TIS ETA Pilot – Context and objective



Initial Project focus

- TIS displaying additional info on estimated time of arrival in terminal (ETA) and current data
 of train arrival in / train departure from the terminal
- Shared manual data input (ETA/ current dates) in TIS by the shunting service provider and the terminal manager
 - Incoming trains: ETA/ current arrival/ Ready for unloading
 - Outgoing trains: ETD/ current closing for loading/ current departure

Project realization:

- TIS adaptation to add the last mile train run
- Additional user accounts created for each shunting service provider and the terminal (with individual user rights allocated)

Project Timeline

- Start in April 2017 pilot duration foreseen for one year
- Mid-term review in July/ August 2017

Pilot on last mile ETA "terminal arrival" in TIS



The Pilot involves all relevant parties which are invited to the following activities during the upcoming 2-3 months

- 1 RNE
- insert additional line in TIS for terminal arrival (see below)
- rename existing line "arrival terminal" in "arrival hand-over"
- train involved parties in TIS for inserting ETA "under the crane"

- 2 Terminals
- select some pilot trains out of int. freight trains on RFC RALP
- register in TIS and establish reporting point ("RICS code")

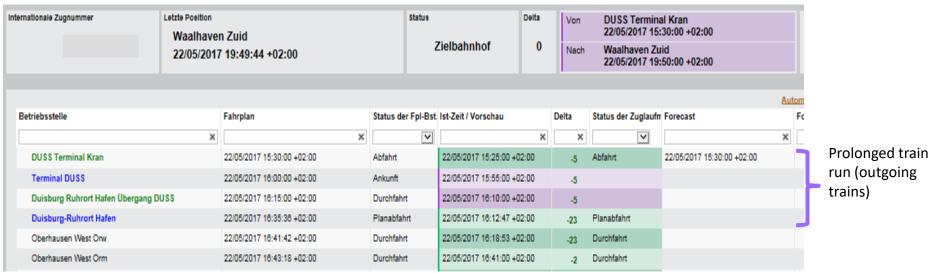
- 3 Shunting RU
- estimate train arrival in terminal "under the crane"
- insert ETA in TIS (see green arrow below) for selected trains

Bottrop Hbf - Gbf	17/05/2017 08:51:18 +02:00	Ankunft	17/05/2017 08:28:52 +02:00	-22	Ankunft		
Oberhausen Mathilde	17/05/2017 09:24:36 +02:00	Durchfahrt	17/05/2017 08:48:36 +02:00	-36	Durchfahrt		
Bottrop Hbf - Gbf	17/05/2017 09:11:30 +02:00	Abfahrt	17/05/2017 08:49:30 +02:00	-22			
Duisburg-Ruhrort Hafen	17/05/2017 09:31:06 +02:00	Zielbahnhof	17/05/2017 08:52:10 +02:00	-39	Zielbahnhof		
Oberhausen-Osterfeld Abzw	17/05/2017 09:20:54 +02:00	Durchfahrt	17/05/2017 08:58:54 +02:00	-22			
Duisburg Ruhrort Hafen Übergang DUSS	17/05/2017 07:00:00 +02:00	Abfahrt	17/05/2017 09:00:00 +02:00	+120	Abfahrt		Prolonge
Terminal DUSS	17/05/2017 08:00:00 +02:00	Ankunft	17/05/2017 10:00:00 +02:00	+120	Ankunft		run (inco
DUSS Terminal Kran	17/05/2017 08:40:00 +02:00	Abfahrt	17/05/2017 10:35:00 +02:00	+115	Abfahrt	17/05/2017 10:40:00 +02:00	trains)
4							

Prolonged train run (incoming rrains)

Another example for outgoing trains (→ departure from the terminal)





Estimated time of departure

+ 5 min

Real time of departure

- 5 min
- Arrival handover point to the main track 23 min

TIS ETA Pilot – Lessons learned



- Existing legal restrictions in data usage rights and information sharing results in a fragmented information landscape visible for each stakeholder (based on its individual user rights in TIS).
 - → This aspect should now have been tackled with the new TIS framework agreement
- The number of different stakeholders involved with their individual organizational structure and the shared responsibilities amongst them created an important complexity impeding good results
 - A quite important number of people had to be trained in TIS.
 - Shift work and changing teams in the operational centre hampered a continuous data input by the stakeholders.
 - Stakeholders relied on each other regarding the TIS data input what obviously did not work.
 - Terminal and Shunting service provider are in contact with each other anyway. TIS data input was considered redundant.
- TIS user interface for data input probably too complicated taking into account the aforementioned context



TIS ETA Pilot – How to proceed now ...

- Legal context for free information sharing between the stakeholders involved should urgently be clarified.
 - → Combined transport is a complex product involving various parties. Information sharing only between parties having a contractual agreement between themselves is by far too restrictive to improve operational processes
- 2. The shared data input did not work. Two possible solutions for improvement exist:
 - a. There should be just one stakeholder (\rightarrow the terminal) entering the data in TIS
 - → no direct data exchange but relatively easy to implement
 - → TIS frontend should be further developed. A more user user-friendly possibility for the data input should increase acceptance (max. 30 seconds per data entry).
 - b. There should be a direct information exchange via an IT interface of the individual production system (RU, Shunter, Terminal)
 - → efficient but costly long-term solution