Morning agenda

- 1000-1030 Keynotes
- 1030-1100 The RTF project
- **1100-1200 What's in it for me?**
- 1200-1330 Lunch

Interreg Baltic Sea Region

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Intermodal (Ferry) Real Time Information System Rostock - Gedser - Nykøbing F

Project part-financed by the EU

Project „Interface Plus“ 2010 – 2015

Goals

Door 2 Door Real Time Information for the travel chain:
(Berlin)- **Rostock – Gedser – Nykøbing** - (Copenhagen)

Increase in attractiveness for the travel connection and facilitate and enhance comfort for:

- trip planning
- traveling (connection traffic/ next options in real time)

Target Group: Foot Passengers

Project „Interface Plus“ 2010 – 2015 Partners

- VVW - Public Transport Association Warnow
- Rostock Port
- Scandlines
- Municipality of Guldborgsund
- Movia (Rejseplanen)

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Project „Interface Plus“ 2010 – 2015
Main Challenges

- Connecting 6 different travel information systems from 2 countries with very different requirements in real time
- Connecting 3 different transports means (trains, ferry, buses) from very different domains (public transport, shipping) in real time
- Partly develop completely new systems – Real-time information for seagoing ferry vessels developed from scratch.

Project „Interface Plus“ 2010 – 2015
Main Results

- Ferry Real Time Information System (“FRIS”) for Scandlines Ferrys Rostock-Gedser (based on AIS + own self-learning prediction algorithms)
- Port of Rostock Passenger Terminal Information System (Scandlines in real time/ TT-Line, Stena Lines, SOL, Finnlines with schedules and cancellation)
- Intermodal (Ferry) Real Time Information in journey planners (Deutsche Bahn, VVW, Rejseplanen)
- Real Time Information inside transport means and at station boards along the whole transport chain

Real Time Ferries

South Baltic Programme

Interreg Baltic Sea Region

European Union

European Regional Development Fund

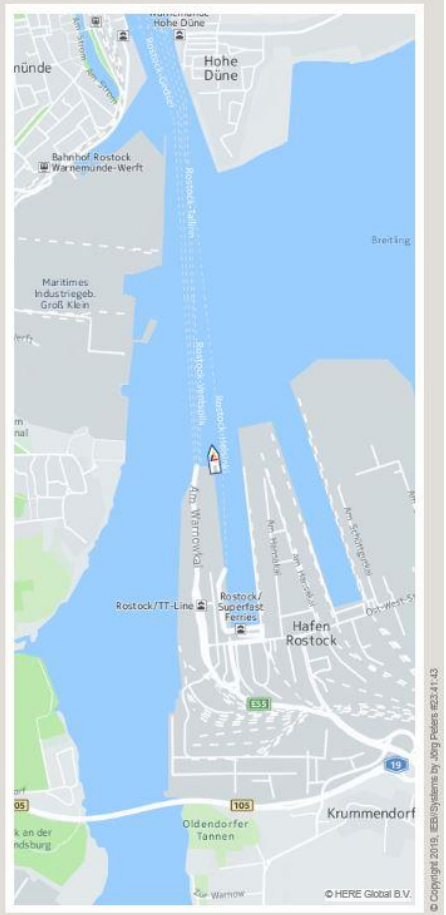
On Board Displays Scandlines Ferry “Berlin”

Scandlines

23:41

Rejseinformationer • Reiseauskunft • Travel Information

Linje Linie Line	Fra Von From	Afgang Abfahrt Departure	Til Nach To	Ankomst Ankunft Arrival
Scandlines	Rostock	23:45 23:45	Gedser Færge	01:45 01:45
				5 min
740	Gedser Færge (…	04:39	Nykøbing Falste…	05:18
	Retning: Nykøbing F St.;			
				3 min
Togbus G…	Nykøbing F St.	05:30	Vordingborg St.	06:10
	Retning: Vordingborg St.;Cykler kan ikke medtages			



Alle Angaben ohne Gewähr • Informationer uden garanti
Information without guarantee

Real Time Ferries

South Baltic Programme

Interreg Baltic Sea Region

European Regional Development Fund

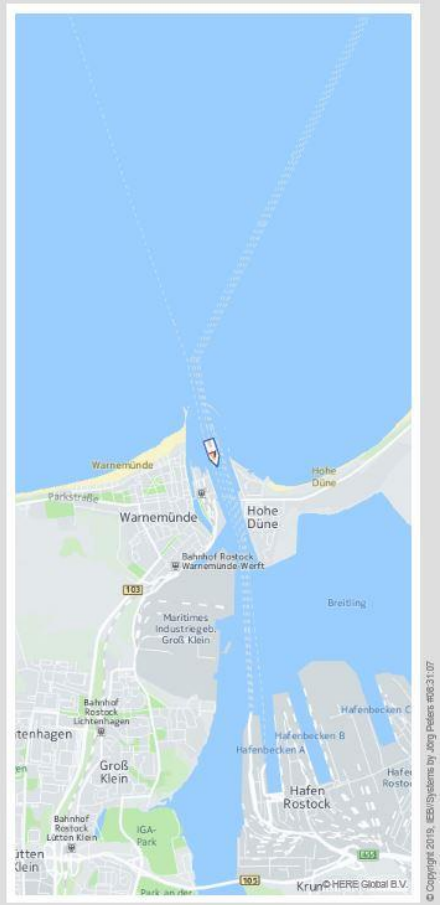
European Union

On Board Displays Scandlines Ferry “Copenhagen”

Scandlines

Reiseauskunft • Rejseinformationer • Travel Information

	Linie Linje Line	Haltestelle Busstopested/Station Stop/Station		Zeit Tid Time	Heute I Dag Today
Scandlines	SCL	Gedser	ab • dep	07:00	07:00
		Rostock Scandlines	an • arr	08:45	08:47
		Fußweg • Gangafstand • Footpath ca. 5 min			
BUS ROSTOCK PORT	Shuttle	Rostock Scandlines	ab • dep	09:00	
		Rostock Seehafen Fähre	an • arr	09:05	
		Fußweg • Gangafstand • Footpath ca. 0 min			
BUS RSAG	49	Rostock Seehafen Fähre	ab • dep	09:31	09:31
		Rostock S Lütten Klein	an • arr	09:43	09:43
		Fußweg • Gangafstand • Footpath ca. 4 min			
DB BAHN	S2	Rostock-Lütten Klein	ab • dep	09:56	09:56
		Rostock Hbf	an • arr	10:09	10:09



Alle Angaben ohne Gewähr • Informationer uden garanti
Information without guarantee

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FRIS - Ferry Operator Web-Tool for schedule planning, dispatching and real time

Passenger-Information-System
Public Transport Association Warnow

WELCOME | DEPARTURES | PLANNER | TRACKING | SUPPORT | LOGOUT | DE

Departures

Search departures

Date	Line	Direction	Vehicle	Action
Wed 18.09.19	SCL Rostock/Gedser	All Directions	All Vehicles	

Founded departures

Line	Scheduled Departure	From / To	Date / Time / Estimation	Vehicle	Information
	07:00	Gedser Rostock Scandlines	Wed 18.09.19 07:00 0 Wed 18.09.19 08:45 +3	SCL Copenhagen	
	09:00	Gedser Rostock Scandlines	Wed 18.09.19 09:00 0 Wed 18.09.19 10:45 0	SCL Berlin	
	09:00	Rostock Scandlines Gedser	Wed 18.09.19 09:00 0 Wed 18.09.19 10:45 0	SCL Copenhagen	
	11:00	Gedser Rostock Scandlines	Wed 18.09.19 11:00 0 Wed 18.09.19 12:45 0	SCL Copenhagen	
	11:00	Rostock Scandlines Gedser	Wed 18.09.19 11:00 0 Wed 18.09.19 12:45 0	SCL Berlin	
	13:00	Gedser Rostock Scandlines	Wed 18.09.19 13:00 0 Wed 18.09.19 14:45 0	SCL Berlin	
	13:00	Rostock Scandlines Gedser	Wed 18.09.19 13:00 0 Wed 18.09.19 14:45 0	SCL Copenhagen	
	15:00	Gedser Rostock Scandlines	Wed 18.09.19 15:00 Wed 18.09.19 16:45	SCL Copenhagen	
	15:00	Rostock Scandlines Gedser	Wed 18.09.19 15:00 Wed 18.09.19 16:45	SCL Berlin	
	17:00	Gedser Rostock Scandlines	Wed 18.09.19 17:00 Wed 18.09.19 19:00	SCL Berlin	
	17:00	Rostock Scandlines Gedser	Wed 18.09.19 17:00 Wed 18.09.19 19:00	SCL Copenhagen	
	19:15	Gedser Rostock Scandlines	Wed 18.09.19 19:15 Wed 18.09.19 21:15	SCL Copenhagen	
	19:15	Rostock Scandlines Gedser	Wed 18.09.19 19:15 Wed 18.09.19 21:15	SCL Berlin	
	21:30	Gedser Rostock Scandlines	Wed 18.09.19 21:30 Wed 18.09.19 23:30	SCL Berlin	

Passenger-Information-System
Public Transport Association Warnow

WELCOME | DEPARTURES | PLANNER | TRACKING | SUPPORT | LOGOUT | DE

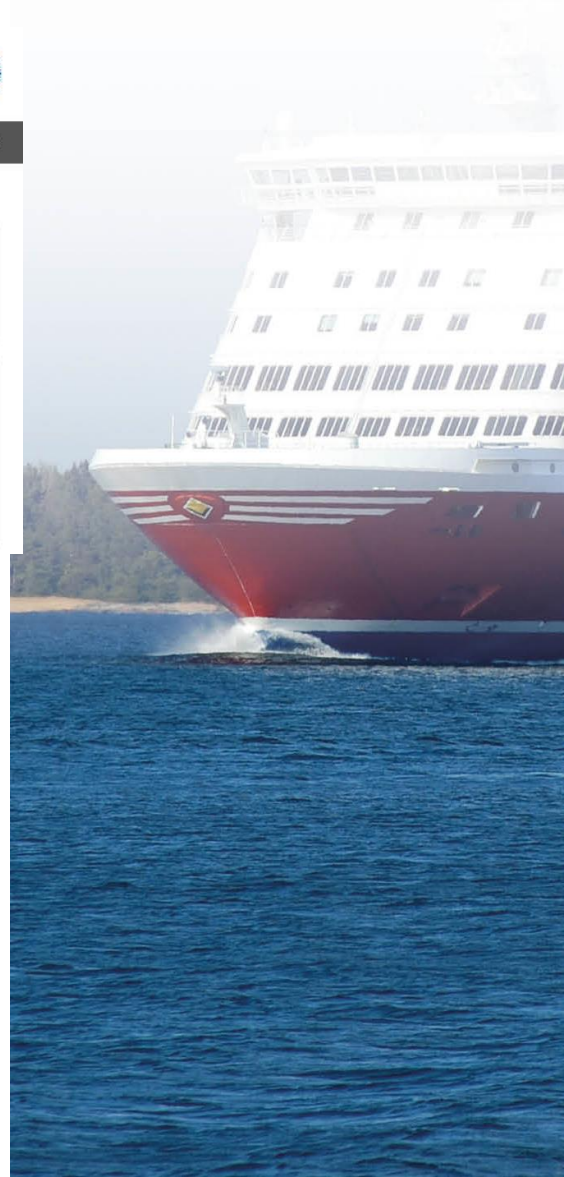
Departures

Search departures

Date	Line	Direction	Vehicle	Action
Thu 12.09.19	SCL Rostock/Gedser	All Directions	All Vehicles	

Founded departures

Line	Scheduled Departure	From / To	Date / Time / Estimation	Vehicle	Information
	23:45	Gedser Rostock Scandlines	Thu 12.09.19 23:45 +2 Fri 13.09.19 01:45 +6	SCL Copenhagen	
	23:45	Rostock Scandlines Gedser	Thu 12.09.19 23:45 0 Fri 13.09.19 01:45 0	SCL Berlin	



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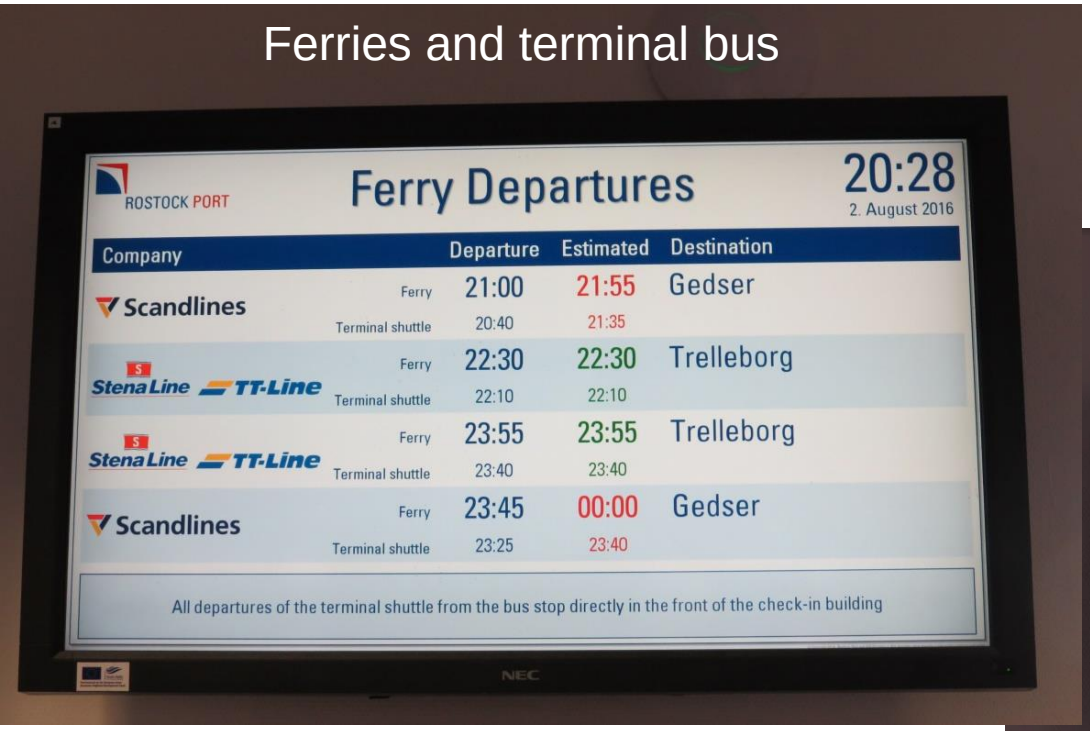
Passenger Terminal Displays - Rostock Port (DE)

Ferries and terminal bus



Public transport

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Station Boards - Rostock Port

public transport

terminal bus

Interreg Baltic Sea Region

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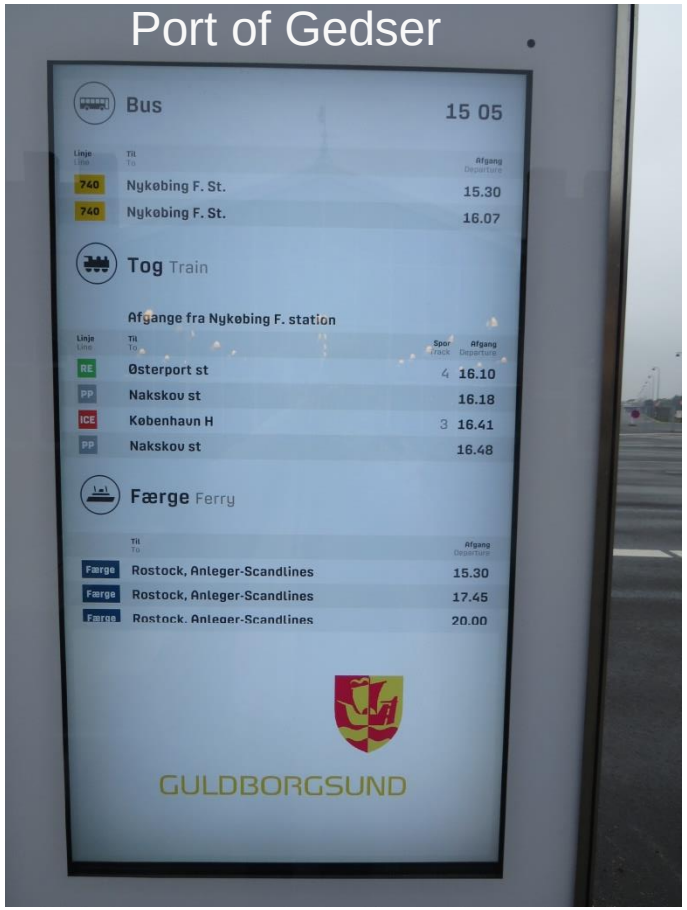
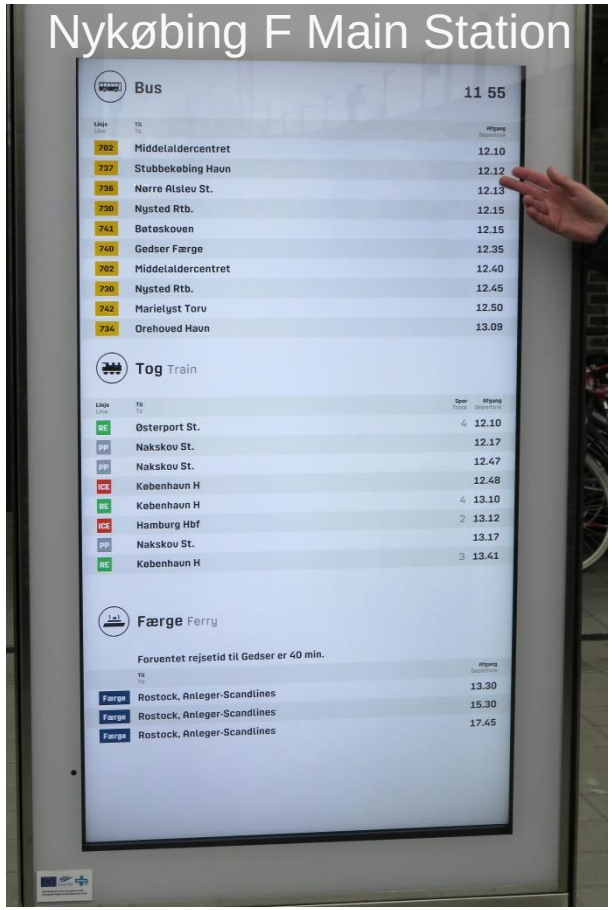
Station Boards - Rostock City

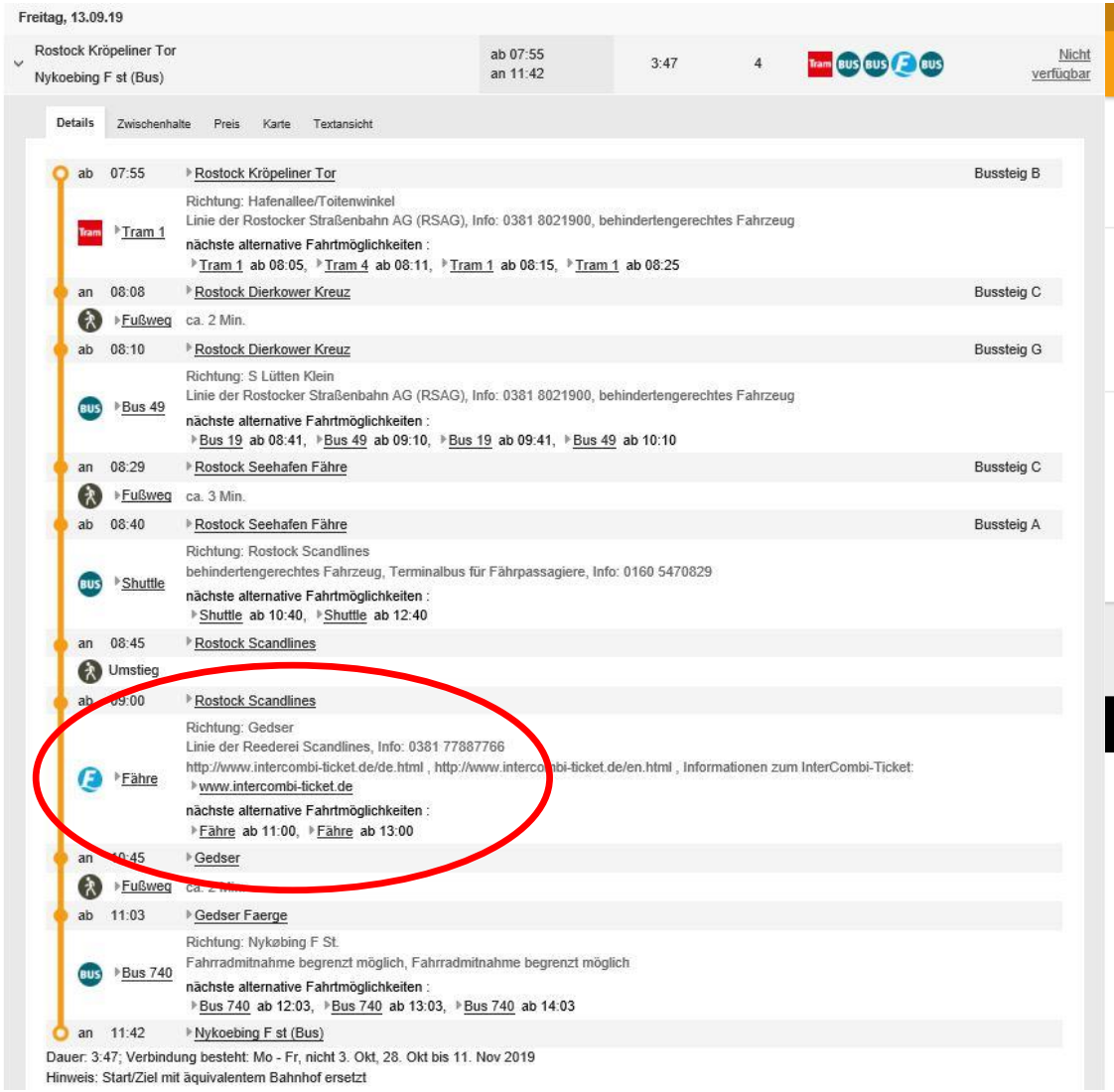
Station Boards - Gedser Port and Nykøbing F Main Station (DK)

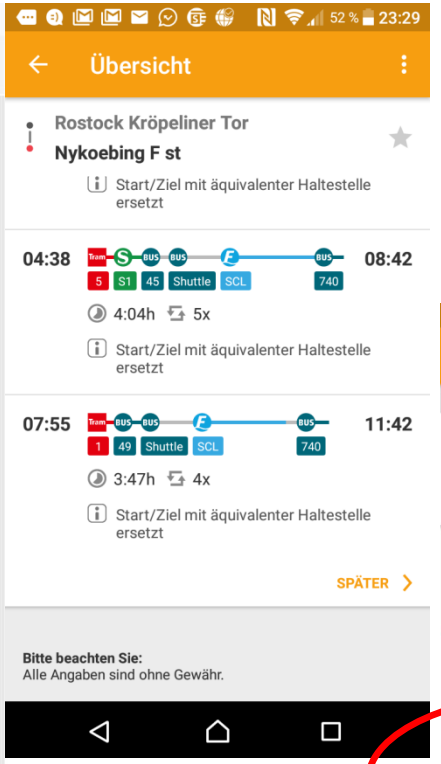


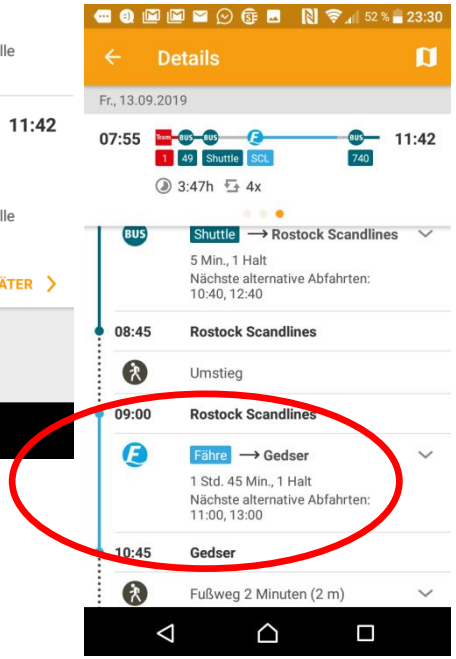


With info about trains to Copenhagen

Journey Planner VVW (Rostock) Internet and App







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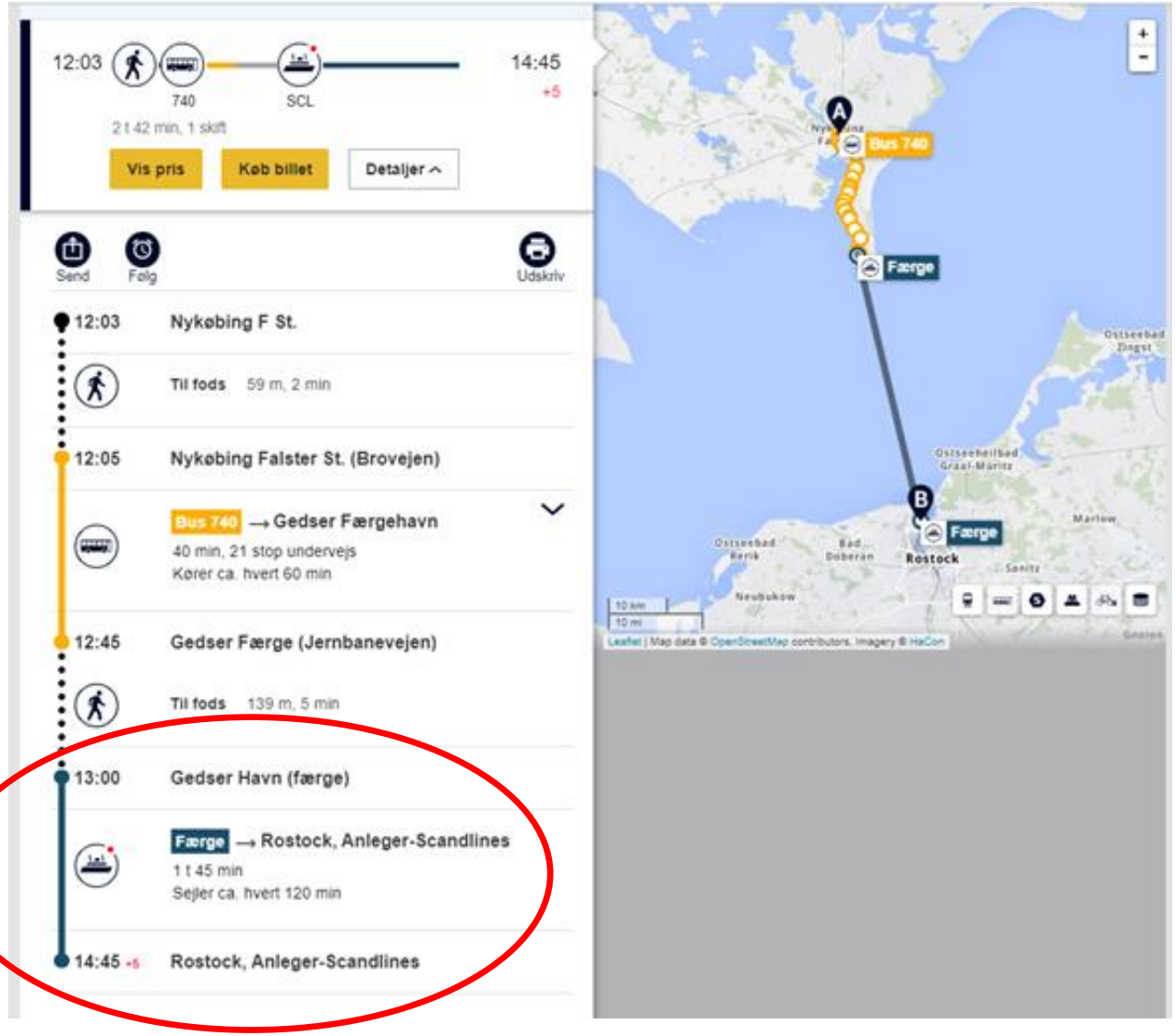
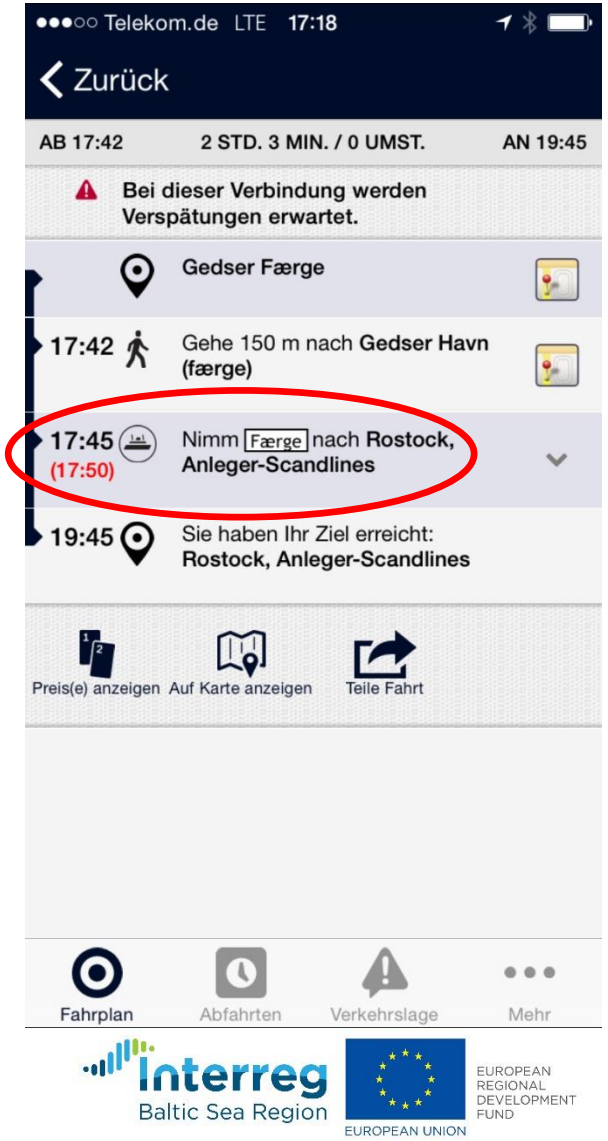
EUROPEAN UNION

Journey Planner Rejseplanen (DK) Internet and App





What´s in for me? Benefits for Scandlines (and other ferry companies in Rostock):

- Improved passenger satisfaction - enhancing the comport of the journey
- Automatized, fast and reliable information in case of deviations, cancellation etc.
- Wide spreading of information(automatic feeding of prominent nationwide journey planners)
- Optimization of different internal processes:
  - Automatized shuttle bus ordering in Port of Rostock in accordance with ships´ real time arrival/ departure
  - Better information to stevedores etc. in case of delays
- Meeting EU Passenger Rights
- …

What's in for me? Benefits for the Port of Rostock:

- Uniform and homogeneous passenger information in the ferry terminal (schedules and cancellation of all ferry operators + real time info for Scandlines)
- Enhanced comfort of stay in the terminal
- Optimization of internal processes:
  - Automatized terminal bus ordering service for all ferry operators in accordance with ship's real time arrival/ departure
- Improved information about public transport connections between port and city (incl. connection protection for delayed ferry's)
- …

We learned a lot in this EU project. And we use it to achieve even better results in RTF

Thank you for your attention

www.realtimeferries.eu

Added values of ferry real time data from the point of view of a logistics service provider

Jens-Uwe Uhlich
Schenker Deutschland AG

1st RTF Conference Rostock
September 18, 2019

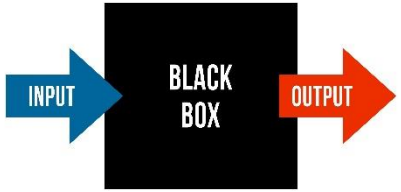
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
DB SCHENKER
LPL LOGISTICS
Universität Rostock
Lehrstuhl für
Produktionsorganisation & Logistik
Prof. Dr.-Ing. Nina Vojdani

Agenda

- Current situation & DB Schenker use case
- Operative solutions
- Advantages with real time data

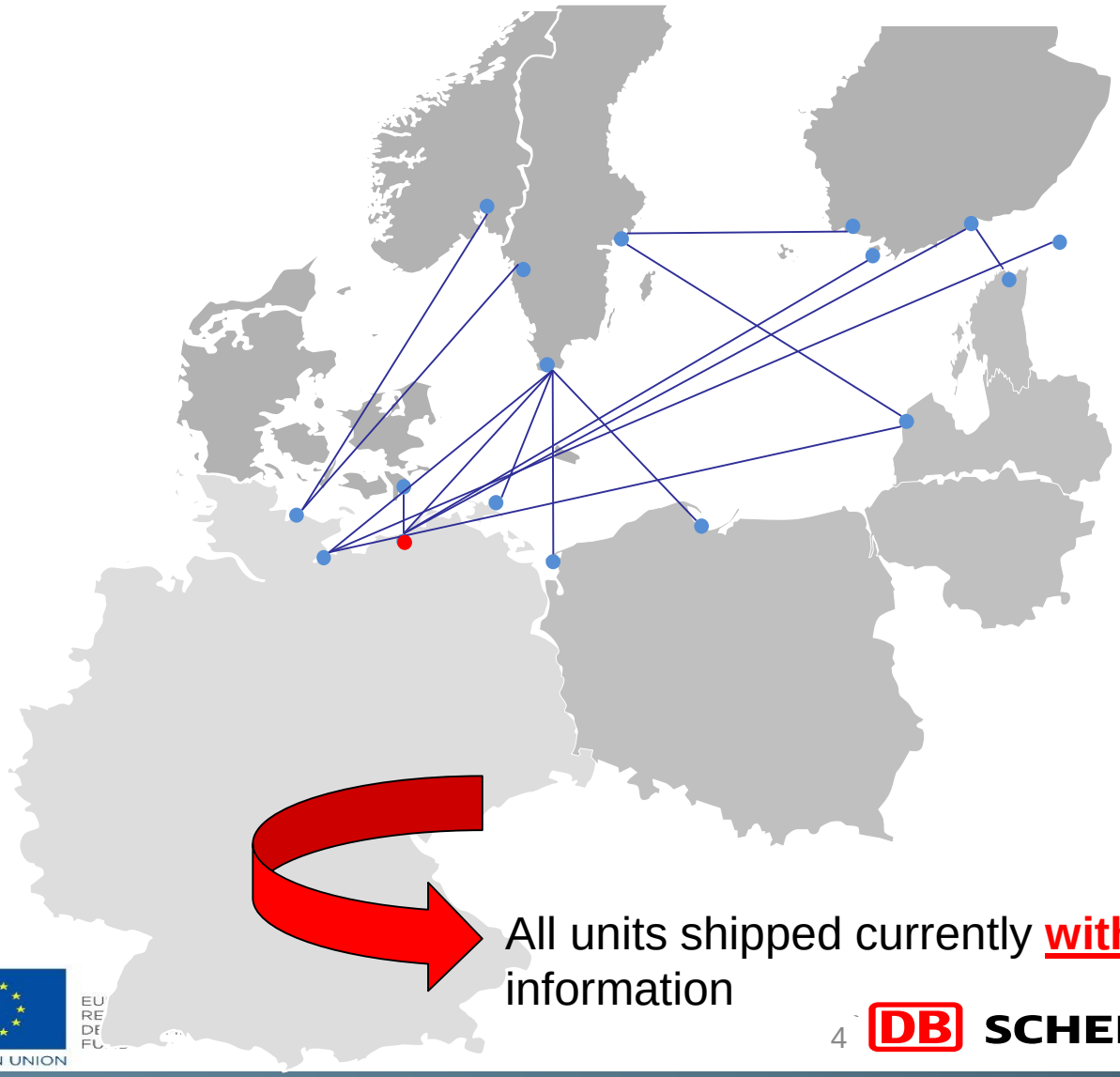
current situation

- ferry destination between Rostock and Trelleborg is one of the main routes for DB Schenker in south/north v.v.
- Real time information on ferry delays/earliness, cancellations, changes of berths, etc. are not automatically available and can only be accessed conventionally by phone, fax or e-mail
- Dispatcher and lorry driver do not receive timely information about changes and can not respond to that
- We work like in a black box



current situation

RTF project – output base



potential volume
in the Baltic Sea
controlled by Schenker

For example:

- FI-DE 13.000 units p.a.
- FI-SE 20.000 units p.a.
- DK-DE 5.000 units p.a.
- FI-IT 6.000 units p.a.
- SE-IT 6.000 units p.a.
- NO-DE 5.000 units p.a.
- DE-SE 15.000 units p.a.

All units shipped currently **without** real time information

Consequences in case of delay/cancellation

- Hard factors
  - no possibility to plan reliable uses of staff and equipment (lorry, trailer, tugmaster, fork lift, etc.)
  - overtimes of staff
  - inefficient / low utilization of the capacities and logistic facilities
  - delays in delivery and waiting times for subcontractors
- soft factors
  - low performance in the whole supply chain due to lack of information
  - bad KPI performance - more and more a relevant indicator for delivery reliability on a clients side

Real time data information system – Use cases

- flexible check-in & boarding time handling for arriving trucks: truck driver mobile phone app
- Just-in-time pick up of unaccompanied trailers in the port area

- Use Case #3: optimizing processes of large forwarding companies related to ferry passages

- Up-to-date foot pax and/ or car pax travel time prognosis via travel planners & ticketing APPs of „third party providers“ (google, etc.)
- Convenient & safe on-time arrival by car to the ferry departure
- On-board information for foot pax & car pax on connecting public transport options & road traffic situation

Quelle map: Interreg Baltic Sea Region

Operative solution

targets:

- development of an own APP or „a hybrid window on desktop“, to receive automatically the real time data of the ferry in case of disorders
- automatically transfer of information to the involved target groups (via APP)
- future integration into our used transport management system (TMS)

target groups:

- dispatcher road / trailer
  - to reroute of lorries
  - to inform the involved parties
- dispatcher warehouse
  - to plan the capacities of staff, technic, equipment, etc.
- dispatcher rail / train/intermodal and dispatcher customs
- lorry driver, clients, consignees

Dashboard

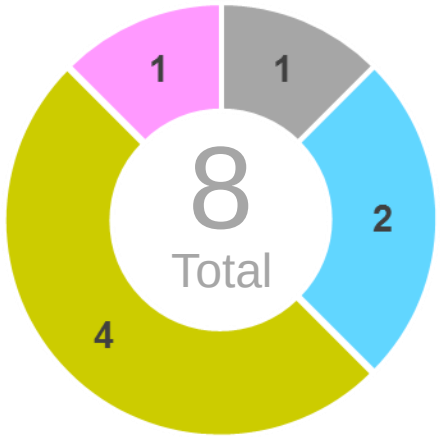
Real Time Ferries

Departure

May 23, 2019 14:30
Time to departure: 01:15

Days without a delay: 130

Trailerstatus

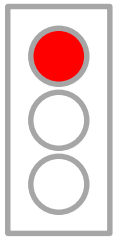


picked goods at BSG on storage area shipped

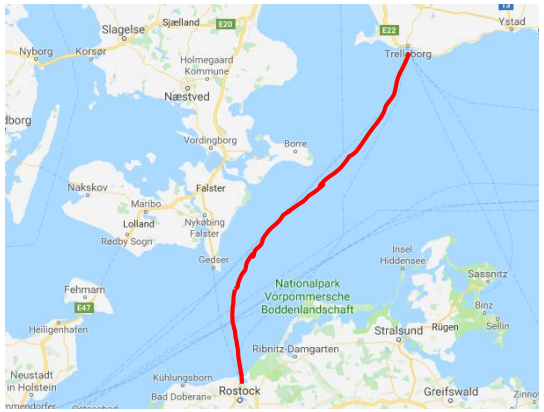
Stena Line - Skane

STD: 15:00
ETD: 15:45

Delay: 00:45 min
reason: previous trip



Date	Ship name	STD	ETD	STA	ETA	Info	ILU
23.05.19	Skane	15:00	15:45	21:00	21:45	Delay	SEQA0012345 SEQA0012346 SEQA0012347 SEQA0012348 SEQA0012349 SEQA0012350 SEQA0012351 SEQA0012352



added value/benefits for DB Schenker

DB Schenker	• information as a most important **intangible** good • improvement of planing process along the whole supply chain • improvement of customer service • increase of customer satisfaction • improvement of capacity utilization • reduction of overtimes of warehouse staff • reduction of waiting times of lorry driver • harmonizing of dashboards and uniform measurement of KPIs • Improvement of the supply Chain Visibility (standardized rules and methods)
consignees	• real time data about the delivery status • further processing of information into different areas like warehouse, production, customer service, etc.

Added values of ferry real time data from the point of view of a logistics service provider

Many thanks for your attention.

1st RTF Conference Rostock
September 18, 2019

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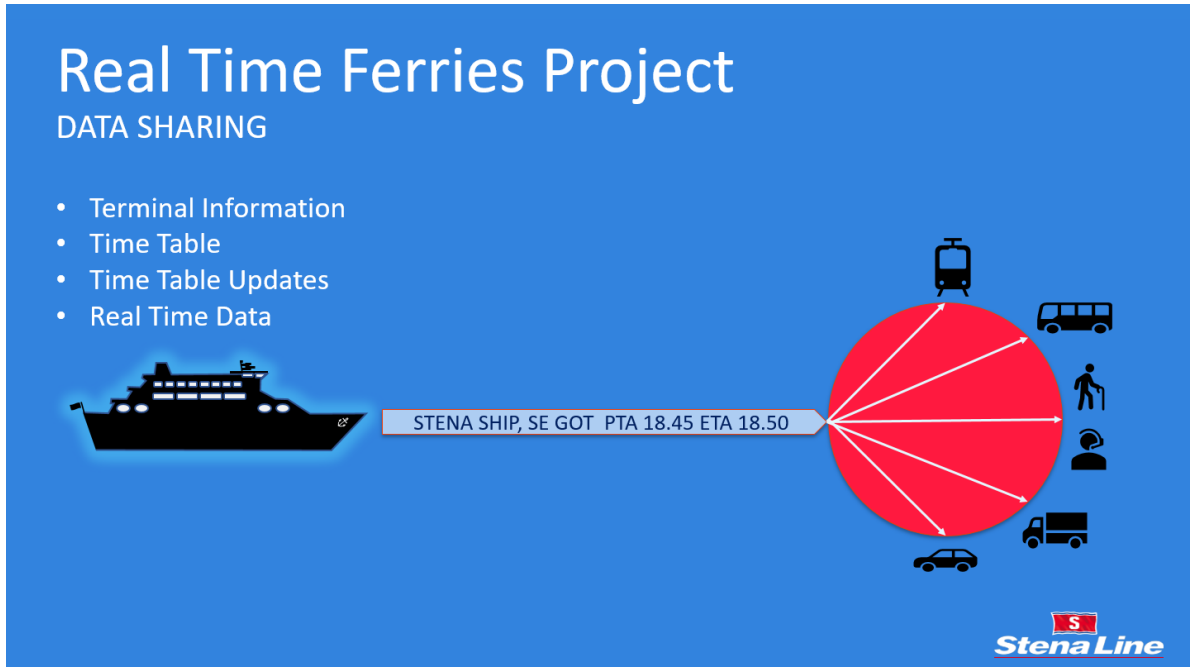
Stena Line Digital Transformation 2017->

A cognitive journey - moving from paper to digital a cross the organisation

- Information exchange
- improve operational efficiencies and performance
- sustainable ferry journeys
- Improve customer satisfaction
- reduce cost
- reduce workload
- ……



Information sharing

- Internally

to support Stena Operations

- With partners

added value & efficiency

- With customers

Prompt travel information

- Public

Shared and accessible via WEB

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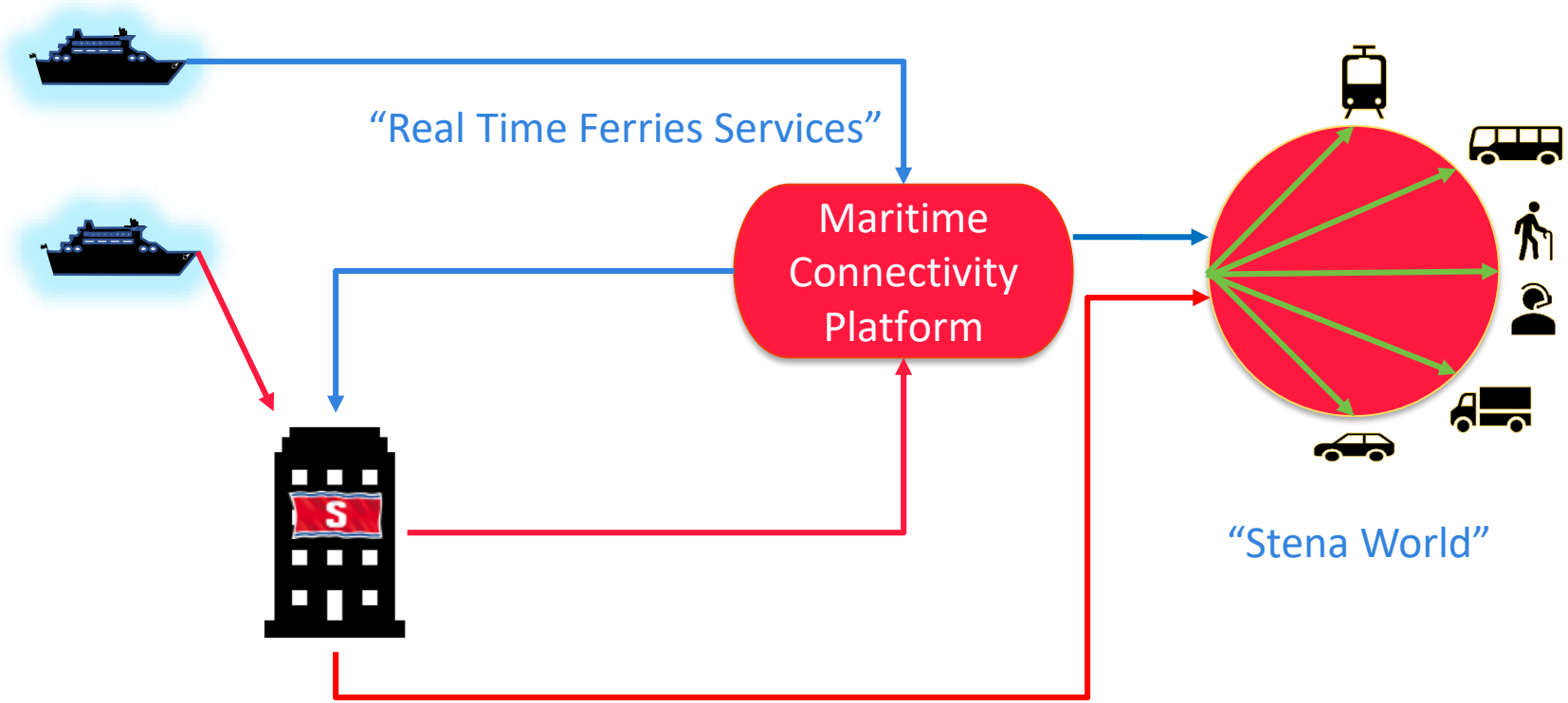
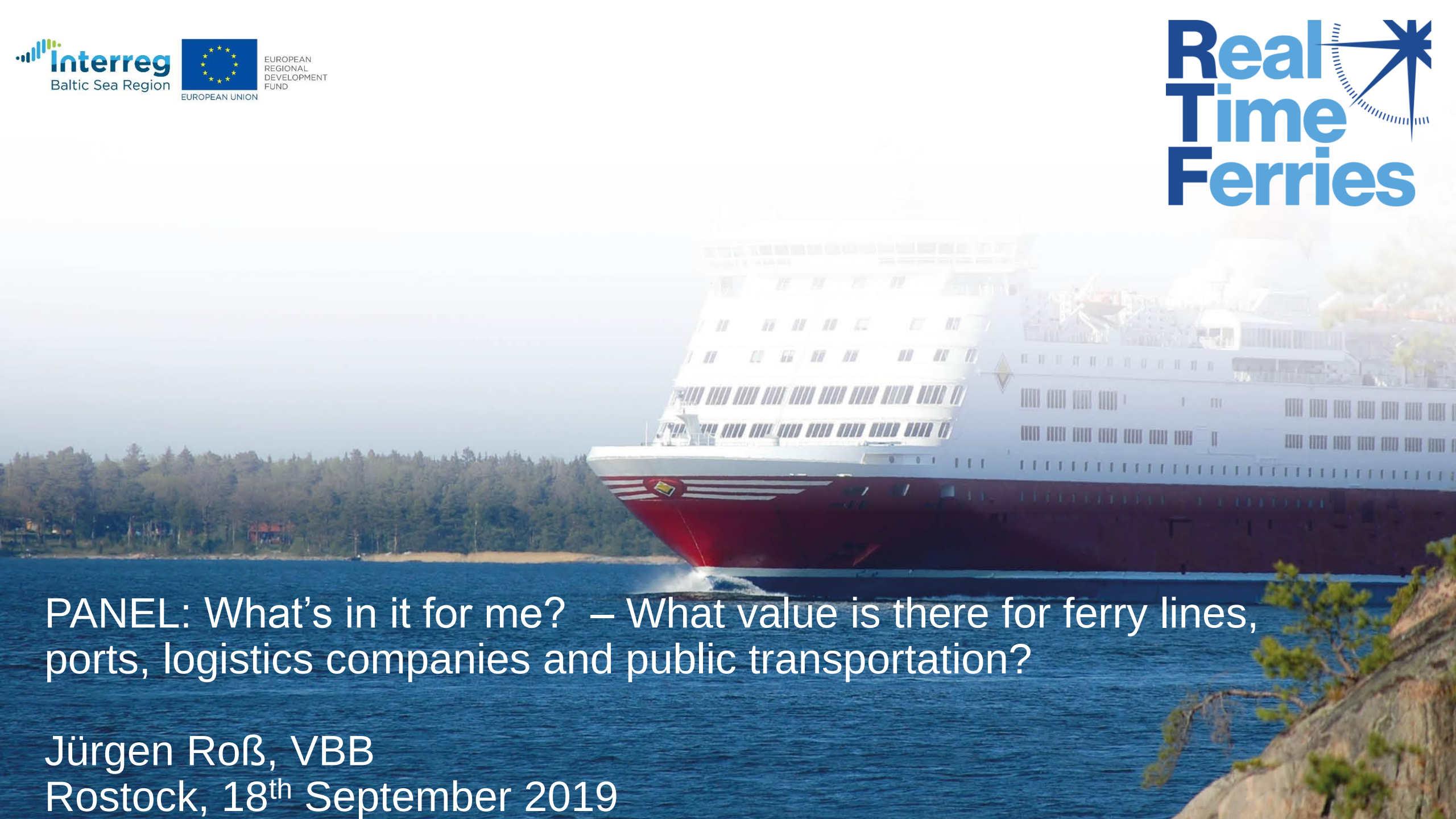
How to implement RTF in Stena Line?

Without adding new systems, increase workload and jeopardize safety

- Machine to Machine information exchange
- Use International standard format
- Safe integration with bridge equipment
- Minimize human interaction
- Control of the information exchange

There are alternatives…….



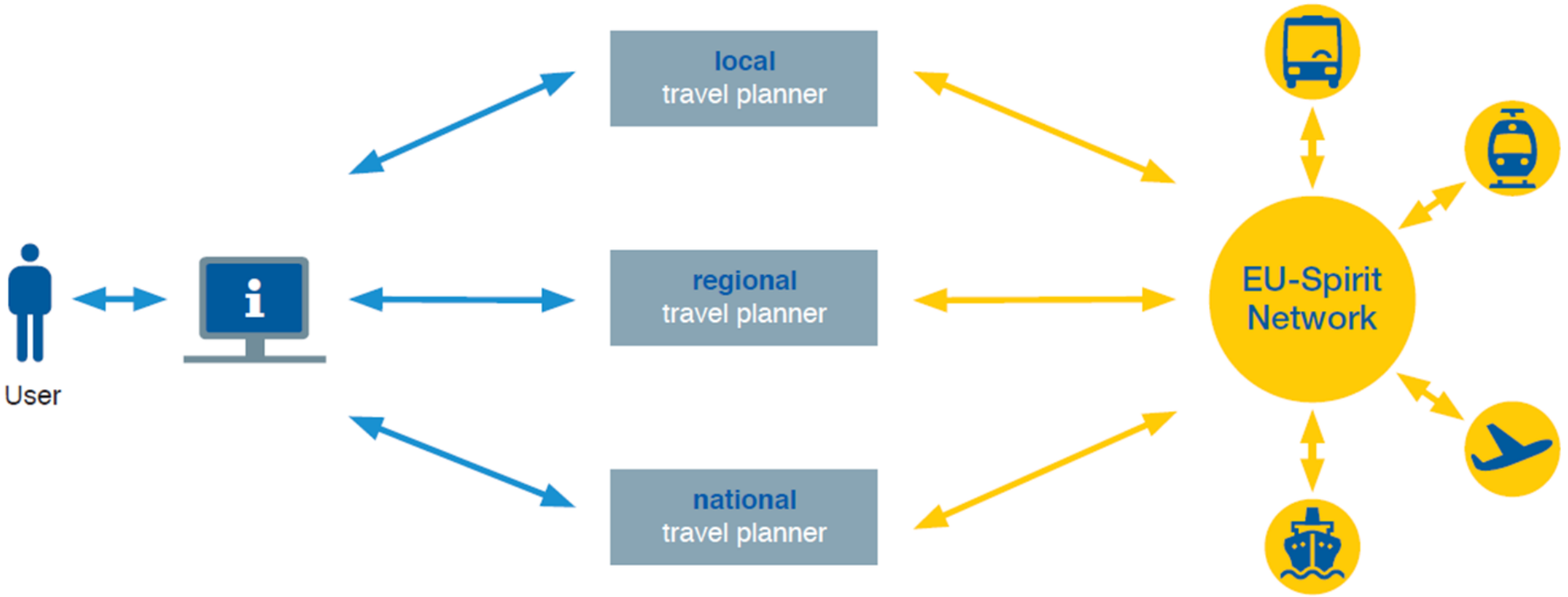


PANEL: What's in it for me? – What value is there for ferry lines, ports, logistics companies and public transportation?

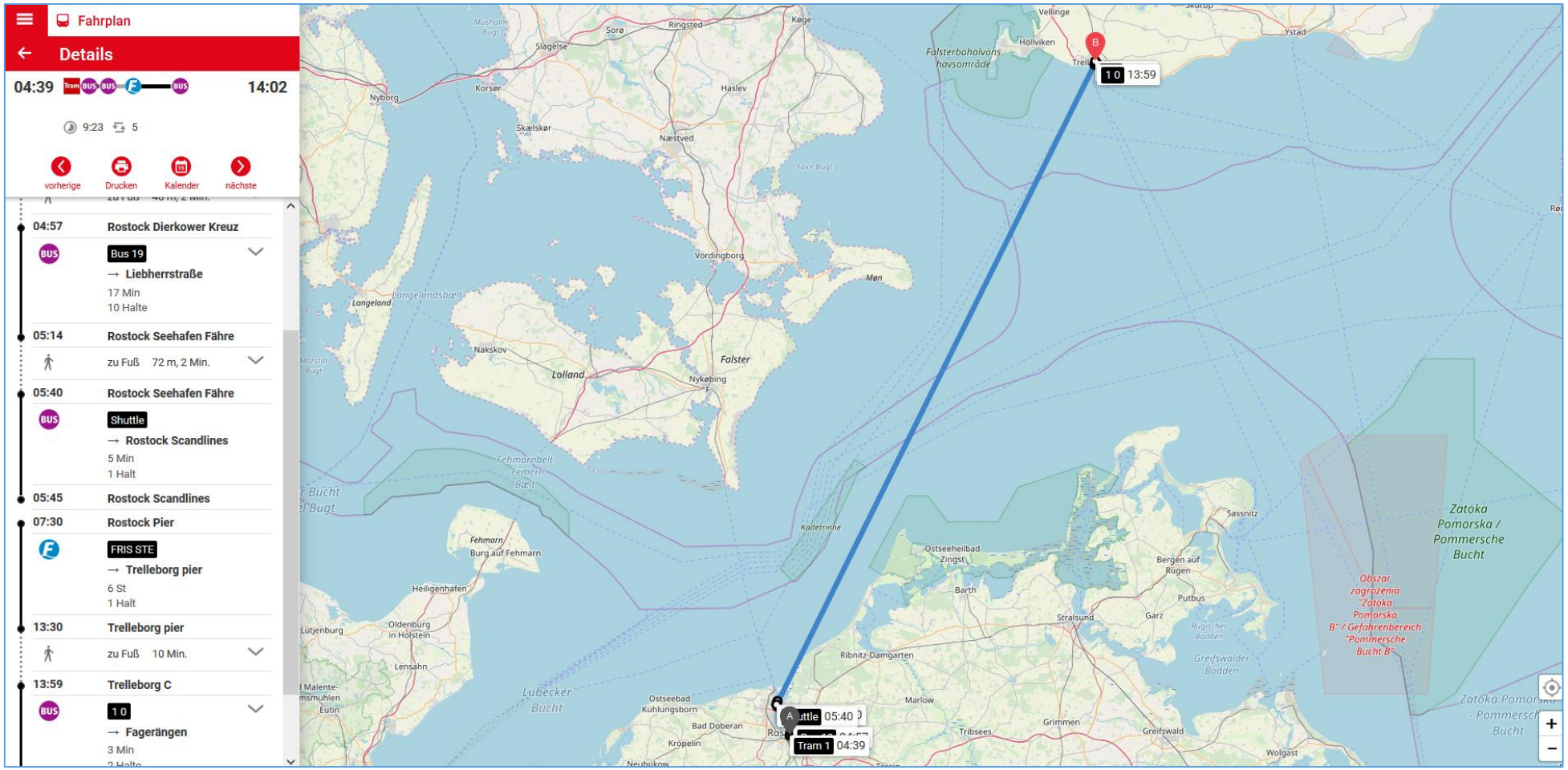
Jürgen Roß, VBB

Rostock, 18th September 2019

Cross-linking within the EU-Spirit network



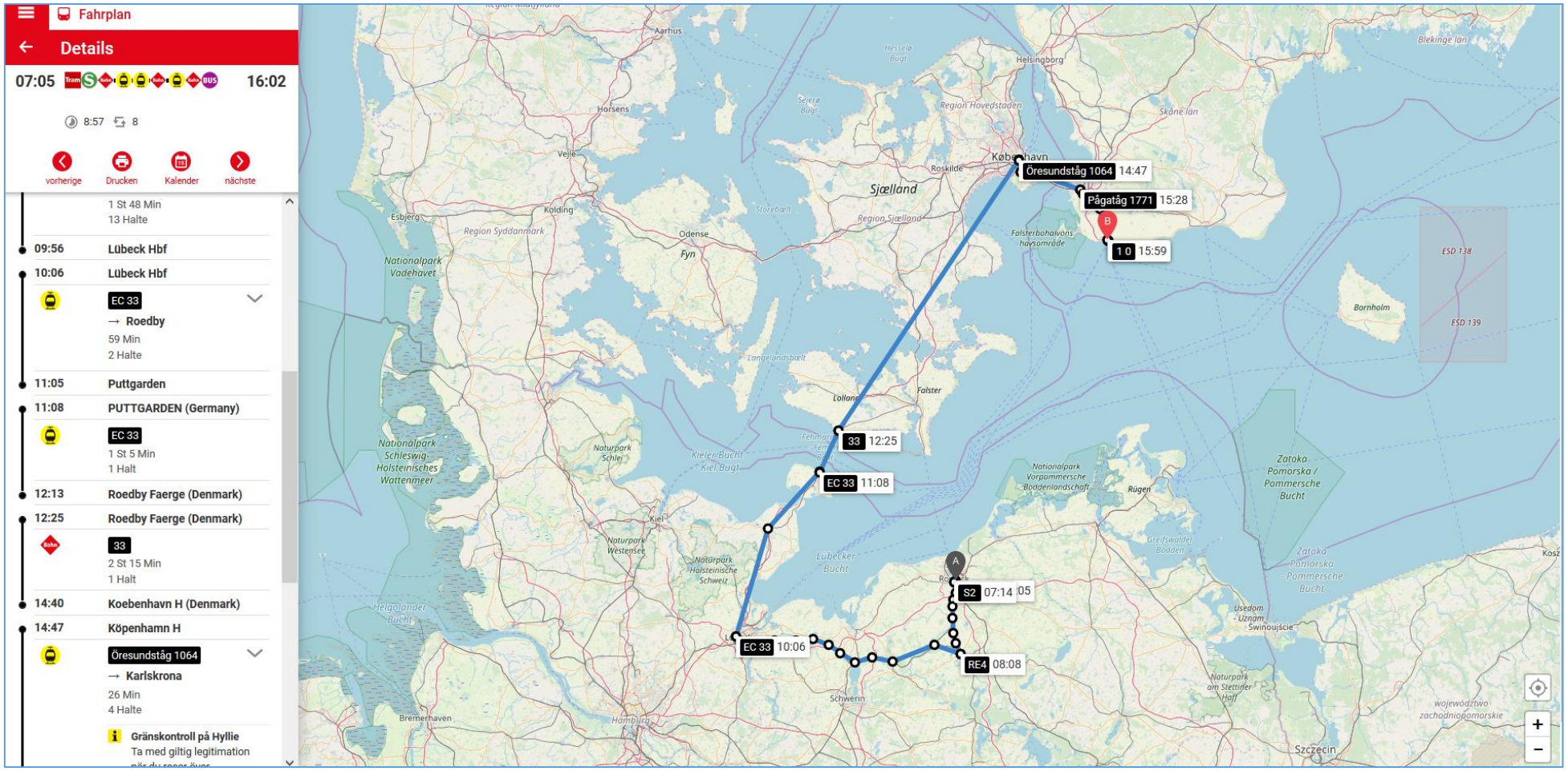
EU-Spirit today (1): travel information (scheduled data)



Rostock, Steintor IHK
→ Trelleborg, Alléen

Date 19. September 2019
Via Ferry => Trelleborg
Departure 04:39 AM
Arrival 14:02 PM
Duration: 09:23
Transfers: 4

EU-Spirit today (2): travel information (scheduled data)



Rostock, Steintor IHK
→ Trelleborg, Alléen

Date 19. September 2019
By train via Hamburg / Copenhagen
Departure 07:05 AM
Arrival 16:02 PM
Duration: 08:57
Transfers: 6

Do you have questions?

Juergen Ross

Division Head of
Planning and Customer Information

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Berlin-Brandenburg GmbH

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10623 Berlin

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VBB.de

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Thank you!

It’s time to get visible!

Real Time Ferries – *sharing real time departure and arrival times for ferries in the Baltic Sea Region to facilitate passenger and goods transport*

www.realtimeferries.eu