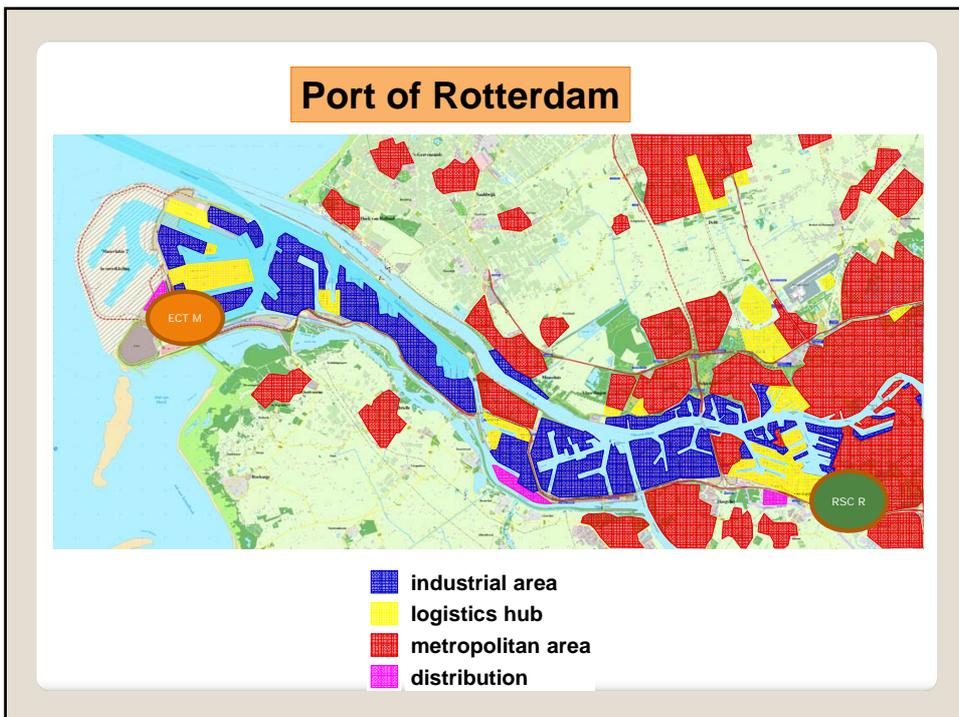




Chain Management at the Harbour Line in Rotterdam
(Kijfhoek ↔ Maasvlakte)

Pilot started in autumn 2008, roll out in spring 2010

KEYRAIL



- **NUMBER OF TRACTION PROVIDERS**

- 1 ACTS
- 2 B-Cargo
- 3 CTL
- 4 DB Schenker
- 5 ERS
- 6 SNCF FRET
- 7 HGK
- 8 ITL Benelux
- 9 RRF
- 10 Rurtalbahn
- 11 TX Logistik
- 12 VEOLIA

3

- **NUMBER OF INTERMODAL OPERATORS**

- 1 HUPAC
 - 2 ICF
 - 3 IFB
 - 4 ERS
 - 5 KOMBI VERKEHR
 - 6 IMS
 - 7 POLZUG
 - 8 KUHNE & NAGEL
 - 9 ICA
 - 10 INTRANS
 - 11 SHUTTLEWISE
 - 12 CTS
 - 13 ECT
- several smaller ones

4

CHAIN MANAGEMENT has as primary goal to improve the punctuality at the Harbour Line in the Port of Rotterdam



Introduction

Goal	Higher punctuality by more cooperation between all partners Results: - lower costs (-/- 20 %) - more production (+ 20 %) with the same assets
Scope	<ul style="list-style-type: none"> Inter modal rail transport From Maasvlakte to Kijfhoek inclusive the "integration" of the Harbour line and the Betuwe Route / the common network
Who ?	 <p>KEYRAIL As Chain Manager of the Harbour Line, Keyrail is project leader</p>

In the pilot of Chain Management of the Harbour Line TEN operational rules have been appointed



Introduction

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)

6



Planning: Rule 1: Integrated Planning (IP)

An INTEGRATED PLANNING linked with the (inter)national time tables, shunting yards slots and feasible/realistic terminal slots, is the absolute necessary basis for a high punctuality.

7

Rule 2: terminal slot



Planning: Rule 2: Terminal slot

The definition of a terminal slot includes: which activities will take place at what moment, the allowed maximum periods and who is responsible for that activity.

**E.G. - the appointed production of the terminal;
- standard times for technical controls;
- standard times for entering and departure;**

8



Information: Rule 3: number of containers

The information of the numbers of units to load or to unload has to be available in time for the terminals and the traction providers.

for unloading: RSC R: 2 hours before arrival of the train
 for ECT M: 4 hours before arrival of the train
 for loading: RSC R: 2 hours before start loading of the train
 for ECT M: 14 hours before start loading of the train

If not: the terminal can refuse the train and can give the slot to an other train

KPI: % trains with # containers in time per Operator

9



Information: Rule 4: wagon list

The information of the wagon list including the sequence (AZ – ZA) has to be proper and has to be delivered in time.

If not: the terminal can refuse the train

KPI: % final wagon lists in time per traction provider

10



Information: Rule 5: EToLM

The estimated time of the last move will be given to the traction provider as soon as possible.

for RSC R: at latest 2 hours before last move
for ECT M: at latest 4 hours before last move

If not: the terminal will pay the cost for replanning a new time table of the train by Keyrail

KPI: per terminal % announcing in the time the proper EToLM

11



Information: Rule 6 Transport information

At least 2 hours before EToLM all the transport information (wagon/container combination, hazardous cargo, train weight, etc.) has to be delivered at the traction provider.

If not: the train stays longer at the terminal

KPI: per agent: % transport information is sent in time

12



Operations: Rule 7 Loc/loc driver

Loc and loc driver have to be back at the terminal at least 1/2 hour before the (dynamic) EToLM and have to confirm that

If not: the terminal can order Keyrail to arrange a shunting by a third party, the original traction provider pays the bill.

- KPI: - per traction provider % conformations in time;**
- per traction provider % loc and loc driver are back in time.

13



Deviations: Rule 8a: ETA

The information according the deviated ETA and the replannings have to be correctly and have to be available in time for everybody.

If not: if the ETA is not in proper order, the terminalslot expires and the terminal can use the slot for other trains

- KPI: - # announced ETA deviations and replannings / total # announced ETA**

14



Deviations: Rule 8b ETD

**The information according ETD and replanning
has to be correctly and has to be delivered in
time**

If not: the time table will be expired

**KPI: per terminal: % ETD announced in time
per traction provider: % replanned trains**

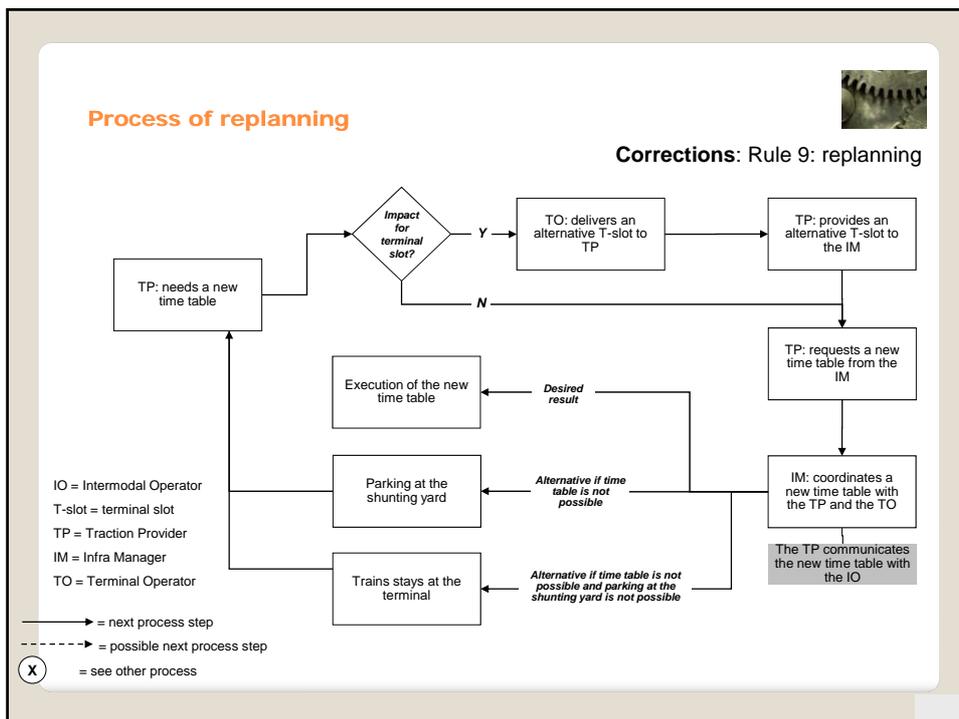
15



Corrections: Rule 9 replanning

**For replanning a lot of appointments are made
and translated in line diagrams**

16



Keyrail can order to remove blocking/ obstructed trains and the obstructor will pay the bill

Corrections: Rule 10: Shunting

Initiative	In which situation is a train blocking	Invoice
terminal or traction provider	The terminal has not announced in time the estimated time of the last move (RSC: 2 hours and ECT: 4 hours)	Terminal
Terminal	The traction provider didn't confirm the return of the loc and loc driver at least 3 hours before ETD	Traction provider
Terminal	The traction provider announces that it is not possible that the loc and loc driver will be back at the terminal at least 1 hour before ETD. There above the terminal can't give a new ETD which is acceptable for the terminal and the traction provider	Traction provider
Terminal	The loc and loc driver are not back at the appointed time (1 hour before ETD)	Traction provider
Keyrail	The loc and loc driver are not at the shunting yard, 30 minutes after ETD.	Traction provider
Keyrail	The shunting yard advised by Keyrail is (almost) fully occupied.	Keyrail

KPI: Per traction provider # blocking trains for which shunting is requested



Thank you for your attention.