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Redesign of the International Timetabling Process

Work Package 1: 'Market, Capacity, and Works & Possessions'

EXTENDED EXECUTIVE SUMMARY

Introduction

First phase of project focused mostly on market needs.

Work Package 1 team (WP1) detected 5 sets of requirements deemed essential by railway market for improved international timetabling:

- several necessary preconditions
- interactive Advanced Planning
- efficient Coordination of Works and Possessions (W&P)
- innovative features during Timetable Production
- flexible, efficient and harmonised change processing

Key horizontal themes identified so far across all requirements:

- innovation
- flexibility
- stability
- harmonisation

Overview of key requirements for redesign of international timetabling

Preconditions

- Capacity products and safeguarding
- Harmonised rules (e.g. cancellation, priority)
- Leading role of IM

Advanced Planning

- Capacity needs of market
- Iterative dialogue between IM and RU/other applicants
- Earlier feasibility studies

Coordination of Works & Possessions

- Regular information cycles
- Path offers including W&P impacts
- Common information on capacity constraints

Timetable Production

- Harmonised and stable train path offers
- Quick allocation procedure (passengers)
- Fine-tuning before allocation (freight)

Change Processing

- Post-annual requests
- Flexibility in handling of changes
- No 'frozen zone' before allocation

Necessary preconditions for a successful redesign of international timetabling

- Capacity products must be centred on market and end-customers:
 - Pre-constructed products (PaP, Catalogue Paths)
 - Framework Agreements
 - Feasibility Studies
- New methods and products for safeguarding capacity will ensure high planning reliability
- Harmonisation and transparency will play a crucial role:
 - when applying priority rules
 - when following cancellation procedures and charging cancellation fees
- A coordinating IM 'entity' will be designated to lead the train path allocation procedure

Interactive Advanced Planning: from X-24 months or earlier until path request deadline

Iterative dialogue with RUs will facilitate path planning. It will involve:

- processing capacity needs announcement of RUs/other applicants
- designing market-oriented innovative capacity products
- harmonising international pre-constructed products
- informing and consulting on internationally-harmonised deadlines
 - concerning works with major/medium impacts
 - concerning (regular) fixed possession windows
- publishing an overview of available capacity and constraints (due to works and possessions)
- conducting internationally-harmonised feasibility studies
 - these may begin at X-16 months
 - these are carried out before the start of the RU preparation phase for path requests
- running regular IM-RU exchange platforms at X-15 months (workshops)

Coordination of Works and Possessions (W&P): continuous task throughout whole planning cycle

Works and possessions (W&P) disrupt traffic.

They need to be efficiently coordinated at the international level:

- through a regular iterative information cycle with RUs starting at X-24 months
- thanks to two new harmonised deadlines for announcement of capacity constraints due to W&P: X-17 and X-12 months
- by taking W&P into account during design of pre-constructed products and capacity offers

Results:

- path ordering takes into account alternatives
- optimal resource planning by RUs and other applicants
- draft and final offers are stable and take into account W&P with major/medium impacts
- W&P with minor impacts are coordinated and announced in an internationally-harmonised way, too

More innovative Timetable Production after path request deadline

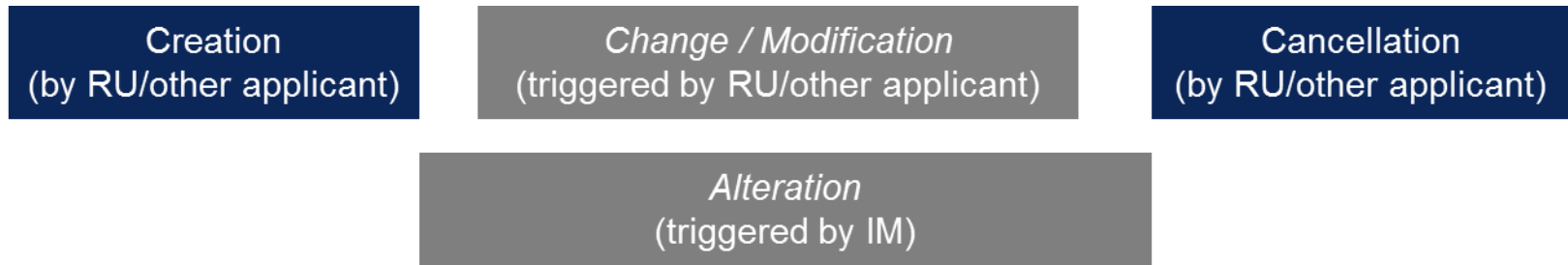
Main features during this period:

- Regular communication between RUs/other applicants-IMs: deals with RU-triggered changes, IM-triggered alterations and conflict resolution
- Draft and final offers get harmonised and are stable: no 'partial offers'
- Coordinating IM acts as 'Project Manager', therefore strongly involved
- *Passenger-specific*, to meet the need for reliability of passenger market
 - if draft offer accepted, final allocation immediate
 - final allocation made no later than X-4 months so that train operator can start ticket sales as early as possible
- *Freight-specific*, to meet the need for flexibility of freight market
 - majority of stakeholders want path request deadline not earlier than X-6 months
 - majority of stakeholders want path request deadline closer to date of Timetable Change
 - fine-tuning phase shall be introduced between draft offer and allocation

Change Processing: flexible, efficient and harmonised (1)

New options before and after train path allocation:

- Post-Annual Requests replace Late Path / Ad-Hoc Path Requests
- Post-Annual Requests will contain the following options:



- It should be possible to make changes to path details immediately after path request deadline (instead of after a 4-month 'frozen zone')
- Preconditions for successful change processing are:
 - Full harmonisation of train path requests and offers
 - Complete offers (not partial)
 - Delivery of train path offers on time

Change Processing (2)

During the period between path request deadline and train path allocation:

- Changes to initial requests and draft offers should be handled in a harmonised and transparent way
- Changes to path requests may be handled with some flexibility:
 - the IM may define an acceptable range of changes
 - the IM has to give feedback on feasibility of change requests (= notification to RU/other applicant)
- To avoid massive amount of modifications/alterations after allocation, a fine-tuning phase should be introduced between draft offer and allocation

Change Processing (3)

During the period after train path allocation and up to X+12 months:

- Harmonised alterations caused by Works & Possessions with minor impacts will be possible

- In the freight sector:
 - deadlines for updating annual timetable will be more frequent (monthly)
 - harmonised procedures during running timetable will focus on RU needs
 - deadlines for requests concerning train path changes will be market-oriented (with a lead time of 4 weeks)

What next?

The second project phase has already started:

- Work Package 2 team is analysing in detail market requirements identified by Work Package 1 team and new requirements that have come in from the sector
- WP2 team will draft a new timetabling process based on these requirements
- Close interaction between the two teams is still ongoing
- Final proposal will be created in spring 2016
- Intensive consultation and wide-ranging endorsement to follow – both in the second half of 2016

Thank you for your attention!