Morning agenda

• 1000-1030 Keynotes
• 1030-1100 The RTF project
• 1100-1200 What’s in it for me?
• 1200-1330 Lunch
Intermodal (Ferry) Real Time Information System
Rostock - Gedser - Nykøbing F
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)
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
**On Board Displays Scandlines Ferry “Berlin”**

<table>
<thead>
<tr>
<th>Linje Linie Line</th>
<th>Fra Von From</th>
<th>Afgang Abfahrt Departure</th>
<th>Til Nach To</th>
<th>Ankomst Ankunft Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scandlines</td>
<td>Rostock</td>
<td>23:45</td>
<td>Gedser Færge</td>
<td>01:45</td>
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<td>23:45</td>
<td></td>
<td>01:45</td>
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<tr>
<td></td>
<td></td>
<td>5 min</td>
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<tr>
<td>740</td>
<td>Gedser Færge (… 04:39</td>
<td>Nykøbing Falster… 05:18</td>
<td></td>
<td>3 min</td>
</tr>
<tr>
<td></td>
<td>Retning: Nykøbing F St.;</td>
<td>Retning: Nykøbing F St.;</td>
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<tr>
<td>Togbus</td>
<td>Nykøbing F St.</td>
<td>05:30</td>
<td>Vordingborg St.</td>
<td>06:10</td>
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<tr>
<td></td>
<td>Retning: Vordingborg St.;Cykler kan ikke medtages</td>
<td>Retning: Vordingborg St.;Cykler kan ikke medtages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
On Board Displays Scandlines Ferry “Copenhagen”

<table>
<thead>
<tr>
<th>Linie</th>
<th>Haltestelle</th>
<th>Zeit</th>
<th>Heute</th>
</tr>
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<tbody>
<tr>
<td>SCL</td>
<td>Gedser</td>
<td>ab</td>
<td>07:00</td>
</tr>
<tr>
<td></td>
<td>Rostock Scandlines</td>
<td>dep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>an</td>
<td>arr</td>
<td>07:00</td>
</tr>
<tr>
<td></td>
<td>Rostock Scandlines</td>
<td>Time</td>
<td>08:45</td>
</tr>
<tr>
<td></td>
<td>an</td>
<td></td>
<td>08:47</td>
</tr>
<tr>
<td>Shuttle</td>
<td>Rostock Scandlines</td>
<td>ab</td>
<td>09:00</td>
</tr>
<tr>
<td></td>
<td>Rostock Seehafen Fähre</td>
<td>dep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>an</td>
<td>arr</td>
<td>09:05</td>
</tr>
<tr>
<td>BUS</td>
<td>Rostock Seehafen Fähre</td>
<td>ab</td>
<td>09:31</td>
</tr>
<tr>
<td>RSAG</td>
<td>Rostock S Lütten Klein</td>
<td>dep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>an</td>
<td>arr</td>
<td>09:43</td>
</tr>
<tr>
<td>DB BAHN</td>
<td>Rostock-Lütten Klein</td>
<td>ab</td>
<td>09:56</td>
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<td>Rostock Hbf</td>
<td>dep</td>
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<td></td>
<td>an</td>
<td>arr</td>
<td>10:09</td>
</tr>
</tbody>
</table>
FRIS - Ferry Operator Web-Tool for schedule planning, dispatching and real time
Passenger Terminal Displays - Rostock Port (DE)

Ferries and terminal bus

Ferry Departures

Company | Departure | Estimated | Destination
--- | --- | --- | ---
Scandlines | 21:00 | 21:55 | Gedser
Terminal shuttle | 20:40 | 21:35 |
Stena Line | 22:30 | 22:30 | Trelleborg
Terminal shuttle | 22:10 | 22:10 |
Stena Line | 23:55 | 23:55 | Trelleborg
Terminal shuttle | 23:40 | 23:40 |
Scandlines | 23:45 | 00:00 | Gedser
Terminal shuttle | 23:25 | 23:40 |

All departures of the terminal shuttle from the bus stop directly in front of the check-in building.

Public transport

Nahverkehr

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<tr>
<th>Abfahrt</th>
<th>Linie</th>
<th>Ziel</th>
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<tbody>
<tr>
<td>12</td>
<td>45</td>
<td>HP Lübben Klein</td>
</tr>
<tr>
<td>42</td>
<td>45</td>
<td>Schwerin-Seebrücke</td>
</tr>
<tr>
<td>42</td>
<td>49</td>
<td>Hauptbahnhof Süd</td>
</tr>
</tbody>
</table>

Note: The schedule is subject to change. Please check the latest information at the terminal.
Station Boards - Rostock Port

public transport

terminal bus
Station Boards - Rostock City
Station Boards - Gedser Port and Nykøbing F Main Station (DK)

With info about trains to Copenhagen
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
Agenda

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

#### Stena Line - Skane

- **STD:** 15:00
- **ETD:** 15:45
- **Delay:** 00:45 min
- **reason:** previous trip

#### Trailerstatus

![Trailerstatus Chart]

- **Total:** 8
- **picked goods:** 4
- **at BSG:** 1
- **on storage area:** 1
- **shipped:** 2

#### Departure

- **Date:** May 23, 2019 14:30
- **Time to departure:** 01:15
- **Days without a delay:** 130

### Table

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<tr>
<th>Date</th>
<th>Ship name</th>
<th>STD</th>
<th>ETD</th>
<th>STA</th>
<th>ETA</th>
<th>Info</th>
<th>ILU</th>
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<td>23.05.19</td>
<td>Skane</td>
<td>15:00</td>
<td>15:45</td>
<td>21:00</td>
<td>21:45</td>
<td>Delay</td>
<td>SEQA0012345</td>
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*Images and logos may be watermarked.*
<table>
<thead>
<tr>
<th>DB Schenker</th>
<th>consignees</th>
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</thead>
<tbody>
<tr>
<td>• information as a most important <strong>intangible</strong> good</td>
<td>• real time data about the delivery status</td>
</tr>
<tr>
<td>• improvement of planing process along the whole</td>
<td>• further processing of information into different areas like warehouse,</td>
</tr>
<tr>
<td>supply chain</td>
<td>production, customer service, etc.</td>
</tr>
<tr>
<td>• improvement of customer service</td>
<td></td>
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<tr>
<td>• increase of customer satisfaction</td>
<td></td>
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<tr>
<td>• improvement of capacity utilization</td>
<td></td>
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<tr>
<td>• reduction of ovetimes of warehouse staff</td>
<td></td>
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<tr>
<td>• reduction of waiting times of lorry driver</td>
<td></td>
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<tr>
<td>• harmonizing of dashboards and uniform</td>
<td></td>
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<tr>
<td>measurement of KPIs</td>
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<tr>
<td>• Improvement of the supply Chain Visibility</td>
<td></td>
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<tr>
<td>(standardized rules and methods)</td>
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</tbody>
</table>

*Improved supply chain visibility* (standardized rules and methods)
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
A cognitive journey - moving from paper to digital across the organisation

- Information exchange
- Improve operational efficiencies and performance
- Sustainable ferry journeys
- Improve customer satisfaction
- Reduce cost
- Reduce workload
- ……..

Real Time Ferries Project
DATA SHARING

- Terminal Information
- Time Table
- Time Table Updates
- Real Time Data

Information sharing
- Internally to support Stena Operations
- With partners added value & efficiency
- With customers Prompt travel information
- Public Shared and accessible via WEB
How to implement RTF in Stena Line?
Without adding new systems, increase workload and jeopardize safety

There are alternatives………. 

• Machine to Machine information exchange 
• Use International standard format 
• Safe integration with bridge equipment 
• Minimize human interaction 
• Control of the information exchange
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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VBB.de
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