



EU Danube Region Strategy: Technical Secretariat for Priority Area 1a:
To improve mobility and multimodality: Inland waterways

Working Group 4: "River Information Services"

Implementation of River Information Services in Serbia

Directorate for Inland Waterways
Bucharest, 27-10-2011

Overview of past events

- First initiative on RIS implementation in Serbia in 2001
- First ENC's are published in 2002/2003
- First governmental vessels equipped with AIS and ECDIS Viewers in 2004
- First installation of AIS basestations (Belgrade, Novi Sad) in 2005
- RIS center and Tracking and Tracing prototype implemented in 2007
- Detailed design and specification for full scale implementation in 2008
- Start of full scale implementation in September 2009



EU Funded Implementation of RIS in Serbia

Full scale implementation of the RIS on the Serbian Danube

- Funding Programme: IPA 2007
- Project duration: 2009-2012
- Overall project value EUR 11 Mill, divided in 3 contracts
 - Supplies of equipment for RIS implementation
 - Implementation of RIS on the Serbian Danube
 - Supervision of implementation
- Funded by EU – 100%
- Main Beneficiaries:
 - Ministry for Infrastructure and Energy
 - Directorate for Inland Waterways - Plovput



General outline

- Different ICT based system integrated in functional RIS system:
 - AIS based tracking and tracing
 - FIS by means of ENC's and Notices to Skippers (NtS)
 - Electronic reporting system (ERI)
 - Hull Database (Hull DB)
 - Data Exchange Gateway (NIDES)
 - dGPS correction provision (IALA/AIS)
- Equipment programme for governmental vessels
- Equipment programme for commercial vessels



General outline

- General concept/segments
 - Central segment in Belgrade (Plovput)
 - RIS Centre in Belgrade (Plovput)
 - Authority Segment
 - User Segment
 - Logistics Segment
- Geographical structure
 - Shore segment
 - Onboard segment



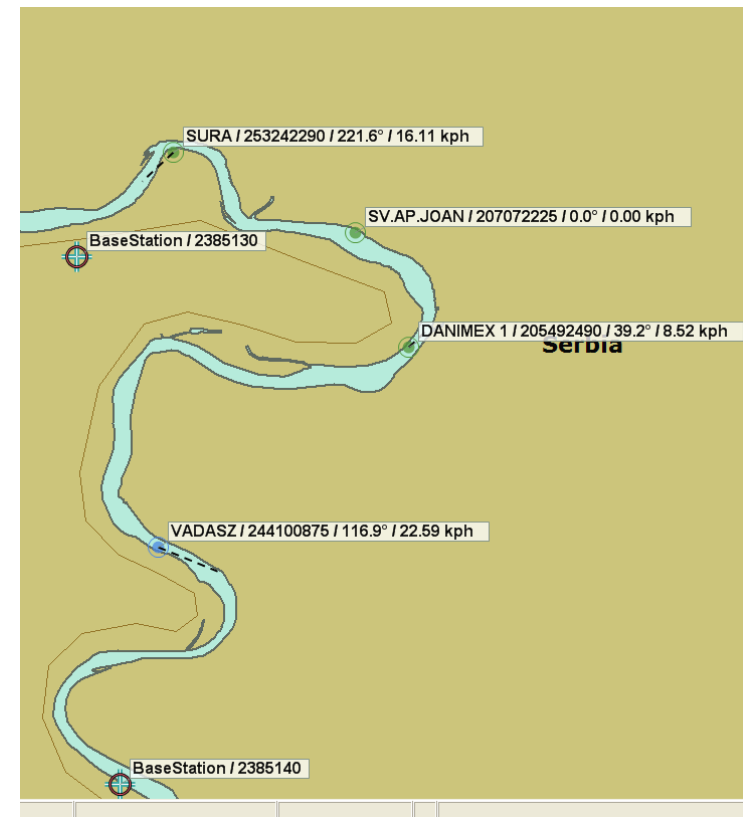
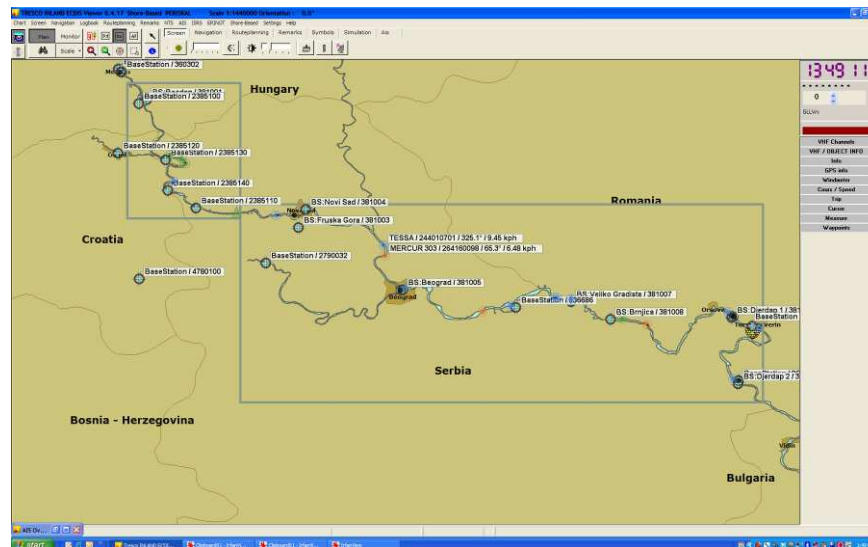
Tracking and Tracing

- AIS network of 15 onshore basestations, alongside the Danube
- Currently 15 out of 15 AIS basestations installed
- Functional acceptance test executed
- Performance tests to be done
- Current coverage 100% of Serbian Danube

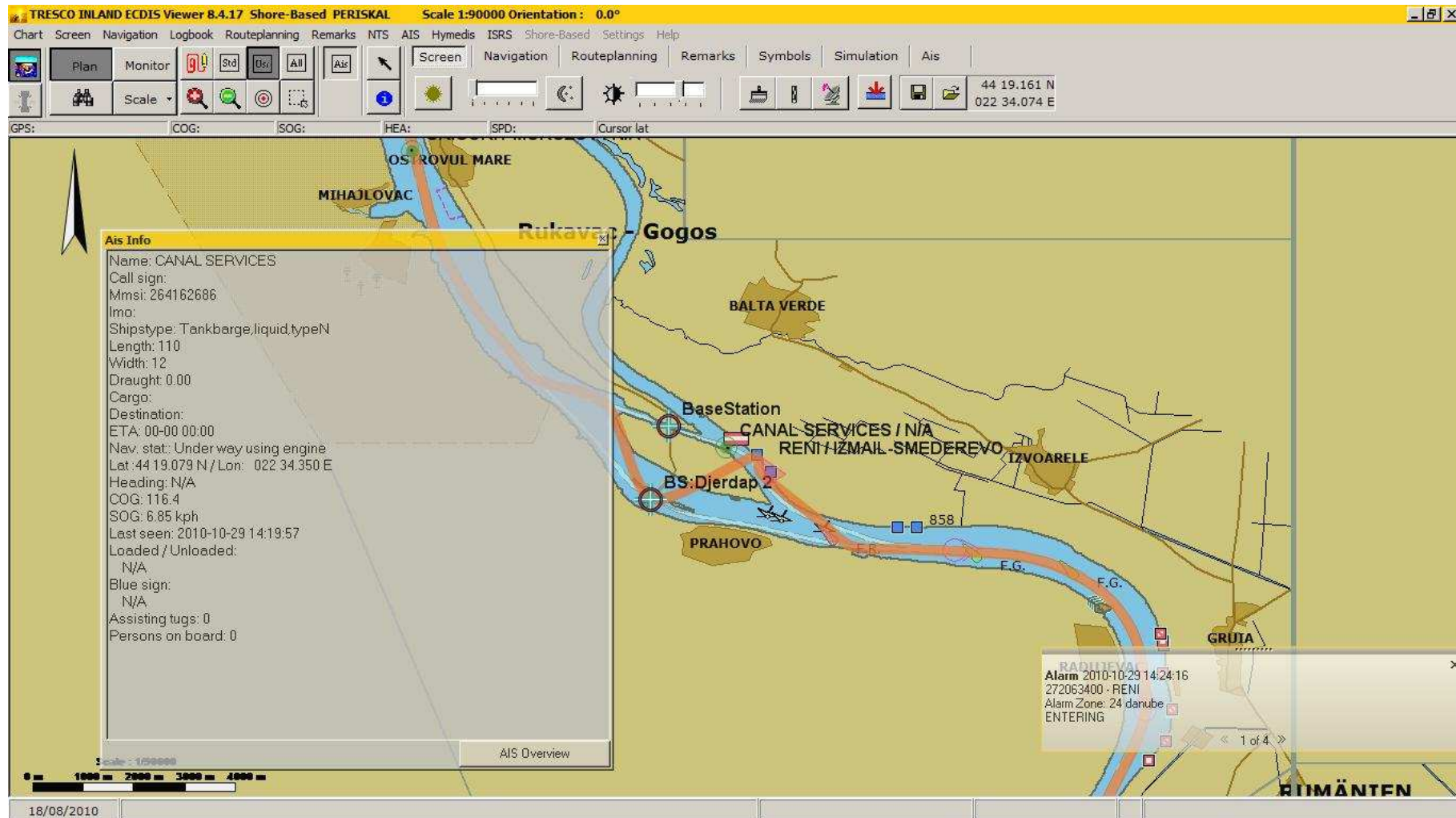


Tracking and Tracing

- AIS based Tracking and Tracing system installed
- Functional acceptance test executed
- Performance tests to be done



Tracking and Tracing



Tracking and Tracing

AIS Overview

Ships Monitor Alarm Zones Tracking History Messages

ENI	MMSI	IMO	Name	Destination	Speed	Source
	272029900		ZVENIGOROD		0.00 kph	RTR
	211431170		BAYERN		8.15 kph	RTR
	207261213		NAIDEN KIROV		0.00 kph	RTR
	205268500		SOPT		0.00 kph	RTR
	244700275		MS-VARIANT		0.00 kph	RTR
	264160098		MERCUR 303		0.00 kph	
	211243700		URSULA KLAUS		0.19 kph	RTR
	211482270		SANTA MARIA		0.00 kph	RTR
	244650958		SANDRIA		12.41 kph	RTR
	20457		SEGESTA		0.19 kph	
	244042985		DENSIMO		0.00 kph	RTR
	205401710				12.41 kph	RTR
	207261414		MADARA		0.00 kph	RTR
	272039800		GRIGORIY		7.22 kph	RTR
	244690099		SULOMARO		0.00 kph	RTR
	272063400	0	RENI	IZMAIL-SMEDERE	0.00 kph	RTR
	244660626		VANTAGE		189.46 kph	RTR
	244010965		MARONA		0.00 kph	RTR
	256412000		FLAMENCO		21.67 kph	RTR
	207261207		GEORGI		9.07 kph	RTR
	211191520		HAMBURG		11.67 kph	RTR
	207261216		HAN ASPARUH		17.41 kph	RTR
	244660696		KVB JANNA MARIA		0.00 kph	RTR
	211313030		DER KLEINE PRINZ		24.45 kph	RTR
	244670667		KANTARA		0.00 kph	RTR
	264162642		CANAL SERVICES 6		9.07 kph	RTR
	211169290		ACHIM		0.00 kph	RTR
	214180803	0	STEFEL REF	VIKOVAR	0.00 kph	RTR

Find
Name Search

Refresh All known targets

Interrogate

Actions

go to ☐ Label

Tracking

Ship static data

Euro Nr. MMSI

Call sign IMO:

Shipsname

Width Length

Pos. ref A Pos. ref B Pos. ref C Pos. ref D

Inland specific

Dangerous cargo Loaded / Unloaded

Blue sign Regional bits

PoB Settings

Crew Staff Passengers:

Filter

Close



- Web portal is available with Serbian dataset online
- D4D system integrated up to state of the art version
- Maintenance portal integrated
- Data exchange with other Danube countries ongoing



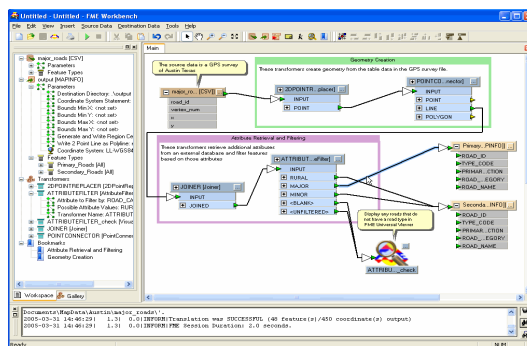
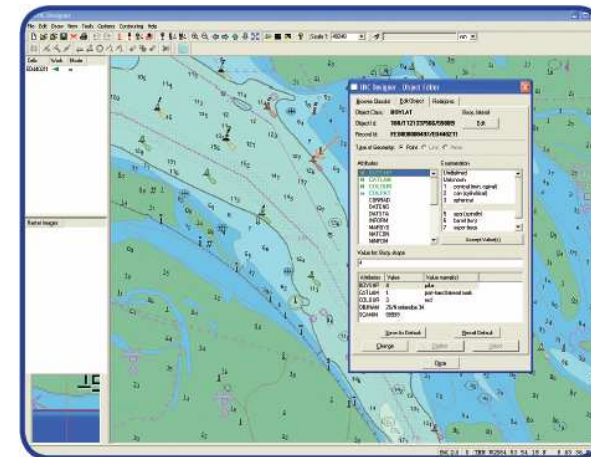
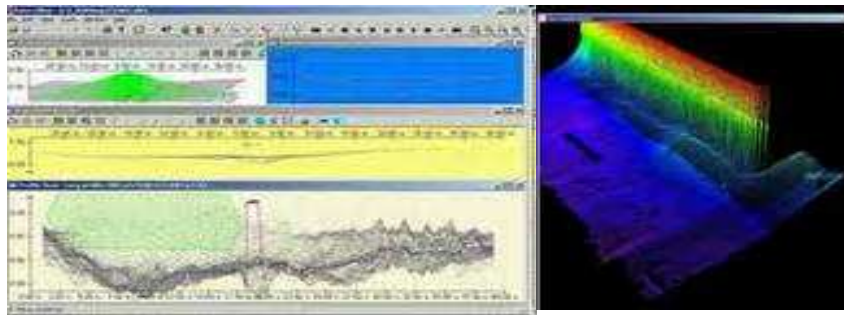
The screenshot displays the D4D web portal interface. On the left, there are two map views: a top-down view of a river section with navigational markers and a bottom-down view of a river section with a city area. On the right, there is a search panel with a filter set to 'Alles, außer Landflächen'. Below the filter, there is a table with columns 'Type' and 'Object'. The table contains the following data:

Type	Object
Wasserstraßenkilometer	
Farbe	Green
Radarauffälligkeit	Yes
Art der Boje/Bake oder Stränge	Left fairway side
Farbmuster	
Tonnen - Form	Conical (nun, ogival)
Toppzeichen Muster	
Toppzeichen Form	
Topcol	

Below the table, there is a section for 'Map functions' with radio buttons for 'Googlemaps', 'Map', 'Satellite', and 'Terrain'. The 'Satellite' option is selected.

Electronic Navigational Charts

- ENC production platform updated (software + hardware)
- New production tools obtained
- Multibeam echosounder improved
- Hi-res satellite imaged of the Danube obtained



ERI – Implemented

ERI & DataGateway

Inbox Data gateway ERI User settings Administration

ERIRSP

Generation time	09/08/2011 11:11:18
Response	Approved
Error code	999
Error description	Automatic response

Sender

Party ID	RSBEG00000RIS0100000
Name	RisSerbia
Country	
City	
Postal code	

Cancel

All ☒ Type Apply

Inbox

Delete selected Mark selected as READ Mark selected as UNREAD

1 2

	Message Time	Type	Title
<input type="checkbox"/>	09/08/2011 12:12:59	ERIRSP	Received ERIRSP Approved (Voyage 516516)
<input type="checkbox"/>	09/08/2011 11:12:09	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 11:11:18	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 11:03:05	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 11:02:10	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:59:50	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:44:26	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:43:32	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:11:01	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:08:23	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:02:41	ERIRSP	Received ERIRSP Approved (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 10:02:41	ERINOT	Published ERINOT (Voyage 5432632)
<input type="checkbox"/>	09/08/2011 09:16:51	ERIRSP	Received ERIRSP Approved (Voyage 070911455)
<input type="checkbox"/>	09/07/2011 16:18:39	ERIRSP	Received ERIRSP Approved (Voyage 070911)
<input type="checkbox"/>	09/07/2011 16:13:59	ERIRSP	Received ERIRSP Approved (Voyage 070911)
<input type="checkbox"/>	09/07/2011 15:54:14	ERIRSP	Received ERIRSP Approved (Voyage 070911)
<input type="checkbox"/>	09/05/2011 13:07:51	ERIRSP	Received ERIRSP Approved (Voyage pretest-2)
<input type="checkbox"/>	09/04/2011 18:33:55	ERIRSP	Received ERIRSP Approved (Voyage pretest-2)
<input type="checkbox"/>	09/04/2011 18:30:40	ERIRSP	Received ERIRSP Approved (Voyage 64646)
<input type="checkbox"/>	09/04/2011 18:29:57	ERIRSP	Received ERIRSP Approved (Voyage 64646)
<input type="checkbox"/>	09/04/2011 18:29:08	ERIRSP	Received ERIRSP Approved (Voyage 64646)
<input type="checkbox"/>	09/04/2011 18:26:19	ERIRSP	Received ERIRSP Approved (Voyage 64646)

ERI & DataGateway

Inbox Data gateway ERI User settings Administration

Manage reports Search

Create new voyage

Filter

Vessel All voyages ☐ Apply Clear

My reports

Voyage: 1234 [BargeA2] Documents Ediling (Editing) ERINOT Report

Voyage: 516516 [BargeA2]

Voyage: 5432632 [VesselA1]

Voyage: 5432632121f0qs [VesselA1]

Voyage: ddsd342 [VesselA1]

Voyage: 070911 [BargeA1]

Voyage: 070911-copy [BargeA1]

Voyage: 0815 [BargeA1]

Voyage: 5646 [VesselA1]



NtS – Implemented

Saopštenja brodarstvu (NTS)

English | Srpski

Početna
e-mail servis
CRUP

Administracija NTS-a
Korisničko ime:
Lozinka:
Ulaz

e-mail servis
Sva obaveštenja možete primiti i putem emaila, kliknite na link "e-mail servis", popunite podatke i obaveštenja ćete redovno dobijati na Vašu e-mail adresu.

Sistem za unos NTS poruka je trenutno u test fazi. Molimo Vas za razumevanje i saradnju kako bismo što pre dobili potpuno funkcionalni sistem. Sve predloge i primedbe možete slati na e-mail: nts@crup.hr

PRETRAŽIVANJE OBAVEŠTENJA
Jezik:
Reka:
Rok važnosti: od do
Od datuma izdavanja:
Tip poruke: ☒ Obaveštenje kapetanima
☒ Poruka u vezi vode
☒ Poruka u vezi leda
☒ werm
Pretraži

Saopštenja brodarstvu (NTS)

English | Srpski

Početna
e-mail servis
CRUP

Administracija NTS-a
Korisničko ime:
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REZULTATI PRETRAŽIVANJA
[Povratak na pretraživanje] **Ukupno 257 rezultata, 26 stranica:** << [1] 2 3 4 5 >>
Poruka u vezi vode: CRUP TISA (RKM: 9.50) [code] [XML]
Objavljeno 27.09.2011 15:32
Poruka u vezi vode: CRUP SAVA (RKM: 2000) [code] [XML]
Objavljeno 27.09.2011 15:32
Poruka u vezi vode: CRUP SAVA (RKM: 136.30) [code] [XML]
Objavljeno 27.09.2011 15:32
Poruka u vezi vode: CRUP SAVA (RKM: 103.60) [code] [XML]
Objavljeno 27.09.2011 15:32
Poruka u vezi vode: CRUP SAVA (RKM: 20) [code] [XML]
Objavljeno 27.09.2011 15:32
Poruka u vezi vode: CRUP DUNAV (RKM: 11740) [code] [XML]
Objavljeno 27.09.2011 15:31
Poruka u vezi vode: CRUP DUNAV (RKM: 1154.60) [code] [XML]
Objavljeno 27.09.2011 15:31
Poruka u vezi vode: CRUP DUNAV (RKM: 11160) [code] [XML]
Objavljeno 27.09.2011 15:31
Poruka u vezi vode: CRUP DUNAV (RKM: 1059.80) [code] [XML]
Objavljeno 27.09.2011 15:31
Poruka u vezi vode: CRUP DUNAV (RKM: 8610) [code] [XML]
Objavljeno 27.09.2011 15:31

design & development by HRG

- Implemented according to NtS 2.1 standard
- Currently waterlevel related messages are automatically published



Hull DB – Implemented

Identifications

Name	Titan		
ENI	35000004	ENI date issued	2011-09-16
IMO Number	N/A		

Manage hull | Search hull | History | Statistics | System Configuration

Export: XML CSV | Generate document: PDF DOC RTF | Edit: Edit | Publish | Back

Titan

Active:
Checked:
Status: EDITED
Changed: 09/18/2011 24:20:46 / Hull.admin@...risserbia.rs

Identifications

Name	Titan		
ENI	35000004	ENI date issued	2011-09-16
IMO Number	N/A		

National number

Europe	N/A	Date issued	Issuing authority	N/A
OFS	N/A	Date issued	Issuing authority	N/A
ERN	N/A	Date issued	Issuing authority	N/A
Other	N/A	Date issued	Issuing authority	N/A

Dimensions

Length [m]	65.8	Width [m]	11.8	Draught [m]	2.45	Height [m]	4.64
Dead weight [t]	1530.68	Gross tonnage [t]	1942.5	Displacement [t]	N/A		

Construction

Hull construction	N/A	Type UNECE	8460, Vessel, work maintenance craft, floating derrick, cable-ship, buoy-ship, dredge.		
Type category-1	N/A	Type category-2	N/A		
Type category-3	N/A	Type category-4	N/A		
Type category-5	N/A				

Equipment

Equipment Call sign	N/A				
ATIS Code	N/A	MMSI (radio)	N/A	MMSI (AIS)	N/A

Operator

Name	Hidro-baza	Address	n/a		
City	Beograd	Postal code	N/A	Country	RS
Telephone-1	N/A	Telephone-2	N/A	Telephone-3	N/A
E-mail-1	N/A	E-mail-2	N/A	E-mail-3	N/A

Hull

Manage hull | Search hull | History | Statistics | System Configuration

Vessels | Create New Hull | Test

1 | 2 | 3

Craft Name	Issuing Authority	Id	Eni	Status	Eni Checked	End
MarioTestVessel03	AT50	ENI:7734598	Edited		Edit	Publish
MarioTestVessel04	RS01	ENI:36000001	Draft		Edit	Publish
Vessel-1-36	RS01	ENI:35000036	Draft		Edit	Publish
test337	RS01	ENI:36000036	Draft		Edit	Publish
MarioTestVessel04	RS01	ENI:36000020	Draft		Edit	Publish
Vessel-1-11aafaf	RS01	ENI:35000042	Draft		Edit	Publish
MarioTestVessel06	RS01	ENI:36000002	Draft		Edit	Publish
Lovenci	RS01	ENI:35000048	Draft		Edit	Publish
Rubikon 23	RS01	ENI:35000013	Draft		Edit	Publish
Silver Star	RS01	ENI:35000015	Draft		Edit	Publish
Vessel-1-4aafaf	RS01	ENI:35000043	Draft		Edit	Publish
35000032	RS01	ENI:35000044	Draft		Edit	Publish
Dunavski biser	RS01	ENI:35000016	Draft		Edit	Publish
PD-20 Hidra	RS01	ENI:35000017	Draft		Edit	Publish
Kalenegeban	RS01	ENI:35000018	Draft		Edit	Publish
Luna	RS01	ENI:35000019	Draft		Edit	Publish
PB-130	RS01	ENI:35000020	Draft		Edit	Publish
Antej	RS01	ENI:35000021	Draft		Edit	Publish
Master	RS01	ENI:35000022	Draft		Edit	Publish
Vukodraz	RS01	ENI:35000023	Draft		Edit	Publish



Who is using RIS today in Serbia?

Authorities and public sector

- Directorate for Inland Waterways PLOVPUT
- Lock operators at Iron Gate 1 and Iron Gate 2
- Serbian Customs
- Ministry of agriculture, forestry and water management
- Ministry of Interior – Border Police
- Ministry of Interior - Gendarmerie
- Ministry of Interior – Sector for Emergency Situations (Fire brigade)
- Ministry of Infrastructure and Energetic – Captaincies



Who is using RIS today in Serbia?

Commercial Sector

- Port of Belgrade, passenger quay
- Danube Group (shipping operator)
- Ladjar Transport (shipping operator, for T&T, fleet management)
- Skippers directly involved in navigation on the Serbian Danube



Transponder equipment programme

- Commercial vessels
- Launched in mid July 2011
- Equipment available AIS transponders, ECDIS systems (information mode – laptop plus Periskal Viewer)
- So far approx 40 commercial vessels applied

The screenshot shows the Plavput website, which is the official portal for the Directorate for Waterways of the Republic of Serbia. The main headline is "“RIS Program za opremanje” za opremanje komercijalnih brodova RIS uređajima" (RIS Program for equipment for equipping commercial ships with RIS equipment). The text explains that the European Union delegation in the Republic of Serbia has launched several projects for the implementation of RIS in Serbia, financed by the Instrument for Pre-Accession Assistance (IPA). The projects aim to equip commercial ships with on-board RIS equipment. The website also features a sidebar with navigation links, a list of projects, and a section for the RIS Equipment Programme Serbia, which includes a list of ships equipped with RIS equipment.

Plavput
Republika Srbija
Direktorat za vodne puteve

Насловна Контакт

О нама
Активности
Међународне активности
Проекти
Пловидба
Прописи
Медија центар
Лансинови

05.09.2011.
Пловит инфо дан посвећен пројектима финансирањем од стране ЕУ
Пловит инфо дан посвећен пројектима финансирањем од стране ЕУ одржан 02. септембра у Београду...

Саопштења бродарству

31.08.2011.
Тит - Саопштење бр. 5/11
10.08.2011.
Београд - Саопштење бр. 17/11
27.07.2011.
Београд - Саопштење бр. 14/11
26.07.2011.
Београд - Саопштење бр. 13/11
25.07.2011.
Београд - Саопштење бр. 12/11
20.07.2011.
Сента - Саопштење бр. 17/11
20.07.2011.
Сента - Саопштење бр. 16/11
19.07.2011.
Сента - Саопштење бр. 15/11
08.07.2011.
Нови Сад - Саопштење бр. 12/11
07.07.2011.
Нови Сад - Саопштење бр. 11/11

Вести

“RIS Program za opremanje” za opremanje komercijalnih brodova RIS uređajima
12.07.2011.
Делегација Европске Уније у Републици Србији је покренула неколико пројеката за имплементацију RIS-а у Србији, који су финансирани из “IPA” фондова тј. средства за предприсутну помоћ. У оквиру ових пројеката, предвиђена је могућност да се и комерцијални бродови могу опремити RIS бродском опремом. У ову сврху, Дирекција за водне путеве је као корисник ЕУ пројекта покренула “RIS Program opremanja brodova u Srbiji” који ће спровести извођачи радова уговорени од стране ЕУ Делегације.

Овим програмом ће, под одређеним условима, без новчане надокнаде, комерцијални бродови бити опремљени RIS бродском опремом.

Све неопходне информације које се односе на услове и процедуре за учествовање у програму опремања бродова и пропратну документацију можете преузети у облику zip фајла.

“RIS Equipment Programme Serbia” for the equipment of commercial ships with on-board RIS devices within the framework of the Implementation of River Information Services in Serbia

The Delegation of the European Union to the Republic of Serbia has launched several projects for implementation of RIS in Serbia financed by the Instrument for Pre-Accession Assistance (IPA). In the framework of these projects, also commercial ships can be equipped with on-board RIS equipment. For this purpose, the Directorate for Waterways as the beneficiary of the EU project has launched the “RIS Equipment Programme Serbia” which will be executed by contractors contracted by the EU Delegation.

With this programme commercial ships shall be equipped under certain conditions free of charge with on-board RIS equipment.

All necessary information on the conditions and procedures of participation in the Equipment programme you can download as a zip file.

Документа
Информатор
Фото галерија
Newsletter
Notices to Skippers

ПРОЈЕКТИ

NEWADA
wanda
RISing

Програм опремања
Equipment Programme

CEVNI
Evropski pravilnik za unutrašnje plovne puteve

Да ли сте знали...
Транспорт у ЕУ је одговоран за око четвртину емисије гасова стаклене баште, 12,8% од



Serbian Customs – Bezdan-Mohacs



Iron Gate 2 Lock



National River Display - Plovput



Captaincy



Authority vessel - Customs



Authority vessel – Border Police



Authority vessel – Gendarmerie



Authority vessel – Gendarmerie





EU Danube Region Strategy: Technical Secretariat for Priority Area 1a:
To improve mobility and multimodality: Inland waterways

Working Group 4: "River Information Services"

Thank You for Your Kind Attention

Directorate for Inland Waterways
Bucharest, 27-10-2011