Quality Circle Operation

Optimizing cross-border procedures at the border Aachen - Montzen as part of the RFC Rhine Alpine

23.02.2022 | Saskia Meynhardt| DB Netz AG – Ann Verstraelen | Infrabel – Philipp Scheufler | DB Netz AG

# The Quality Circle Operation program will reduce cross-border barriers with sustainable working structures and KPI's

What is new?

Involvement of all relevant stakeholder

Participants from RUs and IMs in regular telcos

- ✓ from regional and central level, incl. RFC Rhine Alpine
- ✓ from many departments,
  - TT
  - Operations, e.g. Grenzdisponent
  - Sales
  - RFC Rhine Alpine

DB Netz (regional & central experts)

RFC

RU

Infrabel (regional & central experts)
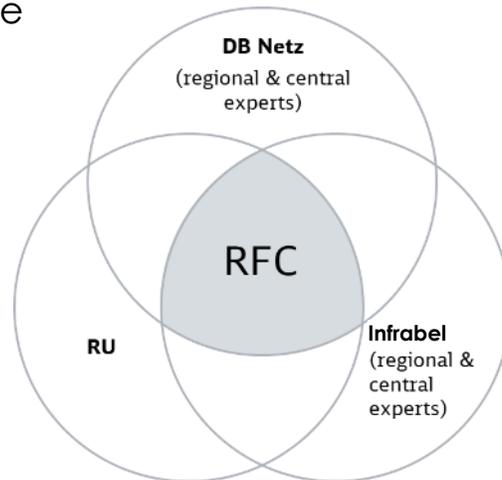
## Sustainable working group structure

1 Modul 1: Base analysis workshop

– Collection of **problems** and **solutions approaches** with **prioritization and** definition of **clear measures**

2 Modul 2: Continuous improvement process

– **Regular Telcos to monitor implementation** of defined measures and discussion about **operative day-to-day business**

Within the Quality Circle Operation meetings it is a continuous process to identify problems and their causes, and propose solutions

Problem

Analysis of causes

Solution from within Quality Circle Operation

KPI dwelling time reduction

The target is a "*seamless border*"
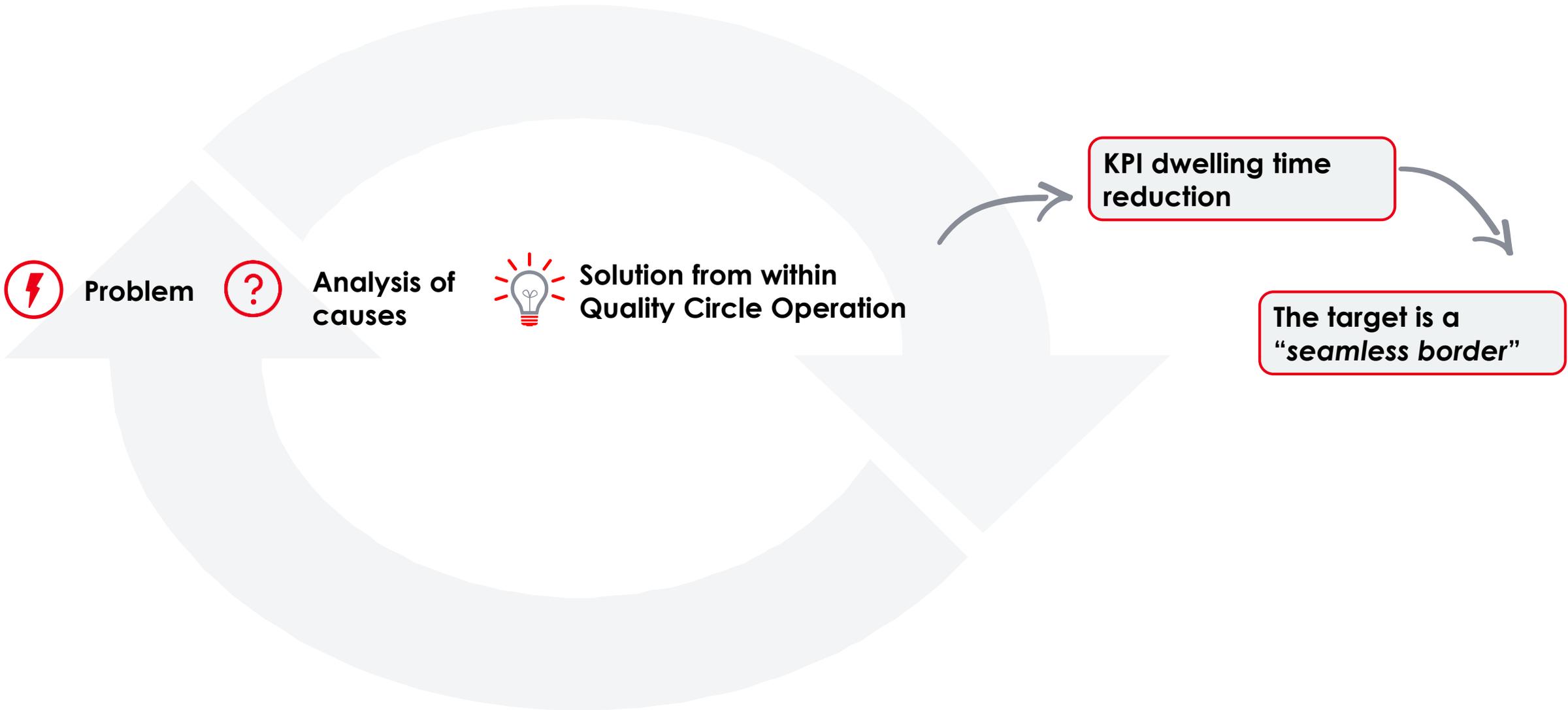
Snapshot of topics from some RUs crosssing Aachen - Montzen – for further discussion in upcoming meetings

Crossrail - "Under the issues we would like to discuss:

- Capacity issues on the line from and to Aachen when infrastructure works occur

- When the "Grenzdisponent" is absent, there is no communication possible between the RU and Infra Manager. Causing big delays that could easily be avoided.

- Possibility to take back detours when the infrastructure works have finished.

- Communication between Montzen / Aachen. We notice that trains are send from and to another station without proper communication about the continuation.

- Trains that are being pulled aside before Aachen without proper communication about the continuation of the train. (Sometimes Köln/ Bonn/ Koblenz).

- Sound issues in Aachen West"

Mündliche Rückmeldung RTB Cargo

- Lokabstellung in Aachen West ermöglichen (auch für solche Loks, die nicht zugelassen)

- Abrechnung: Minutentaktung bei Abrechnung zu kompliziert

- Baustellen ZVf sind kaum abgestimmt - daher Erwartung, wenn es zu Änderungen kommt,wäre Kundenservice wünschenswert

- Wenn Abstellung samstags, dann Mangel an Durchbindung; Es fehlt Kommunikaiton mit anbindenden EVU

- In Belgien andere Zuglängen als in DTld zugelassen - > problematisch!

Further input highly welcome!

Dwell time report as a KPI for QCO measures

RNE developed – based on TIS

Origin of the Border section report – developed with RNE basing in TIS

This report was created to fill two needs:

- To supply ERA with interoperability indicato[r] in an automated fashion. Before the creat[ion] of this report all the info needed to be extracted from the national databases an[d] compiled. This report provides the info in a standardised way automatically.

- And to comply with the new requirement i[n] the TEN-T provision

Border Section Expert Level Report	Aachen-West - Montzen	Report for period: 2022-01

Border Section Expert Level Report   **2022-01**

Aachen-West - Montzen

DB Netz AG and Infrabel

Train type: Freight

Sections: All sections

List of locations: All locations

Expert's comments

Comment type	Comment		Valid from	Valid to

Train runs identified and considered in report per direction

East-West			West-East		
# of identified train runs	# of considered train runs	% of considered train runs	# of identified train runs	# of considered train runs	% of considered train runs
1,228	972	79%	1,102	789	72%

Train runs development over period of 13 months

East-West	West-East

# The TEN-T revision: Focus on dwell time as a KPI

This report is also needed because of the new proposed (and to be debated) requirement in the TEN-T revision.

On top of those infrastructural requirements, the freight railway lines within the European Transport Corridors should meet the following operational targets by 2030:

- for each cross-border section, the dwelling time (time needed to cross a border) of all freight trains crossing the border must not exceed 15 minutes on average;

- At least 90% of the freight trains crossing at least one European Transport Corridor border must arrive at their destination, or at the external Union border if their destination is outside the EU, at their scheduled time, or with a delay of less than 30 minutes.

Sample 1: How does it look like?

Border Section Expert Level Report   Aachen-West - Montzen   Report for period 2022-01
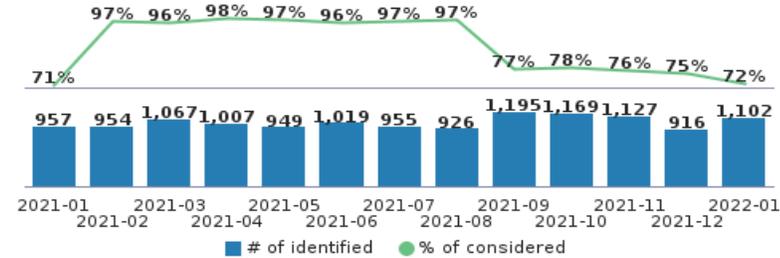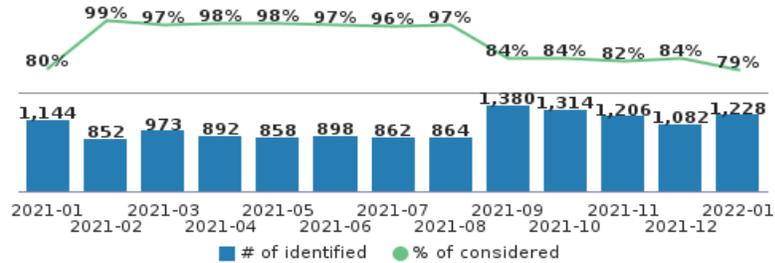
Top 10 train runs with highest delta dwell (difference between Real Dwell and Planned dwell)

Rank	Ref. OTN	Date (in origin)	Delta Dwell (min.)	List of involved Railway Undertakings	Rank	Ref. OTN	Date (in origin)
1	_____	Jan 18, 2022	1,901		1	_____	Jan 9, 2022
2	_____	Jan 23, 2022	1,668		2	_____	Jan 17, 2022
3	_____	Jan 17, 2022	1,247		3	_____	Jan 6, 2022
4		Jan 5, 2022	1,155		4		Jan 19, 2022
5	_____	Jan 3, 2022	1,115		5	_____	Jan 21, 2022
6	_____	Jan 15, 2022	953		6	_____	Jan 8, 2022
7	_____	Jan 29, 2022	885		7	_____	Jan 6, 2022
8	_____	Jan 17, 2022	832		8	_____	Jan 3, 2022
9		Jan 11, 2022	778		9		

Report execution time 09-Feb-2022 @ 12:12:33   Page 2 out of 14

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Sample 2: How does it look like?

Top 10 train runs with highest delta dwell (difference between Real Dwell and Planned dwell)

Rank	Ref. OTN	Date (in origin)	Delta Dwell (min.)	List of involved Railway Undertakings
1		Jan 18, 2022	1,901	
2		Jan 23, 2022	1,668	
3		Jan 17, 2022	1,247	
4		Jan 5, 2022	1,155	
5		Jan 3, 2022	1,115	
6		Jan 15, 2022	953	
7		Jan 29, 2022	885	
8		Jan 17, 2022	832	
9		Jan 11, 2022	778	

Rank	Ref. OTN	Date (in origin)
1		Jan __, 2022
2		
3		
4		
5		
6		
7		
8		
9		

Delay analysis

East-West

Location	Usage	# of train runs	# of incidents	amount of min.	Avg. delay
MONTZEN	EL:ML:PL	201	34	1,921	56
Aachen Hbf	EL:ML:PL	571	99	522	5
Herzogenrath	EL:ML:PL	114	9	118	13
MS - Montzen	EL:ML:PL	949	144	3,877	27
Aachen West Pbf	EL:ML:PL	818	355	24,942	70
MS - Aachen West	EL:ML:PL	818	384	25,754	67
...lberg (Rheinl) Gbf	EL:ML:PL	559	34	108	3
... - Aachen Rothe Erde	EL:ML:PL	569	32	94	3

Train identification pairs

East-West

Location A	Location B	Method	# of identified train runs	% of considered train runs	Locat...
Aachen West Gbf	MONTZEN-FRONTIERE	Alternative	122	93%	Aache...
BOTZELAER	MONTZEN	Alternative	207	97%	BOTZE...
Aachen West Gbf	Aachen-Gemmenich	Alternative	9	44%	Aache...
Aachen-Gemmenich	MONTZEN-FRONTIERE	Main	252	12%	Aache...
Aachen West Pbf	Aachen-Gemmenich	Alternative	62	77%	Aache...
Aachen West Pbf	MONTZEN-FRONTIERE	Alternative	829	97%	Aache...
MONTZEN-FRONTIERE	BOTZELAER	Alternative	989	96%	MONT... FRONT...

Sample 3: How does it look like?

We propose to actively use the dwell time report as a common basis for the regular QCR meetings/telcos

- The report was developed as a means to provide data. We could actively use the report as a basis for the QCO meetings.

- It gives a quick insight in where the major delays at the border are.

- **When we look closer at the trains in the report we can find causes and ways to improve the punctuality at the border.**

QCO Aachen - Montzen

TEN-T revision

Border section report

ERA

Questions?