Verlängerung	Donau	19.12.2011
163 / 00 / 2011, Inland ECDIS Update; Update der Inland ENC's	Donau	07.12.2011
162 / 00 / 2011, Baggerarbeiten; Furt Rote Wied	Donau	05.12.2011
161 / 00 / 2011, Baggerarbeiten; Oberwasser Kraftwerk Aschach	Donau	05.12.2011
160 / 00 / 2011, teilweise Sperre; Sperre der linken Schleusenkammer Freudenau	Donau	30.11.2011
159 / 00 / 2011, Arbeiten; Hinterfüllung Leithier "Marauer"	Donau	29.11.2011
33 / 01 / 2011, Durchfahrtshöhe; Eisenbahnbrücke Steyregg	Donau	25.11.2011
32 / 01 / 2011, Durchfahrtshöhe; Eisenbahnbrücke Linz	Donau	25.11.2011
154 / 00 / 2011, teilweise Sperre; Sperre der rechten Schleusenkammer Melk	Donau	07.11.2011
151 / 00 / 2011, Baggerarbeiten; Renaturierungsarbeiten "Ottersheimer Markt"	Donau	04.11.2011
142 / 00 / 2011, Nachricht; Statistikmeldungen	Donau	12.10.2011
141 / 00 / 2011, Nachricht; Ende der Bereitstellung mobiler Transponder	Donau	12.10.2011
140 / 00 / 2011, teilweise Sperre; Revision der linken Kammer der Schleuse Aschach	Donau	12.10.2011
138 / 11 / 2011, teilweise Sperre; Sperre der rechten Schleusenkammer Melk - Korrektur	Donau	11.10.2011
139 / 00 / 2011, teilweise Sperre; Sandstarbeiten beim Kraftwerk Wallace-Hüttelchen	Donau	11.10.2011

Einträge 1-15 von 34



BMVIT - IV/W2 (Schifffahrt - Technik und Nautik)
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e-mail: w2@bmvit.gv.at



Bundesministerium
für Verkehr,
Innovation und Technologie

GZ. BMVIT-591.007/0227-IV/W2/2011

DVR:0000175

NACHRICHT FÜR DIE BINNENSCHIFFFAHRT Nr. 157/02 aus 2011

gemäß § 24 des Schifffahrtsgesetzes, BGBl. I Nr. 62/1997 idF BGBl. I Nr. 17/2009

Sperre der öffentlichen Länden, Vorhafen Lobau, Verlängerung

Es liegt eine neue Nachricht für die Binnenschifffahrt für den Bereich Wien in Österreich in der Originalsprache Deutsch von via donau vor, die von dem/der bmvit am 19. Dezember 2011 um 09:52 Uhr verfasst wurde:

Wasserstraßen- und verkehrsbezogene Nachricht Nummer 157/02 aus 2011

Betreff: Arbeiten

Meldung des/der Schifffahrtssaufsicht Wien.

Grund der Nachricht: Arbeiten.

Diese Nachricht gilt in der Zeit vom 29. November 2011 bis 23. Dezember 2011.

Für den Fluss Donau, Strom-km 1917,1 bis 1916,8 gilt in der Zeit vom 29. November 2011 bis 23. Dezember 2011 durchgehend folgende Beschränkung: Sperre im Bereich des rechten Ufers in der Zeit vom 29. November 2011 bis 23. Dezember 2011 durchgehend, folgende Beschränkung: Sperre im Bereich des linken Ufers.

Ergänzender Text in Originalsprache: Wegen Reinigungsarbeiten Düker im Vorhafen Lobau wird die öffentliche Lände, Strom-km 1917,335 - Strom-km 1916,785, rechtes Ufer und die öffentliche Lände, Strom-km 1917,150 - Strom-km 1916,800, linkes Ufer, durchgehend, gesperrt. Kennzeichnung durch Schifffahrtszeichen.

Für die Bundesministerin:

i.V. Dipl.-Ing. Bernd Birkhuber

Ihr(e) Sachbearbeiter(in):

Silvia Leiner
Tel.Nr.: +43 (1) 71162-655903
Fax-DW.: 655996
silvia.leiner@bmvit.gv.at

elektronisch gefertigt

Diese Nachricht für die Binnenschifffahrt wurde automatisiert aus Textblöcken erstellt, welche im internationalen Standard für Nachrichten für die Binnenschifffahrt definiert sind.

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RIS in Austria – Waterlevel information

The screenshot shows the DoRIS website interface. At the top, there's a navigation bar with links: KONTAKT, ENGLISH, and SUCHE. Below this is a main header with a large image of a river lock and the text 'DORIS'. The main content area is divided into several sections:

- SERVICES**: Includes links for 'Nützliche Kontakte für die Binnenschifffahrt', 'Informationssystem für die Binnenschifffahrt', and 'Informationen zu den österreichischen Schleusen'.
- news**: Contains a 'newsletter' sign-up form and a 'presse service' section.
- pegelstände**: A table showing water levels at various stations as of 2008-11-12 at 09:00:00.
- nachrichten**: A list of recent news items, including '129/08/2008, Baggerarbeiten: Bereich Kasten' and '126/08/2008, Baggerarbeiten'.
- dansbenews**: A section for 'DANUBE NEWS' with articles like '11.11.2008: IRIS Europe Veranstaltung' and '06.11.2008: Ennshafen und rumänischer Hafen Galatz'.
- links**: A list of external links including 'Internationale Pegelwerte', 'bmvit', 'EU', 'Trageverpflichtung Donau', and 'wetterdienst'.

On the right side, there's a sidebar with links to 'via donau', 'Schifffahrt', 'DoRIS', 'Flussbauprojekt', 'Ports', and 'Danube Ports Online'.

www.doris.bmvit.gv.at
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RIS in Austria – Services (2)

(1) Fairway Information Services

- Electronic navigational charts
- Notices to Skippers (NtS)
- Water level information

(2) Traffic Information and Management Services

- Tracking and Tracing
- Lock management
- National hull database

(3) Safety related services

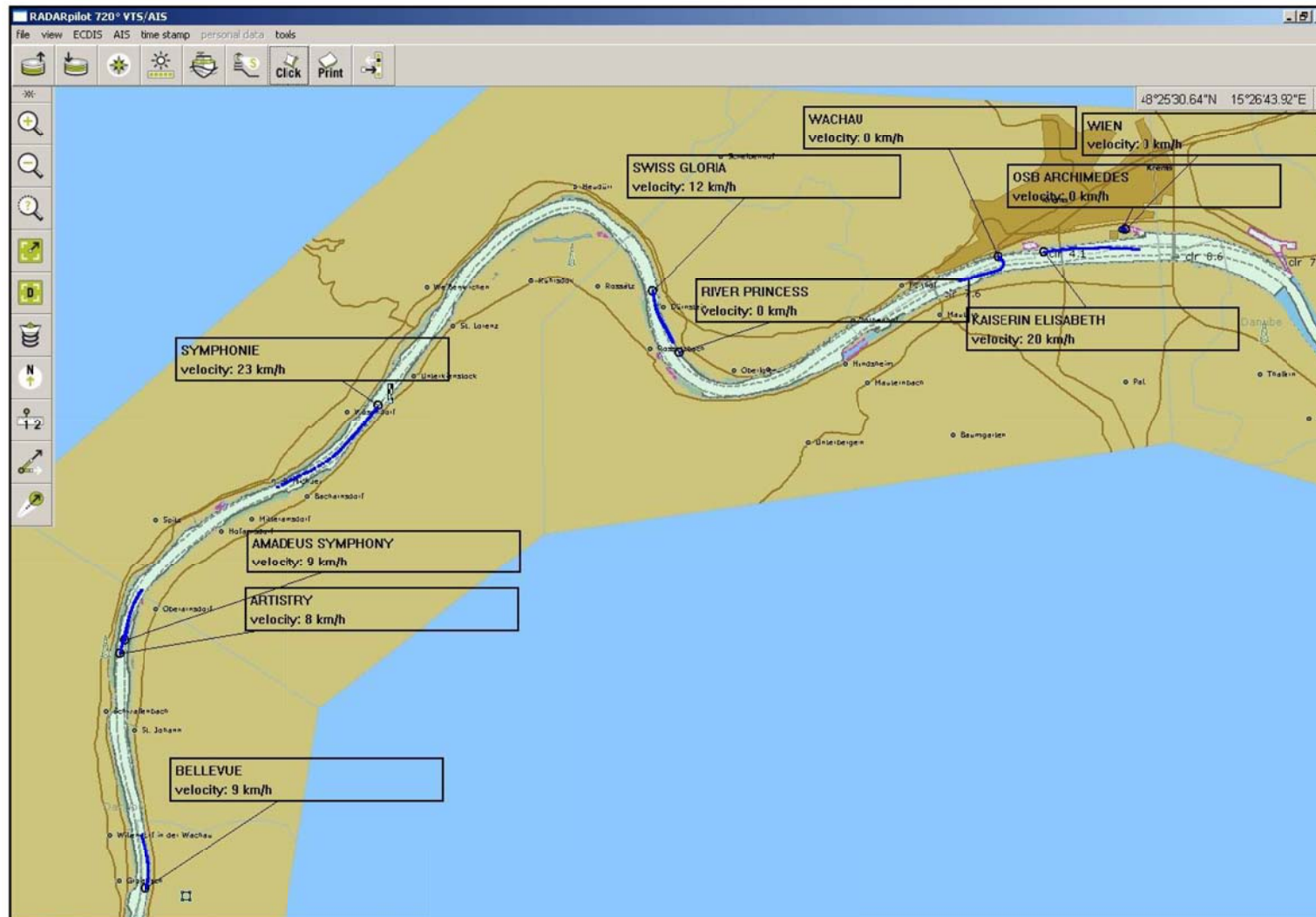
- Electronic Reporting of dangerous cargo
- Incident analysis



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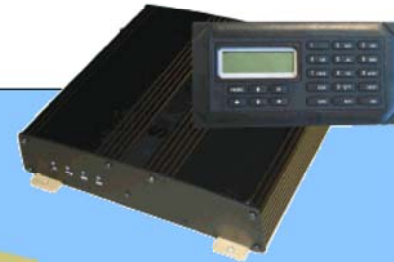
RIS in Austria - Tactical traffic image



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RIS in Austria – Tracking & Tracing



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RIS in Austria – Vessel positions via web

v0.0.4.3209

[Logout](#)
[Print](#)
[Contact](#)
[Help](#)

Christoph, Plasil

[Inbox](#)
[Search](#)
[Traffic Data](#)
[Transport Data](#)
[ERIRSP Data](#)
[Vessel Data](#)
[ERI Report](#)
[ERI User Admin](#)
[Emergency](#)
[Emergency Data](#)
[Data owner admin](#)
[My Data](#)

Traffic, Transport and Fairway related information

[Vessels](#)
[V-Details](#)
[Water level](#)
[Lock state](#)

List of vessels - 10 available

	Name (MMSI/ENR)	Position	Timestamp	km/h
1	ATVESSEL01 200022401 / 20022401	AT, Donau km 2219	1/1/70 1:00 AM	2.0
4	ATVESSEL02 200022402 / 20022402	AT, Donau km 1995	1/1/70 1:00 AM	2.0
10	ATVESSEL03 200022403 / 20022403	AT, Donau km 1873	1/1/70 1:00 AM	2.0
2	ATVESSEL04 200022404 / 20022404	AT, Donau km 2218	1/1/70 1:00 AM	2.0
5	ATVESSEL05 200022405 / 20022405	AT, Donau km 1994	1/1/70 1:00 AM	2.0
9	ATVESSEL06 200022406 / 20022406	AT, Donau km 1873	1/1/70 1:00 AM	2.0
3	ATVESSEL07 200022407 / 20022407	AT, Donau km 2217	1/1/70 1:00 AM	2.0
6	ATVESSEL08 200022408 / 20022408	AT, Donau km 1993	1/1/70 1:00 AM	2.0
8	ATVESSEL09 200022409 / 20022409	AT, Donau km 1874	1/1/70 1:00 AM	2.0
7	ATVESSEL15 200022415 / 20022415	AT, Donau km 1874	1/1/70 1:00 AM	2.0

[Print list](#)

[Karte](#)
[Satellit](#)
[Hybrid](#)

ATVESSEL03

MMSI: 200022403

EN: 20022403

River: Donau

River-Km: 1873

Timestamp: 1/1/70 1:00 AM

Speed: 2.0

Destination: HUBUD000011030016521

Wien

Bratislava

10 Meilen

20 km

©2010 Tele Atlas - Nutzungsbedingungen

[Show all vessels](#)

[Refresh](#)

Last update:
Aug 5, 2010 11:21:13 AM

☒ Water level information
☒ Lock state

Hint
 .) Single click vessel to display it on map
 .) Double-click vessel to get detailed information

RIS in Austria – Lock management

FlexiLock

Programm | Einstellungen | Verspätete Verbände | Öffnen | Help

Hydrographische Daten | Hochwasser | Erg/Schiffsdaten | Aktueller Dienst | Dienste bearbeiten | div. Protokolle | Eost | Störmeldung

Lokale Anmeldung | Verdeckte Anmeldungen | Anmeldung ignorieren | Details zur Anmeldung | ATIS Code Verknüpfung | Anmeldung akzeptieren

SCHLOEGEN | **<unbekannt>**

Erste Meldung: 27/02/08 14:52:57 | Länge (m): 30,00 | Beladen: ☐ | Letzte Meldung: 27/02/08 14:53:38 | Breite (m): 7,00 | Blaue Kegel: 0 | Fahrtrichtung:

Fahrzeuge zu Tal

K ₂	R	Name	B.F.	I	b	b K	AZ	EZ	Stat	Post	WZ	Ende
Vorangekündigte Fahrzeuge und Verbände												
		LORETTE	0	85,00	8,00	0				0		
		DOKW BARKASSE	0	25,00	6,00	0				0		
Ankommende Fahrzeuge und Verbände												
Angemeldete Fahrzeuge und Verbände												
		SCHLOEGEN	0	30,00	7,00	0	14:45			0		
		A ROSA MIA	0	124,00	14,00	0	14:59			0		
Zugewiesene / Geschleuste Fahrzeuge und Verbände												
LK	a	HANS WILHELM	2	103,00	22,40	0	14:55	15:11	15:25	0	00:15	
LK	b	VIENNA	0	38,00	6,00	0	15:02	15:17	15:25	0	00:14	

Planungsmodus aktiviert

Fahrzeuge zu Berg

K ₂	R	Name	B.F.	I	b	b K	AZ	EZ	Stat	Post	WZ	Ende
Zugewiesene / Geschleuste Fahrzeuge und Verbände												
Angemeldete Fahrzeuge und Verbände												
		KAISERIN ELISABETH	0	69,00	9,00	0	14:51			0		
		THALASSA	0	110,00	11,00	1	15:00			0		
Ankommende Fahrzeuge und Verbände												
		MAINGAU	0	110,00	9,00	0				0		
		GERDI	2	180,56	11,00	0				0		
Vorangekündigte Fahrzeuge und Verbände												
		HERSO 1	0	86,00	9,00	0				0		

Rechte Kammer (RK) 225,00 x 23,50

Linke Kammer (LK) 225,00 x 23,50

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RIS in Austria – Services (3)

(1) Fairway Information Services

- *Electronic navigational charts*
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(3) Safety related services

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RIS in Austria – Services (4-6)

(4) Special Services

- XML web services (push or pull)
- One Page Info (overview on fairway information)
- Enhanced ice reports


(5) International RIS data exchange (pilot)

- AIS Data exchange
- ERI Data exchange
- Hull data exchange

(6) Value-added services

- *Mooring information (“LändRIS”)*

PDF data

 OVERVIEW
Fairway
information

Fairway information overview
04.03.2009 07:10

Waterlevels

Station	Water level	Unit
Aufhausen	345	(1)
Altheim	403	(2)
Mauthausen	440	(1)
Völs	311	(2)
Ennsbrunn	278	(2)
Ennsbrunn	395	(1)
Wiburgsmayer	304	(1)

Current lock status

Lock	left chamber		right chamber	
	State	Reason	State	Reason
Aschach	available	-	available	-
Obersiebenbrunn	closed	revision	available	-
Altenbrunn	available	-	closed	revision
Währing	available	-	closed	revision
Völs	closed	revision	available	-
Melk	available	-	available	-
Altenbrunn	available	-	available	-
Grafenbrunn	available	-	available	-
Freudenau	available	-	available	-

Notices to Skippers

The fairway and traffic related message No.2200 in the year 2009

Subject: Dredging

A new notice to skippers is available for Donauanmeldung in Austria in the original language German from via donau, which has been verified by BMAV on 23 February 2009.

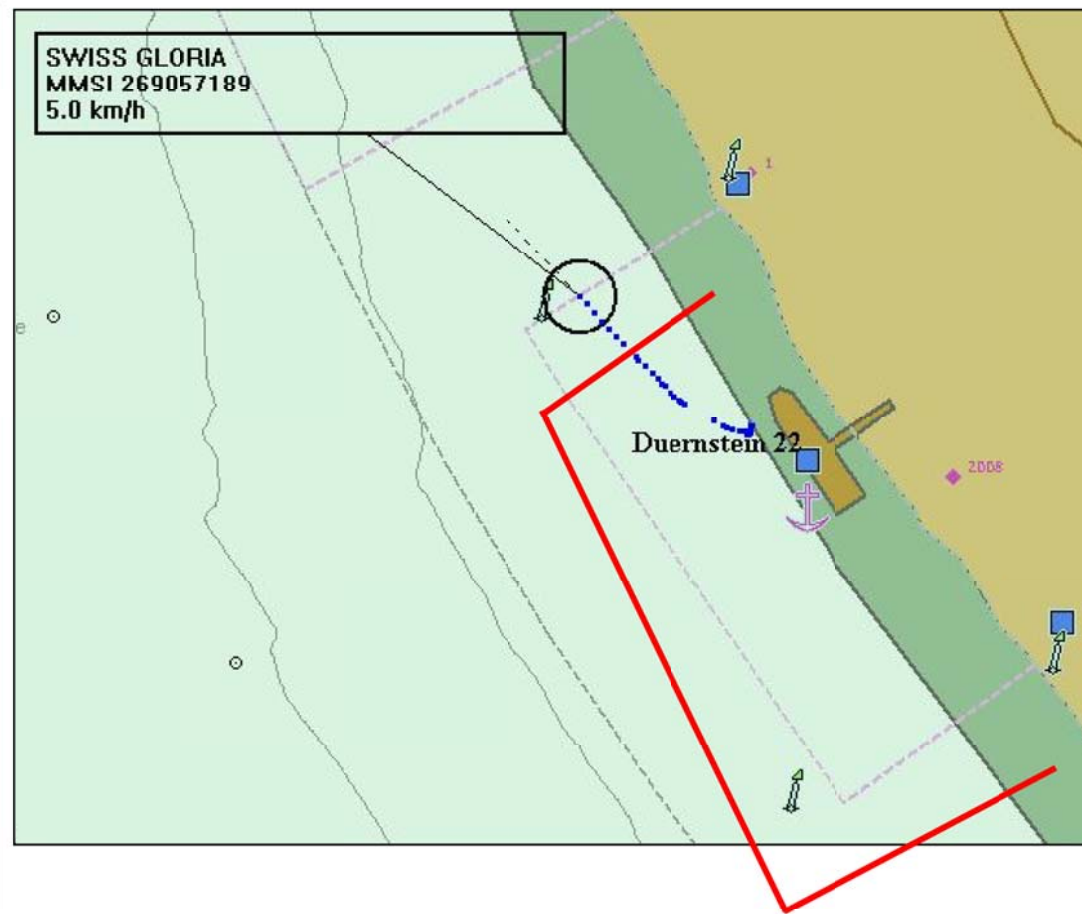
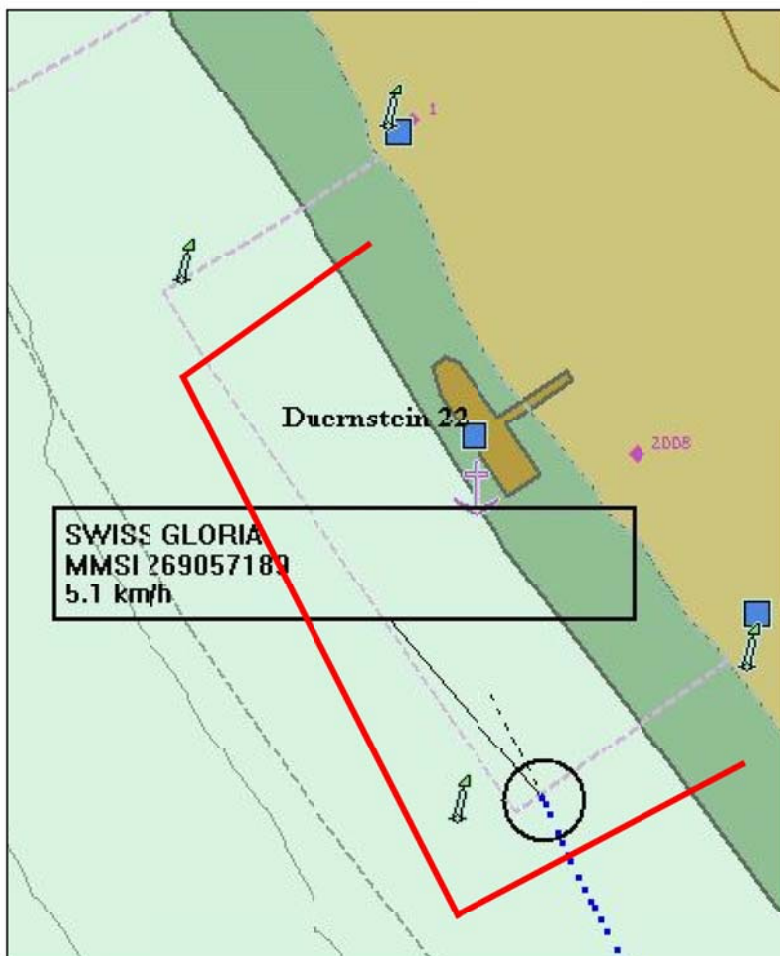
This message is valid in the period from 24 February 2009 to 27 February 2009

For the river Donau, river km 1910.3 to 1910.5 is valid in the period from 24 February 2009 06:00 clock to 27 February 2009 24:00 clock continuously the following limitation: do not create wash in the whole area.

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Mooring information – „LändRIS“



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**via donau in RIS development,
implementation,
operation and**

D O R I S maintenance

DONAU RIVER INFORMATION SERVICES

Role of via donau in RIS development

- Coordination of and participation in European RIS R&D and implementation projects
- Active contribution to standardisation in all RIS Expert Groups and PIANC RIS Working Groups
- Driving force for RIS in the Danube region
- Support and know-how transfer to foreign RIS implementation projects

via donau and RIS operation & maintenance

- via donau has many years of experience in implementation, operation and maintenance of a comprehensive European RIS system - the Austrian DoRIS system.
- via donau has implemented the first equipment programme for Inland AIS transponders worldwide.
- via donau has unique experience with an Inland AIS transponder carriage requirement

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via donau in international RIS development

Participation in all **RIS Expert Groups** and their Task Forces

- Inland ECDIS EG: Johannes Nemeth 
- NtS EG: Christoph Plasil, Mario Sattler 
- ERI EG: Lukas Seemann, Mario Sattler 
- VTT EG: Jürgen Trögl, Thomas Zwicklhuber 

Driving force of **international RIS data exchange**

- Legal Task Force: Andreas Bäck
- Technical Task Force: Mario Kaufmann

Participation in **PIANC RIS Working Groups**: Andreas Bäck et al.

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via donau – international RIS cooperation

Active initiation of and participation in international cooperation projects for RIS development and implementation

- **COMPRIS, ALSO DANUBE** (coordinator)
- **D4D** (coordinator), **DANewBE Data** (coordinator)
- **Master Plan IRIS** (Danube coordinator)
- **NEWADA** (coordinator), **NEWADA duo** (coordinator)
- **RISING**
- **PLATINA** (coordinator) and **PLATINA II** (coordinator)
- **IRIS Europe**, 2006-2008, (coordinator)
- **IRIS Europe II**, 2009-2011, (coordinator)
- **IRIS Europe 3**, 2012-2014, (coordinator)

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via donau support for foreign RIS

- SIF (RIS **France**): Development of specifications and project support for national RIS implementation
- RIS **USA**: Support in development of specifications
- RIS **Serbia**: Development of full set of specifications for comprehensive implementation of RIS in Serbia
- RIS **Serbia**: Supervision of the implementation of the entire RIS Serbia system
- RIS in **Germany**: Consulting for development of tender dossiers
- RIS on **EU Level**: Provision and Maintenance of RIS Support Tools (w.r.t. European Hull Database)
- etc.

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Organisational and legal framework for RIS in Austria

European legal & technical provisions

**Published
2005 ff.**

**EU RIS
Directive
(2005/44/EC)**

**Commission Regulation
414/2007**
concerning the technical guidelines
for the planning, implementation
and operational use of RIS
(RIS Guidelines)

Commission Regulation 415/2007
amended by
Commission Implementing Regulation 689/2012
concerning the technical specifications for
vessel tracking & tracing system **(Inland AIS)**

Commission Regulation 416/2007
concerning the technical specifications
for **Notices to Skippers (NtS)**

Commission Regulation 164/2010
defining the technical specifications for
electronic ship reporting (ERI)

Draft Commission Regulation
defining the technical specifications for
Inland ECDIS

RISVTT
Expert Group
Tracking & Tracing

RISNTS
Expert Group
Notices to Skippers

RISERI
Expert Group
Electronic Reporting
International

RISECDIS
Expert Group
Inland ECDIS

“what”

- **Applicability**
- **Responsibilities of Member States**
- **Minimum requirements for RIS**
- **Services to be provided**
- **Technical specifications to be applied**

Based on preliminary work of organizations such as:

- International Navigation Association (PIANC)
- Central Commission for Navigation on the Rhine (CCNR)
- United Nations Economic Commission for Europe (UNECE)

“how”

“who”

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National legal framework for RIS in Austria

National implementation of EU provisions
and specific detailed regulation by

- **Navigation Law** (RIS + RIS Authority)
[“Schifffahrtsgesetz”]
- **Waterway Law** (RIS Provider)
[“Wasserstraßen-Gesetz”]
- **Waterway Traffic Regulation**
(Details of RIS usage – “AIS transponder mandatory”)
[“Wasserstraßen-Verkehrsordnung”]

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RIS in practical terms

Specific relevant experience

- ...
- Mandatory transponder usage since July 1st, 2008:
After reluctance in the beginning soon very positive reactions – based on a support programme for early adopters.
- Traffic management at the locks: gradual improvement.
- Some reliability problems with transponder (installation)s noticed.
- Outsourcing of system maintenance partly successful.
- Possibilities of incident analysis are highly appreciated.
- RIS as the “Big Brother”: Privacy issues discussions are relevant.
- Low-cost “heading” devices are still lacking.
- Different usage scenarios ask for tailored RIS.
- ...
- Still a high potential for further benefits (reliability, safety, efficiency, environmental performance) ... !

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Different usage scenarios

- Skippers: fairway information, charts, tactical traffic situation
- Logistics service providers and shippers: voyage planning
- Authorities: (24/7 traffic supervision)
- Customs: (revision planning)
- Authorities, vessel owners and insurances: incident evidence
- Lock keepers: lock management and enforcement
- Emergency brigades: (real-time traffic information)
- Ports: transshipment planning
- Ports and berths: charging information
- Waterway managers:
supervision of contractors, (actual fairway usage)
- etc.
- Other use: ship waste management (planned), single window for reporting, statistics
- Additional technology: radar, voice VHF etc.

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Conclusion

For RIS Italia ...

- **Harmonisation** between different interests of involved parties is an important and difficult task.
- Usage of the **European framework** (e.g. EHDB1, information access rights) can contribute to a smoother introduction.
- Usage of **available experience** from other countries is state-of-the-art.
- RIS offers support for an **integrated approach**: business efficiency – safety – environment protection

1 European Hull Database

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