



Bundesministerium
für Verkehr und
digitale Infrastruktur

River Information Services

December 2017

Topics

- I. Introduction into RIS
- II. RIS national (e.g. in Germany)
- III. Corridor approach

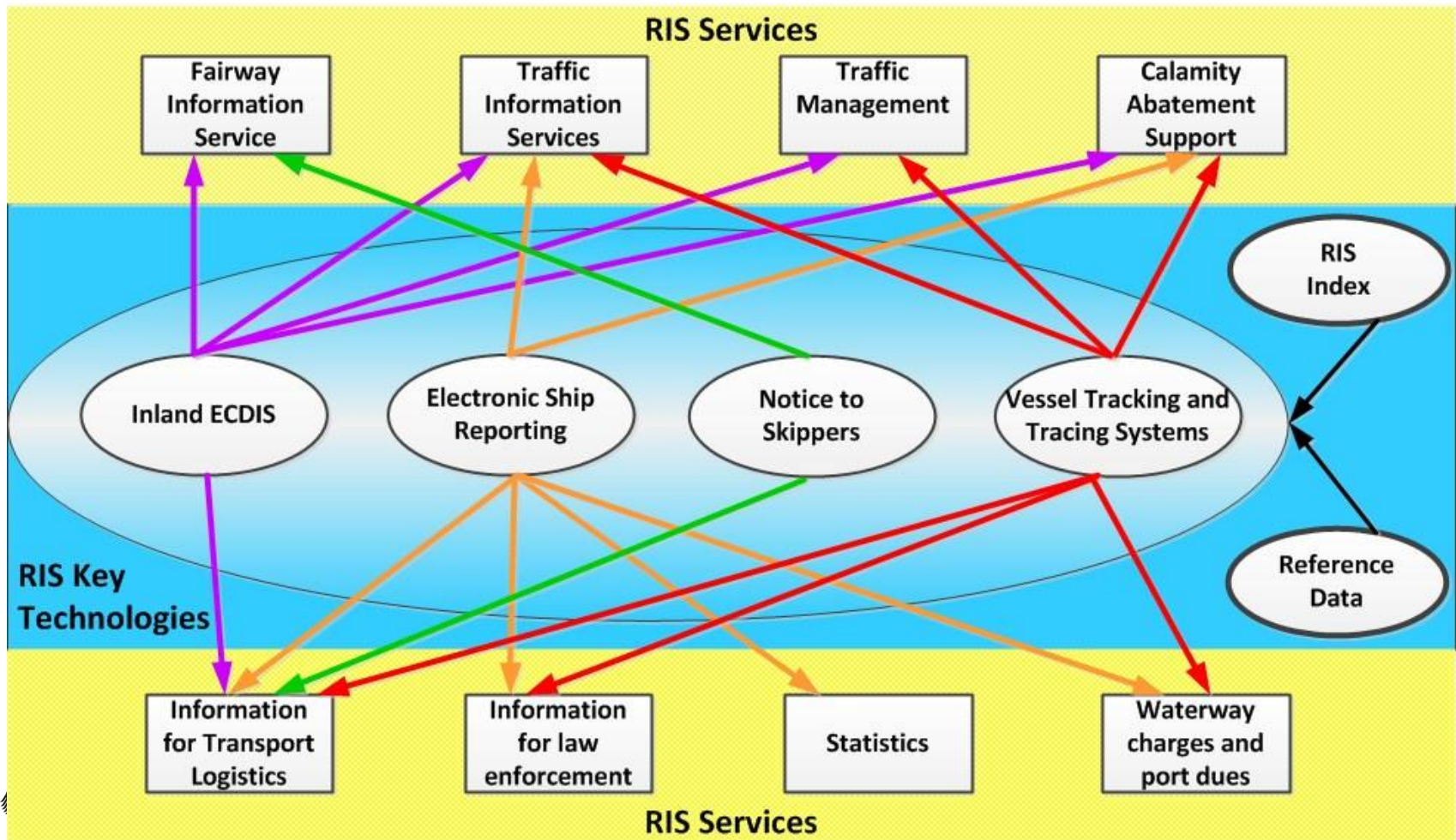
I. RIS Definition

River Information Services

- mean harmonised information services to support **traffic** and **transport** management in inland navigation, including, wherever technical feasible, interfaces to **other transport** modes.
- aim at enhancing safety, efficiency and environmental friendliness of waterway transport
- aim at utilising the inland waterways to their fullest extent

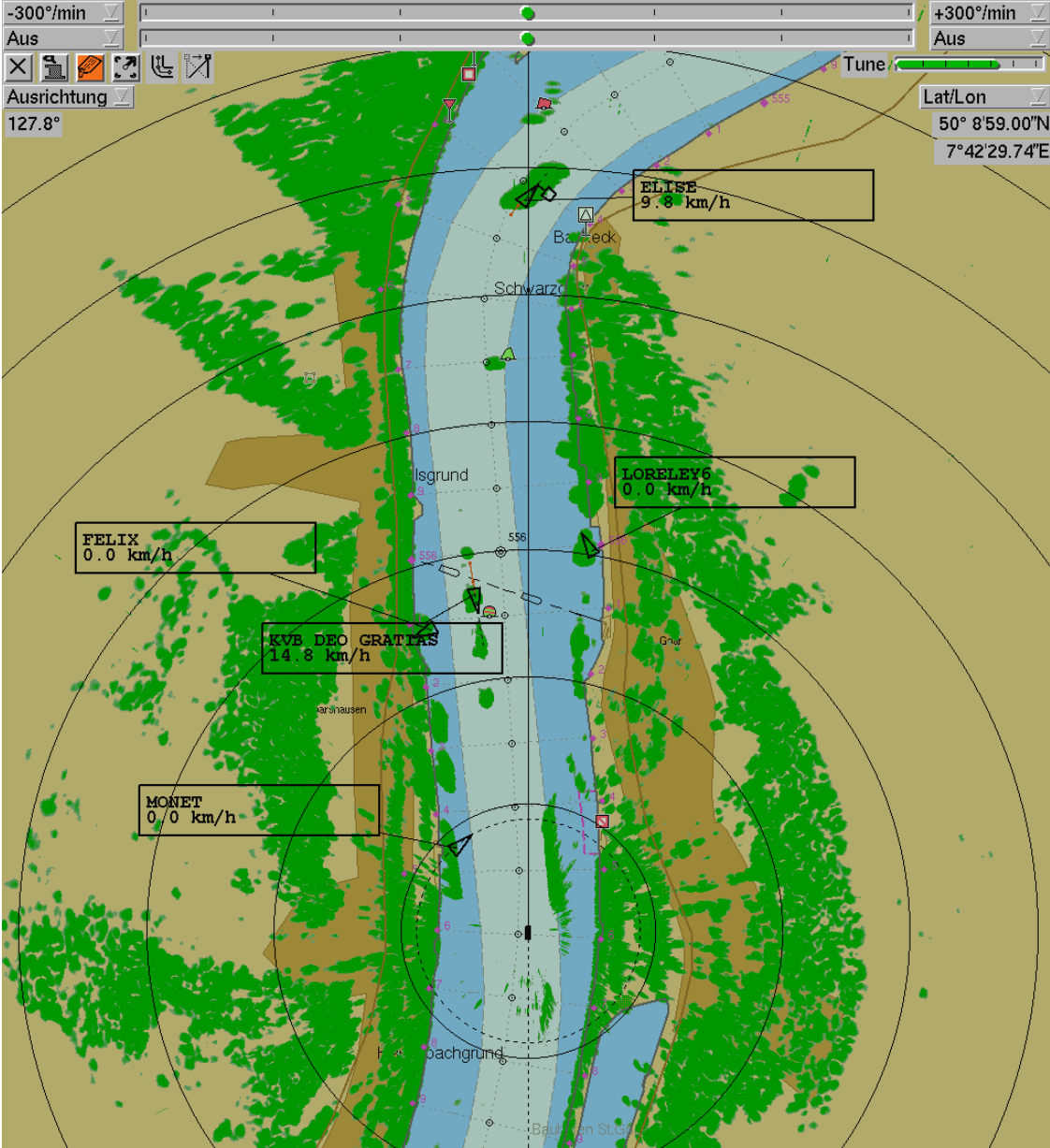
Rivers in the context of RIS include all waterways and ports; all inland waterways of the Member States of class IV and above which are linked by a waterway of class IV or above to a waterway of class IV or above of another Member State, including the ports on such waterways as referred to in Decision No 1346/2001/EC of the European Parliament and of the Council of 22 May 2001 amending Decision No 1692/96/EC as regards seaports, inland ports and intermodal terminals as well as project No 8 in Annex III (3). For the purposes of this Directive, the Classification of European Inland Waterways set out in UNECE Resolution No 30 of 12 November 1992 shall apply.

I. RIS key technologies and RIS Services



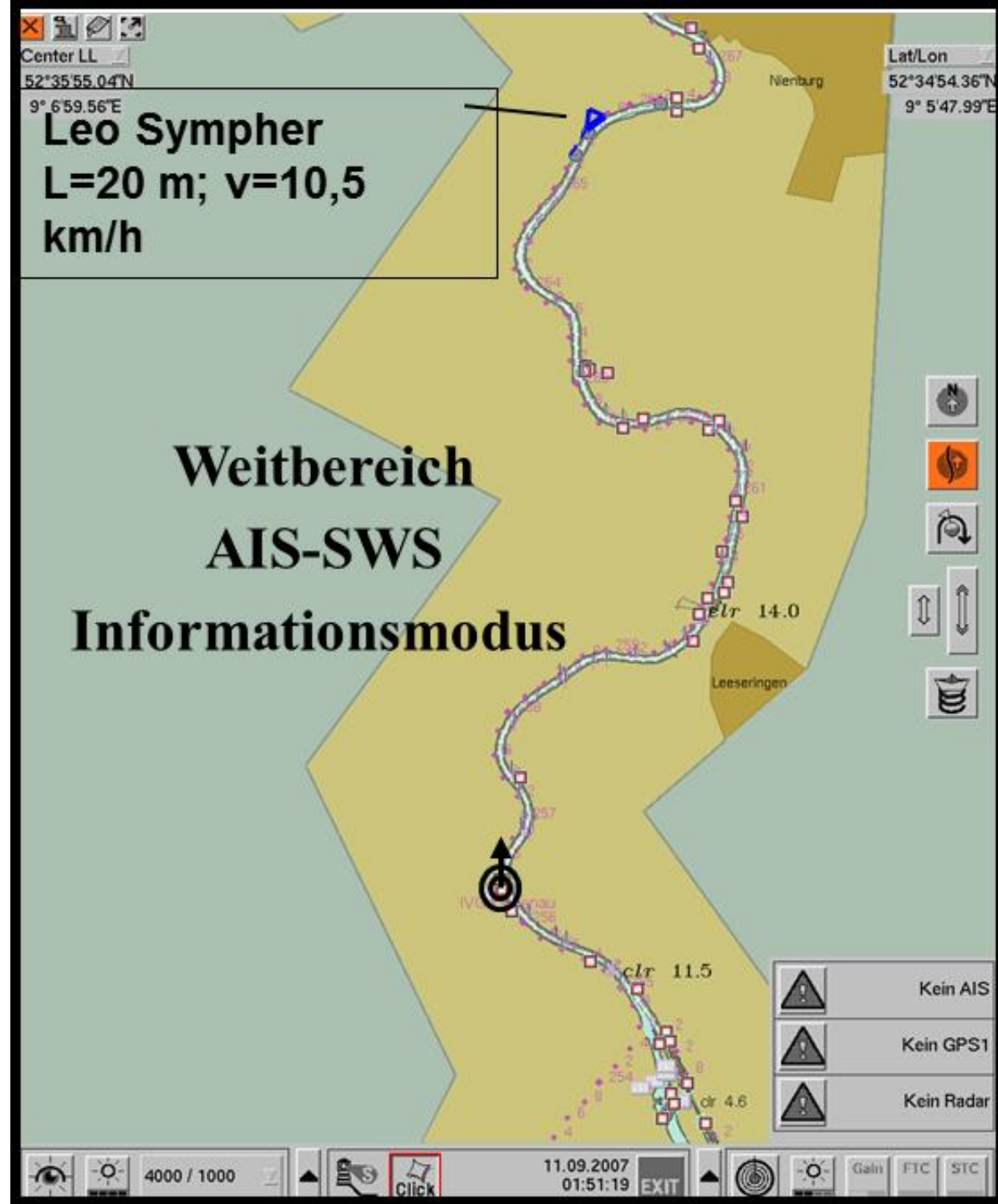
I. Inland ECDIS

Navigation Mode



I. Inland ECDIS

Information Mode



I. AIS dataset

Privacy
related data!

Vessel's static and voyage related data:

- (Unique) European Number of (vessel) Identification (ENI)
- User Identifier (Maritime Mobile Service Identity)
- UN ECE Rec-28 vessel and convoy type
- Length and beam in decimeter accuracy
- **Position**
- Velocity
- ...

I. Application Specific Messages

Specified ASMs:

- Water level message (from shore)
- Vertical bridge clearance message (from shore)
- **ETA message (from vessel)**
- RTA message (from shore)
- Signal lights message (from shore)
- Specified safety related message (from shore)

I. Electronic Reporting

- Web/email based application for the electronic reporting of
 - **Voyage information**
 - Some cargo information
 - Passenger information
- Unambiguous, language independent
- Cross border exchange of reports
- **Privacy related and economic sensitive data!**

I. Legal Basis for RIS

Legal Frame	Technical Guidelines	Technical Specifications
Directive 2005/44/EC RIS Directive 7 Sept 2005 on harmonised river information services (RIS) on inland waterways in the Community	CR EC/414/2007 concerning the technical guidelines for the planning, implementation and operational use of RIS (based on PIANC RIS Guidelines)	CR EC/415/2007 concerning the technical specifications for vessel tracking & tracing system (Inland AIS)
		CR EC/416/2007 concerning the technical specifications for Notices to Skippers (NtS)
		CR EC/164/2010 defining the technical specifications for electronic ship reporting (ERI)
		CR EC/909/2013 defining the technical specifications for Inland ECDIS

I. Legal Basis for RIS

– the process of revision already started

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II. RIS in Germany

Maritime waterways 23,000 km²

Federal inland waterways

Total length: 7,300 km

75% rivers

25% canals

class IV and above: 5,100 km

1,300 bridges

315 locks - 428 lock chambers

290 weirs

2 ship canal lifts

2 barrages

Inland ENCs

full coverage for waterways > class IV

according to actual Standard, Edition 2.3

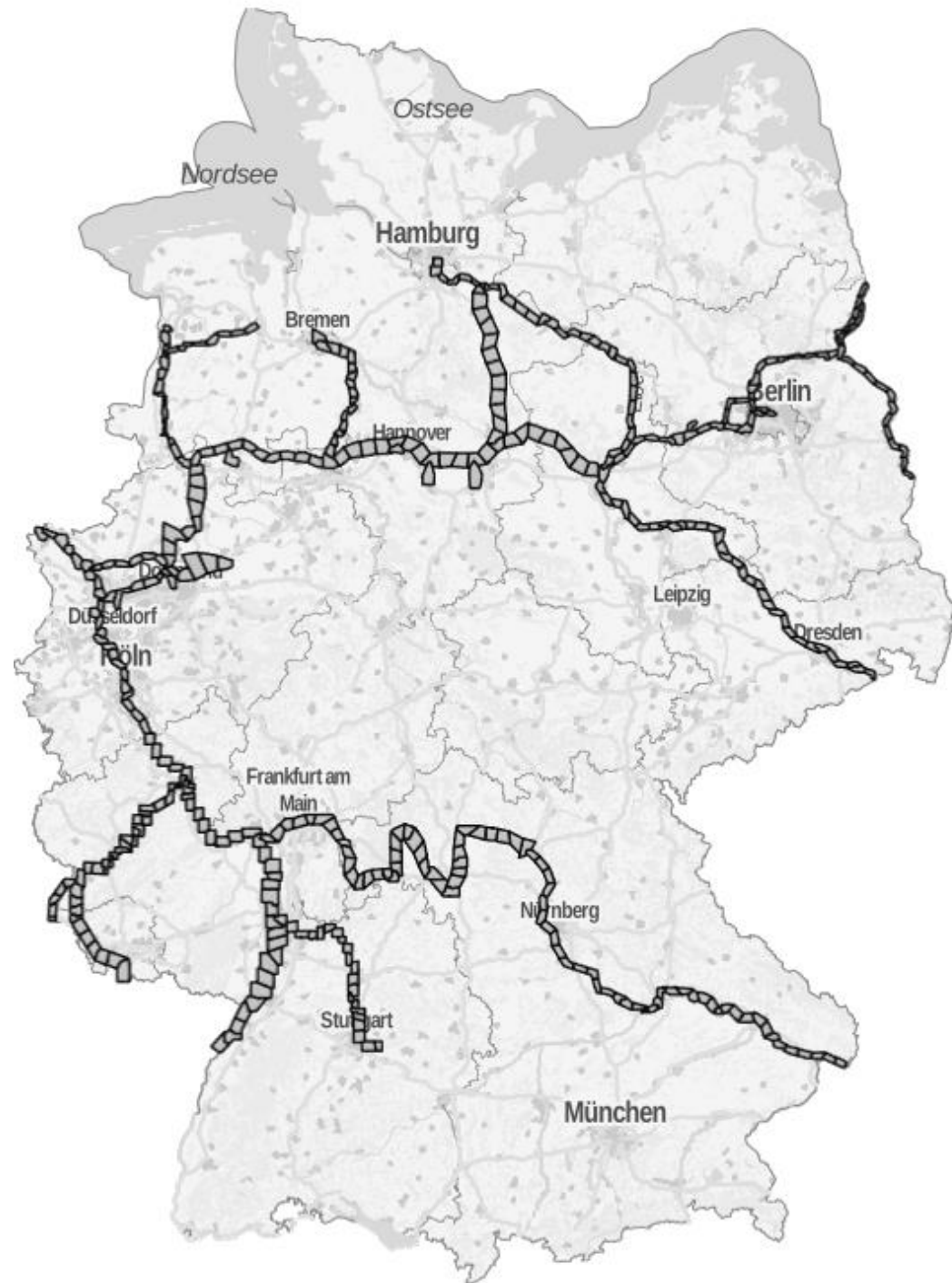


Quelle: Bundesministerium für Verkehr und digitale Infrastruktur, Mai 2016, Karte W 142 c
Kartographische Fachstelle für Geoinformationen 505, Regensburg, zur Verfügung gestellt gemäß GeoMNV
Bundeswasserstraßen, die eine Länge von unter 5 km aufweisen, sind maßstabsgerecht nicht mehr dargestellt.

Stand der Herstellung: Oktober 2015

fertiggestellt	Grenze zwischen Außenstellen der GDWS
in Bearbeitung	Sitz der Gesamtdirektion Wasserstraßen und Schifffahrt (GDWS)
derzeit ohne rechtliche Verpflichtung zur Herstellung von Land ENC (z.B. Wasserklasse IV)	Sitz einer Außenstelle der GDWS
Abgrenzung zur maritimen ENC	Sitz eines Wasser- und Schifffahrtsamtes in Deutschland
	Sitz einer Oberförder- / Bundesstation

II. Inland ENC's in Germany



II. AIS in Germany

Legal obligations for carriage and usage of

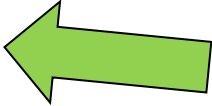
- **AIS:** Kiel Canal since 2006
- **AIS and ECDIS:** Mittelweser since 2010 (operational tests)



TMS Waldhof

II. AIS in Germany

Legal obligations for carriage and usage of

- **AIS:** Kiel Canal since 2006
- **AIS and ECDIS:** Mittelweser since 2010 (operational tests)
- **AIS and ECDIS:** Rhine since 01.12.2014 
- **AIS and ECDIS:** Mosel since 01.01.2016
- **AIS and ECDIS:** remaining main waterways since 23.12.2016

on inland vessels in order to support the skippers' navigation

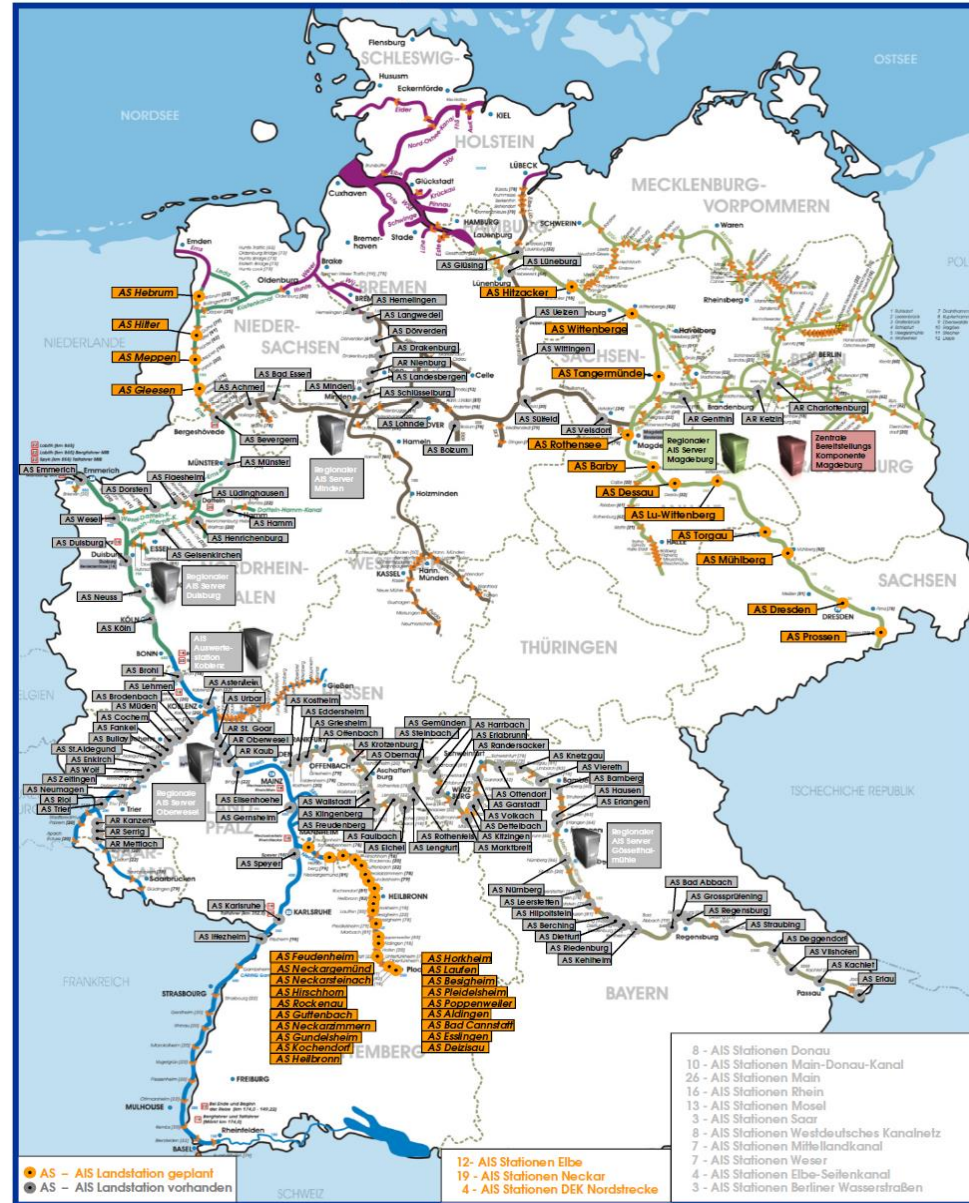
II. AIS in Germany

AIS shore based infrastructure

Today coverage of 3750 km of inland waterways

- 130 Inland AIS shore stations
- 10 Repeater stations
- 5 regional Inland AIS centres

Inland AIS - Landseitige Ausstattung an Binnenwasserstraßen
Planungen - Stand Februar 2017



II. ERI in Germany

Electronic reporting for CAS

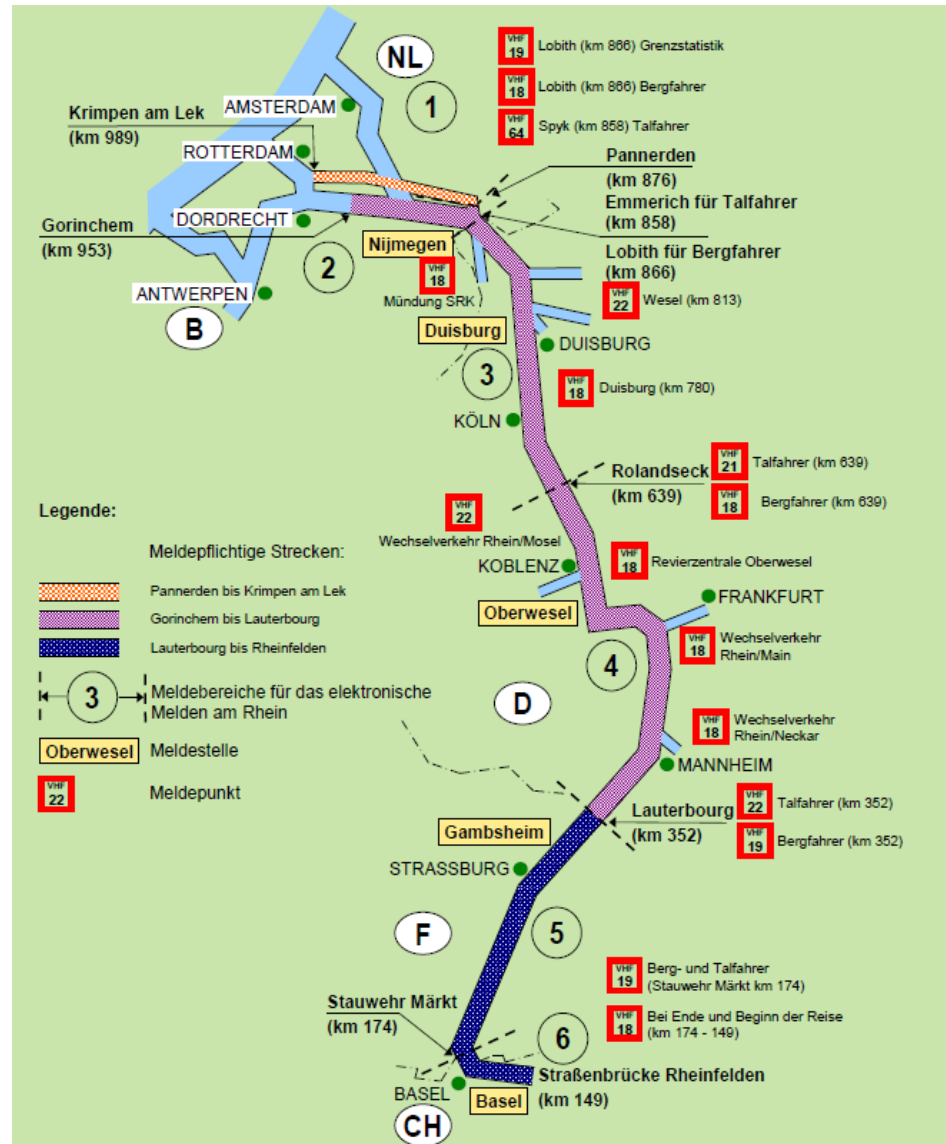
- Legal obligation on Rhine since 01.04.2010

ERI data exchange

between DE and NL, LU, FR to reduce skippers' administrative burden

Electronic transport document

In line with ADN chapter 5.4



II. www.ELWIS.de

The screenshot shows the ELWIS website interface. At the top, there is a navigation bar with links for 'NfB', 'BfS', 'F/T', 'Wasserstände', 'Eislagen', and 'Schleuseninformationen', along with icons for a hand, a leaf, and a lock. A search bar labeled 'Suchbegriff' is on the right. The logo for 'WSV.de' (Wasserstraßen- und Schifffahrtsverwaltung des Bundes) is on the left. Below the logo is a horizontal menu with 'Binnenschifffahrt', 'Seeschifffahrt', 'Sportschifffahrt', 'Untersuchung/Eichung', 'Schifffahrtsrecht', and 'Service'. The main content area has a 'Service' header and a breadcrumb trail: 'Home > Service > Inland ENC der WSV'. The main heading is 'Inland ENC der WSV'. Below it, there is a paragraph starting with 'Die Wasserstraßen- und Schifffahrtsverwaltung des Bundes (WSV) ...' and a link to 'Verordnung (Interner Link)'. A callout box with a blue border and white background is tilted and contains the following text: 'In 2016: 31.2 mio site views, 3.8 mio emails sent, 250 authors'. Below the callout, there is more text: 'Ein Quellenvermerk gemäß GeoNutzV ist **nicht** anzubringen.', 'Die Inland-ENC können im offiziellen Inland > ECDIS-Austauschformat (Interner Link) heruntergeladen werden.', 'Es besteht die Möglichkeit, über > ELWIS-Abo (Interner Link) Informationen zu erhalten, dass neue bzw. geänderte Inland-ENC zur Verfügung stehen.', and 'Für die Anzeige der Inland-ENC ist eine Inland ECDIS-Applikation (> Gerät oder Anwendung (Interner Link)) erforderlich. Diese Inland ECDIS-Applikation ist **nicht** Umfang der kostenfreien Bereitstellung von Inland-ENC.'

NfB BfS F/T Wasserstände Eislagen Schleuseninformationen



Suchbegriff



WSV.de

Wasserstraßen- und
Schifffahrtsverwaltung
des Bundes

ELWIS

Binnenschifffahrt Seeschifffahrt Sportschifffahrt Untersuchung/Eichung Schifffahrtsrecht Service

Service



Service Inland ENC der WSV

Inland ENC der WSV

Die Wasserstraßen- und Schifffahrtsverwaltung des Bundes (WSV) ...
→ [Verordnung \(Interner Link\)](#) zur Festlegung der Nutzungsbestimmungen
ab.

Ein Quellenvermerk gemäß GeoNutzV ist **nicht** anzubringen.

Die Inland-ENC können im offiziellen Inland > [ECDIS-Austauschformat \(Interner Link\)](#) heruntergeladen werden.

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In 2016:


31.2 mio site views
3.8 mio emails sent
250 authors


bindung mit der
(V) **geldleistungsfrei**

II. www.VisuRIS.be

VLAANDEREN.be De Vlaamse Waterweg Een probleem melden Contacteer ons


VisuRIS De Vlaamse Waterweg

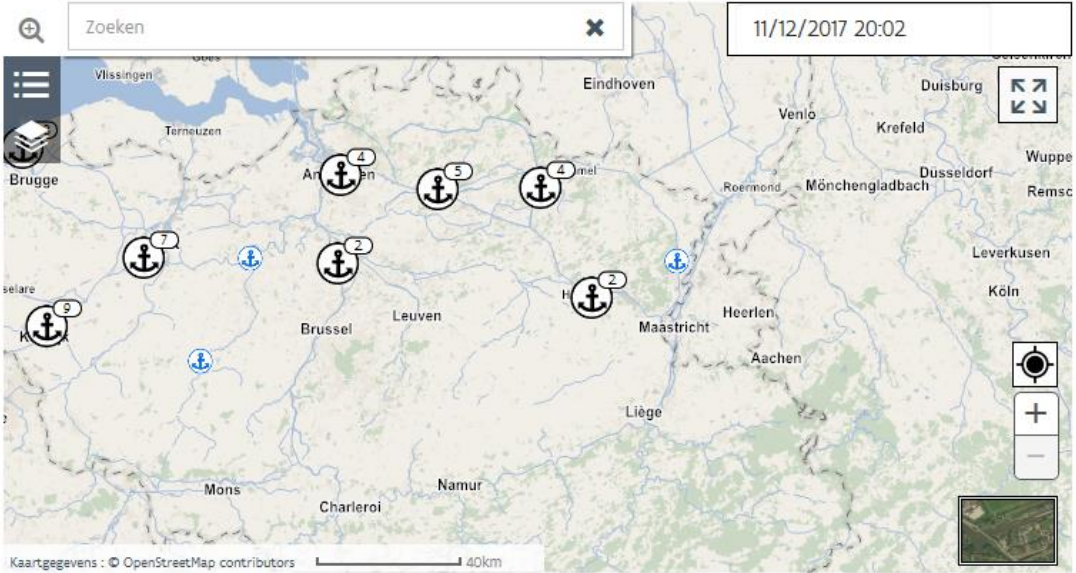
Zoeken 



Actueel Waterweg Diensten Over RIS [Aanmelden >](#)



HUIDIGE SITUATIE



Zoeken  11/12/2017 20:02



Kaartgegevens : © OpenStreetMap contributors 40km

REISPLANNER

Van  

Naar  

+ Voeg tussenstop toe

[Plan reis](#) [Meer opties](#)

Nog geen account?

Registreer je hier! [Registreren](#)

Al een account?

Meld je hier aan! [Aanmelden](#)

RECENTE SCHEEPVAARTBERICHTEN

2017/1623/00	11/12/2017	Maldegem EMT/Akl	1,90 m TAW
waarschuwing - Leie km 0.0 (Menen) Toeristische Leie km 36.5 (Deinze) Afleidingskanaal van de Leie km 0.0 (Deinze) Afleidingskanaal van de Leie km ...			
		Teralfene EMT/Dender	8,28 m TAW

RECENTE HYDROMETEO GEGEVENS

11/12/2017 19:30

NIEUWSBERICHT

ELEKTRONISCH MELDEN IN VLAANDEREN

Heb je een vraag over het elektronisch melden van reizen in Vlaanderen. Bij het overzicht van de RIS

II. RIS national

Member States focus on national implementation

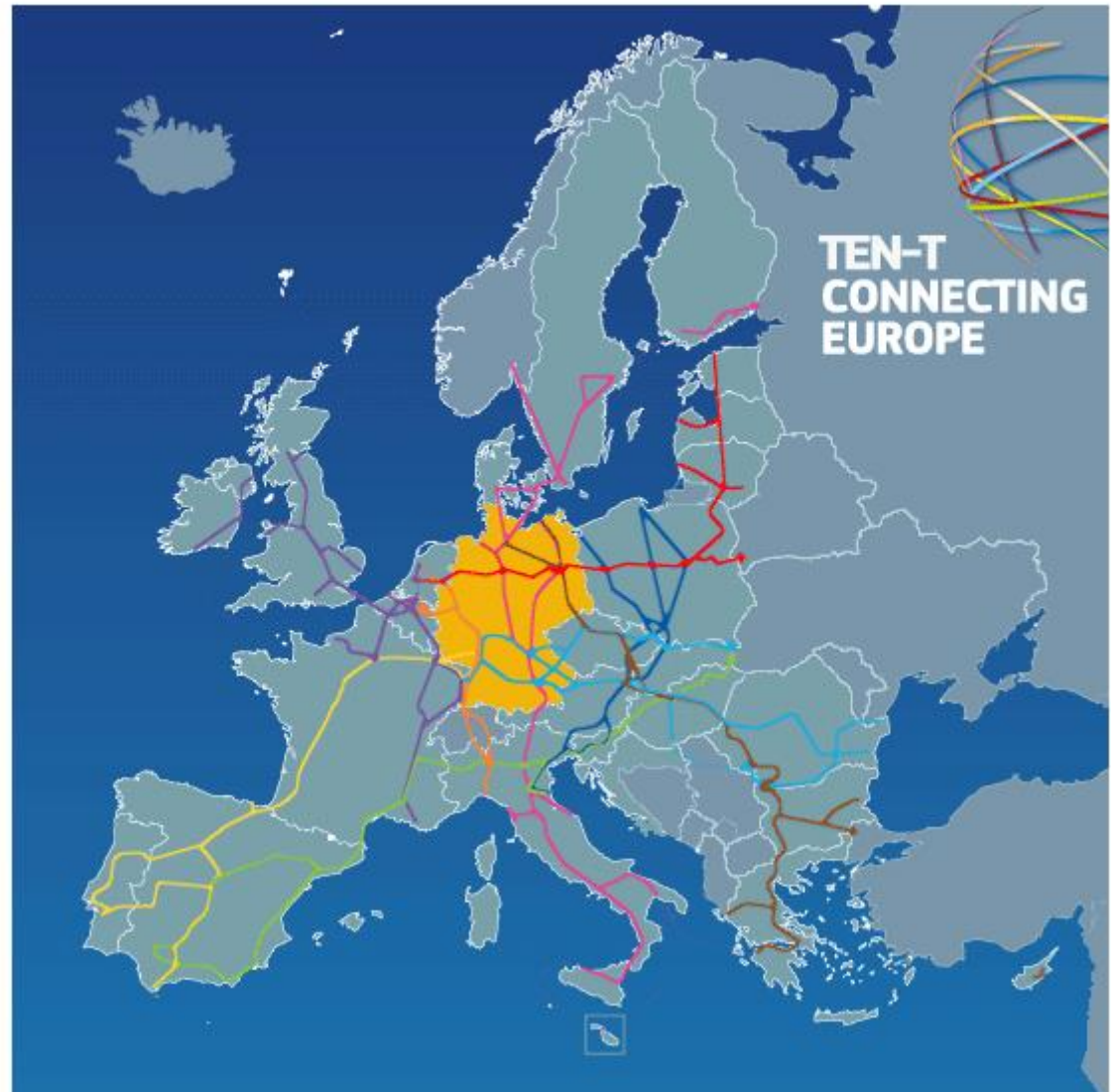
- National RIS portals
- Different service portfolios
- Complaints regarding
 - limited RIS data exchange across borders
 - lack of compatibility
 - differences in data quality
- ...

III. Corridor approach

Germany is part of 6 TEN-T corridors

North Sea-Baltic
Orient/East-Med
Scandinavian-Mediterranean
Rhine-Alpine
Atlantic
Rhine-Danube

**Inland waterways‘
border sections with
NL – LU – FR – AT – CZ - PL**



III. CoRISMa

Study on RIS enabled management of the European IWT corridors

- Next step in the deployment of RIS
- 5 countries (NL, BE, LU, AT, DE plus FR as cooperative partner)
- Co-funded by the EU

III. CoRISMa

common understanding:

“Corridor Management is defined as information services among

- *waterway authorities mutually*
- *waterway authorities and waterway users*
- and*
- *Waterway authorities and related logistic partners*

in order to optimise use of inland navigation corridors within the network of waterways”

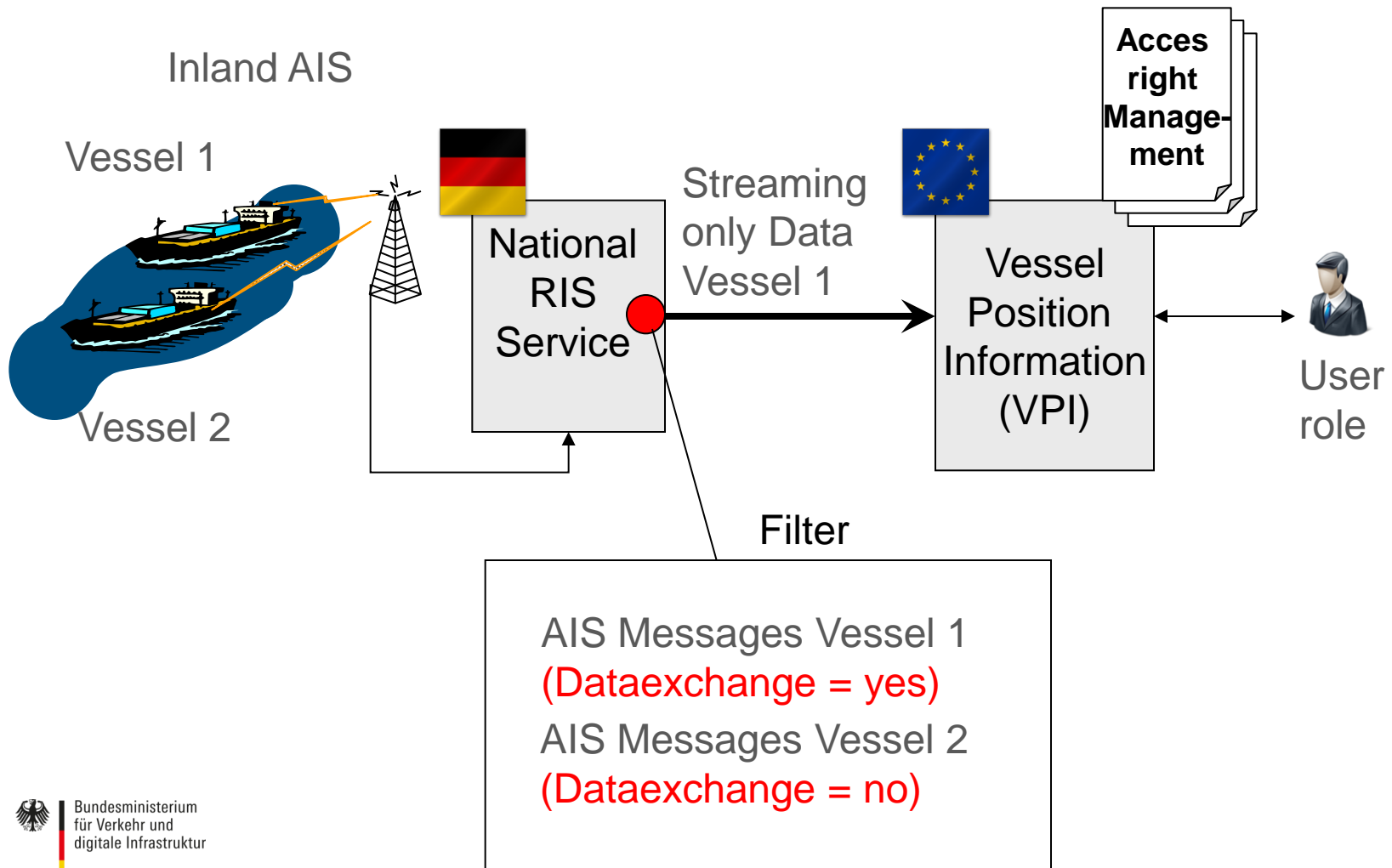
III. CoRISMa

Levels of Corridor Management

1. Providing **Infrastructure information** to enable **reliable route planning**
2. Providing **Traffic Information** for **voyage planning** and for **traffic management**
 - present use of the waterway network (e.g. actual waiting times)
 - predictions where considered reasonable for **traffic planning**
3. Enabling controlled access to **vessels' position and ETAs** to support **transport and deviation management** of the logistic partners

III. Information for transport logistics



CoRISMa pilot 5: vessel position data exchange for logistics



III. Information for transport logistics

CoRISMa pilot 5: vessel position data exchange for logistics

Common VPI

ABMELDEN NUTZUNGSBEDINGUNGEN  

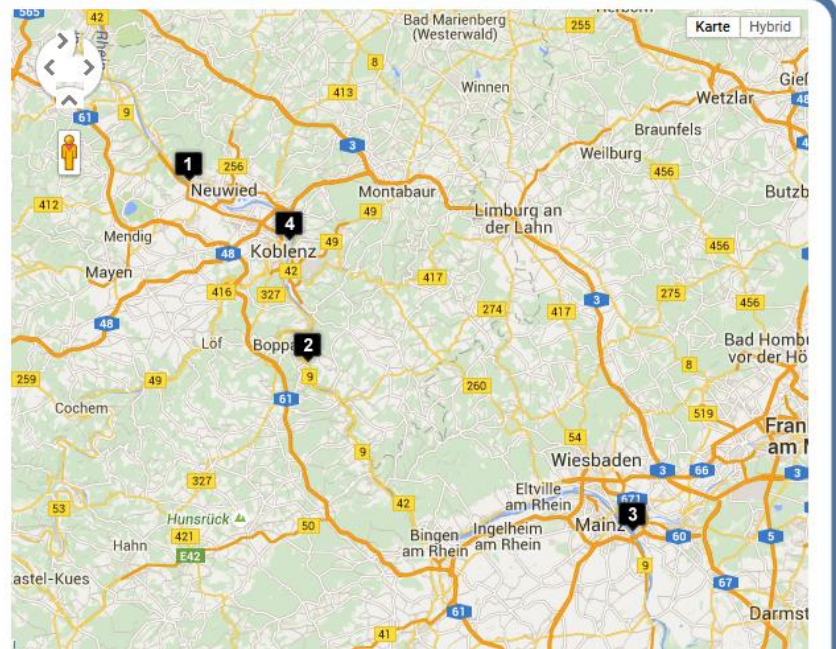
Schäfer, Birgitta

Inbox Suchen **Verkehrsdaten** Meine Daten

Schiffe Schiffdetails

Schiffsliste - 4 verfügbar

	Name (MMSI / ENI)	Position	Zeitstempel	km/h
4	BS MAINZ 211550090 / 05018450	DE, Mosel km 0	01.12.15 11:10:40	0,0
1	DUNDEE 211179370 / 05501380	DE, Rhein km 613	01.12.15 11:10:40	0,4
3	MS WIRBELEY 211695300 / 05041950	DE, Rhein km 494	01.12.15 11:10:40	0,0
2	ST GOAR 211695290 / 05041830	DE, Rhein km 565	01.12.15 11:10:40	0,0

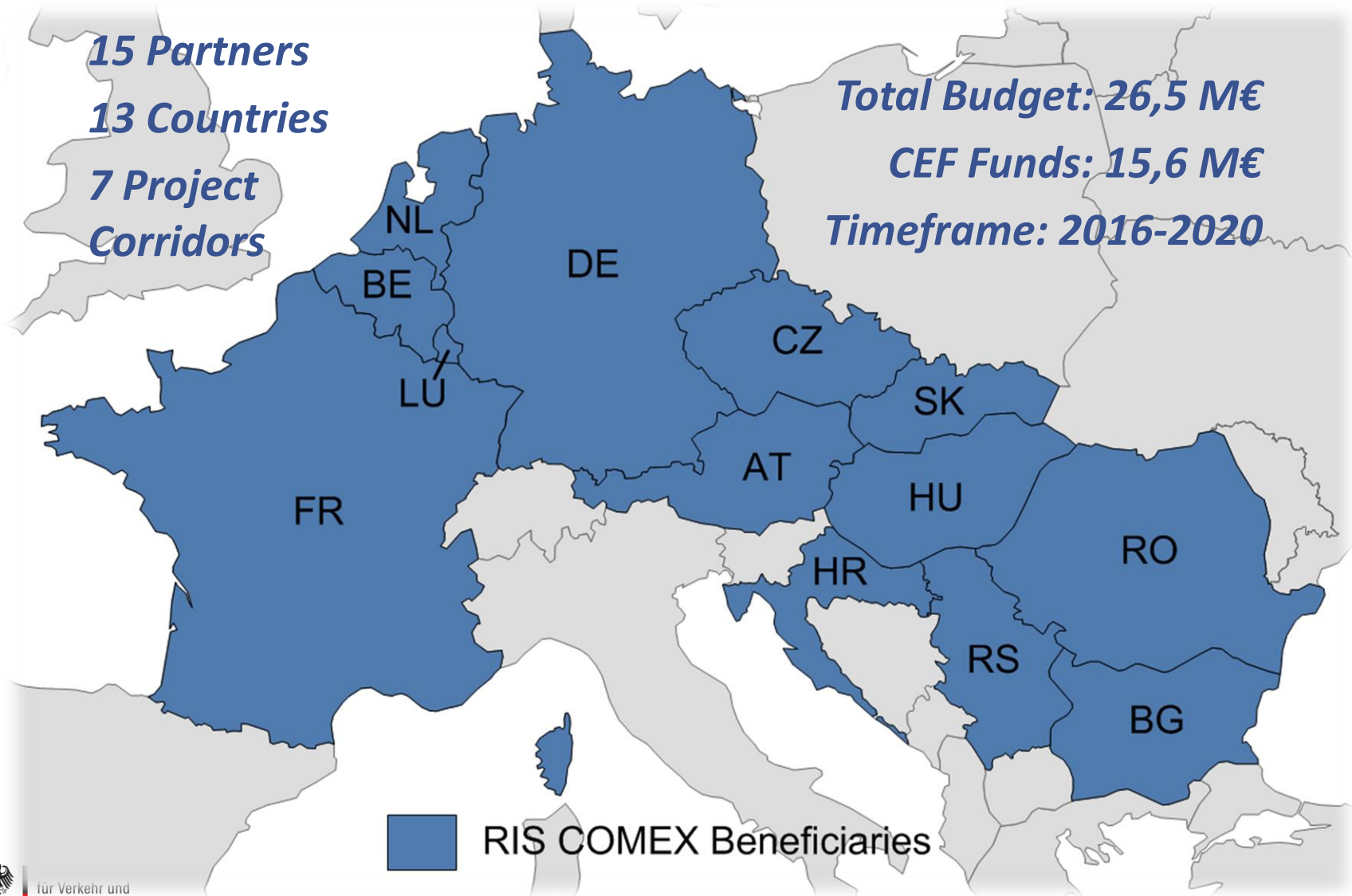


III. CoRISMa

Results

- Agreement on definition and services
- Agreement on procedure for further action:
 - Define corridors between centres of economy among the riparian states
 - Waterway authorities commonly decide on services according to the requirements of the corridor
- Agreement to implement harmonised RIS accordingly

III. RIS COMEX



III. RIS COMEX



III. RIS COMEX

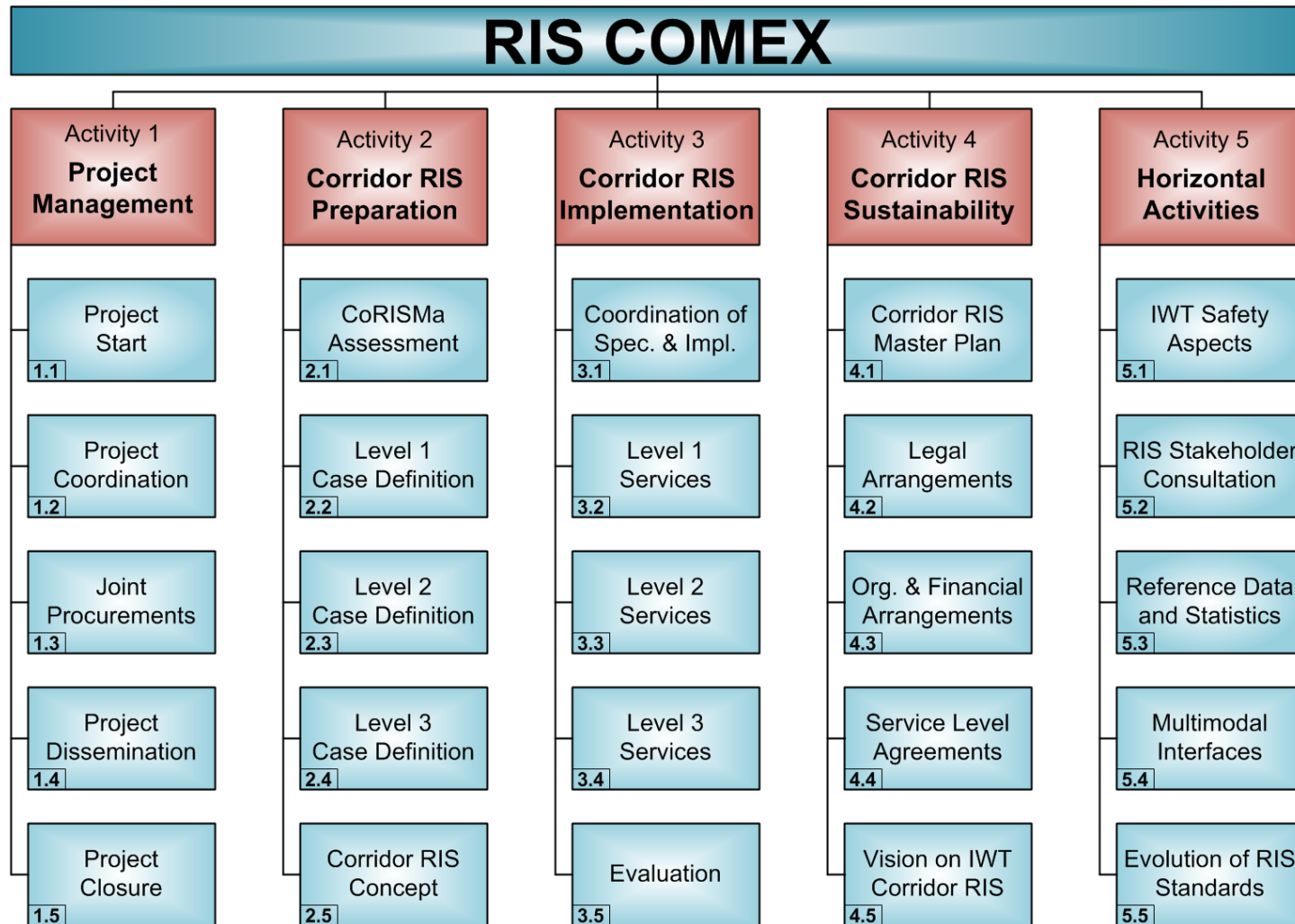
Harmonised implementation of RIS in defined Corridors

according to the CoRISMa concept and to users' needs*

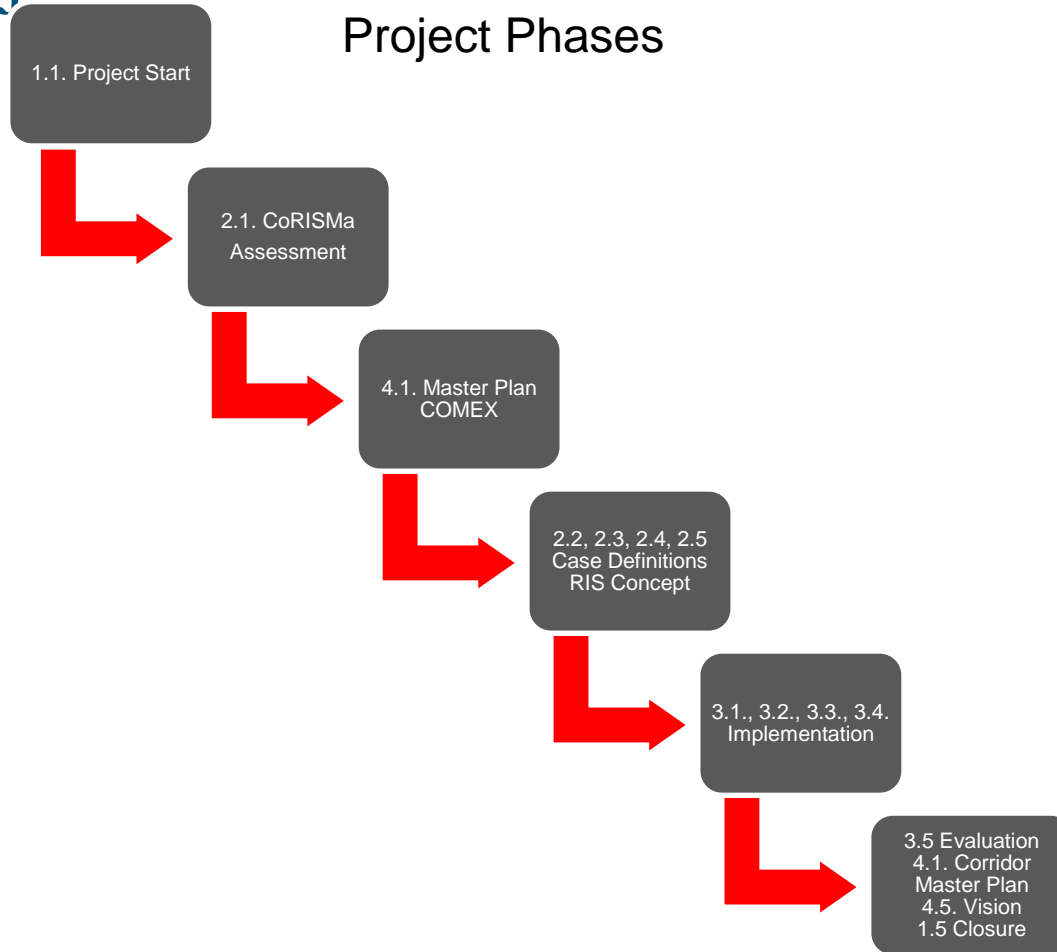
- evolve RIS from national systems to services on Corridor level
- based on a Corridor RIS Concept
- improve the added value of RIS especially for logistics users
- create a single point of access for the end users
- enable sustainable operation beyond the project

* users' needs are asked in Industry Reference Groups and via questionnaires

Work Breakdown Structure



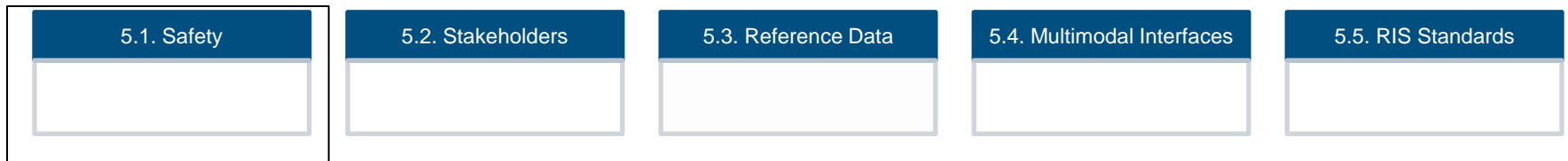
Project Phases



Supporting activities

- 1.2 Project Coordination
- 1.3. Joint Procurements
- 1.4. Dissemination
- 4.2. Legal
- 4.3. Organisation and Finance
- 4.4. Service Level Agreement

Horizontal activities



III. RIS COMEX

In order to

- make IWT a transparent mode of transport, able to be scheduled and reliably integrated into the logistic chain
- enable best use of the available infrastructure
- Improve efficiency and environmental friendliness
- reduce administrative burdens



Thank you for your attention!

contact

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