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Working group

Train Performance Management

**- Analysis on SBB Cargo Int. traffic on RFC RALP
from/to Rheinhausen Yard**

RFC Rhine-Alpine

Virtual TAG Meeting RFC RALP/NSB,
29.03.2022

RFC RALP TF: Objective, set up and used methods for analysis



Initial situation

As part of an analysis of the RFC Rhine-Alpine TPM WG, the RU SBB Cargo Int. was found to have an extremely low departure punctuality ex Rheinhausen in the 1st half of 2021. The low point in April 21 was 17% (Pü 30').

Objective

The handover processes between DB Netz, infrastructure duisport and RU are to be analyzed in a tri-lateral project and measures to be defined so that the departure punctuality of the RFC RALP traffic SBB Cargo Int. ex Rheinhausen is to increase to over 50% (PÜ30') as of 2022.

- **Six Sigma Approach** was used following 5 phases (DMAIC)
- After the initial kick-off **Teams were formed on 3 topics**
 - *Takeover of process and track occupancy in the outer station (DB Netz) and departure process (from "Loco at train" to departure)*
 - *Coding of the causes of delay*
 - *Communication of disposition teams*
- **A total of 10 measures to improve the regularity of departures for SBB Cargo Int. (and beyond) were identified and (partially) evaluated**
 - *4 measures were implemented immediately (quick wins)*
 - *1 measure was rejected*
 - *2 measures are under further investigation, but the impact on punctuality cannot yet be assessed*
 - *2 actions were suggested that need further analysis as they are not the sole responsibility of the project team*



The investigation was carried out by **a joint project team** from

- DB Netz
- SBB Cargo international
- duisport infrastructure
- duisport rail

in the period 07.09.21 - 27.01.22



Analysis of the situation in Rheinhausen with regards to RFC RALP traffic

- Terminal infrastructure Logport I has grown over the years (3 terminals)
- Rheinhausen outer station (Vorbahnhof) has not grown as fast as the traffic development
- Tracks for long trains (>700m) are not sufficiently available, neither at DB Netz nor at Duisport infrastructure
- The DB Netz infrastructure both in Rheinhausen outer station itself and in the region is overloaded
- Close collaboration of all involved parties is needed in operational matters.
- At certain times – depending on traffic situation – exceptional communication on BZ/NLZ level (‘Zulaufsteuerung’) may be needed when handing over freight trains from IM to IM.
- Time Table planning is not always realistic and does maybe not match slots in the terminals (further investigation needed)




**Capacity bottle necks cause
day-in-day-out
operational problems**



Ad hoc traffic to be added

Measures with SBB Cargo Int. on RFC RALP traffic and Lessons Learned

The goal of increasing departure punctuality >50% (Pü30') for SBB Cargo Int. on RFC RALP from Rheinhausen was achieved for January 2022, by:



Short-term measures (on working level)

Priority 1 measures

- Performance Dialogue between operational teams DB N and Duisport infra and SBB Cargo Int., supported by transparency in the IT tools of track occupation
 - operational performance telco for SBB Cargo Int. for 8 weeks during the duration of the project
- SBB Cargo Int. has changed their production concept in 2022 by using Wedau as a neighbouring station to set up long trains

Priority 2 measures

- **Long standing** trains escalation procedure implemented
- Early notification of readiness to drive by RU SBB Cargo Int. (to DB Netz)
- Raising awareness for RFC North Sea-Baltic and ad hoc traffic

Further efforts are needed beyond the scope of the RALP project on:

A. Time spent on DB Netz tracks in Rheinhausen is too long

- more realistic planning required (DB Netz timetable)
- measures to reduce the length of stay (escalation of **long-standing** trains)
- further measures to be discussed and established, e.g. ban wagon inspection on track 13

B. Punctuality Rheinhausen is generally in need of improvement

- Inflow/ouflow control between DB Netz operational centers (BZ/NLZ) planned to be implemented through DB Netz project "RFC1 Operational Traffic management (in Germany)" in the second half of the year 2022

C. High amount ad hoc traffic as a delay driver (on the whole network not only Rheinhausen)

D. Handling of long trains is problematic, due to limited capacity of long tracks in the region

- conversion of the production concept by RUs and the integration of e.g. Wedau for long trains

