

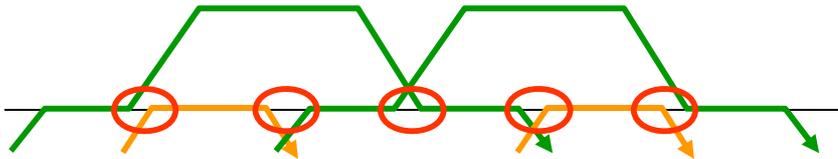
2.8 Punctual rail services

Description

Terminals that are already congested or operating at capacity limits have few or no further buffer time to compensate delayed arrival of trains. Only if trains are operated with a high rate of punctuality terminal slots can be used as contracted with operators. Un-reliabilities, as a matter of fact, are “wasting” scarce terminal resources and reducing the technical capacity. This becomes even more serious if several railway undertakings and intermodal operators are calling at a same terminal. While one operator may accept a shifting of priorities between “his” own trains, he is unlikely to agree on a shift to the benefit of a competitor.

Figure 17: Punctual rail services

Terminals operating at their capacity limits have few or no further buffer to compensate delayed trains. It is a must to operate trains with high rate of punctuality, so that terminal “slots” are used as contracted to (different) operators.



Source: KombiConsult analysis

Prerequisites and implementation

In the workshops we discussed a concept, which might induce a change of behaviour. It foresees bonus-malus incentives for delayed services and priority rules such as “punctual trains are served first”. The concept is dealing with the obligation and rights in the interplay of terminal operator, railway undertaking and intermodal operator calling at a terminal. This innovative approach has been elaborated further for the case of the “last mile” – in fact the last 50-80 km between the dedicated freight railway line, the shunting yard at Kijfhoek, the port line and the intermodal terminals in the port of Rotterdam. It is called “Ketenregie” after the Dutch word for chain management and in operation since spring 2010.

Next to the co-ordination among stakeholders itself that raised already awareness on “discipline” required to increase the performance the following ten rules were agreed upon.

Figure 18: 10 “golden” rules within Ketenregie in Rotterdam

Planning	1	Integrated Planning (IP)
	2	Terminalslot
Information	3	The number of units to load or to unload
	4	The wagon list and the AZ / ZA composition
	5	The (dynamic) expected time of departure (ETD)
	6	Transport related information
Operations	7	Loc and loc driver are back 30 min before last move
Deviations	8	Expected deviations of the planned ETA's and ETD's
Corrections	9	Replanning in case of deviations
	10	Shunting of blocking trains (terminals and shunting yards)

Source: RSC Rotterdam

Impacts and benefits

With more punctual rail services, the terminal operator will be able to improve his planning reliability, increase the capacity up to 20% depending on initial occupation rate and buffer time, and avoid wasting of resources.

The entire effect is primarily on reliability and thus quality of intermodal rail-road transport. Finally, less resources are needed and the efficiency can be increased.

Figure 19: Impact of the measure “Punctual rail services” on the four main goals



Source: KombiConsult analysis

Costs

Costs are primarily associated with the coordination of stakeholders when implementing the concept and by a transparent information system that allows to monitor the causer of a delay, measures taken and invoicing generated by that.

Involved Parties

- Infrastructure managers
- Railway undertakings
- Intermodal operators
- Terminal operators

Conflicts of goals

In most European countries, important railway undertakings and rail network operators are part of high-integrated railway holdings. In all likelihood, they will try to prevent an implementation of such bonus-malus incentives concerning the reliability of rail services.

References

Operational concept implemented in the framework of “Ketenregie” in the Rotterdam, but not yet agreed terms of commercial application of bonus-malus regime for delayed service.