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1 Creation and usage of re-routing scenarios

The re-routing scenario is compiled of possible re-routing options related to individual ICM line sections, including a map view (schematic view, snapshot from/link to CIP, etc.).

Each RFC defines the re-routing scenarios and collects the information about re-routing options using the agreed excel file template described in chapter 3 of this document.

All collected information (after approval of RFC Managing Board if required) are imported to CIP following the process and responsibilities described in Annex 4 of the ICM Handbook.

In case of real interruption, the re-routing scenario for specific ICM line can be directly exported from CIP, including a map view. The detailed instruction how to export the re-routing scenario from CIP can also be found in Annex 4 of the ICM Handbook. "Please note, that this information will be available in Annex 4 only after the related CIP developments are implemented. The targeted availability of required CIP functionality is for the TT period 2022 (subject of approval of required developments by CIP CCB)."

The rerouting overviews shall be reviewed on a yearly basis and the updated version of the rerouting overviews shall be available in CIP by 2nd Monday of January at the latest. The review is initiated by the RFC, addressing the member IMs in advance so at least 2 months before the deadline for import the content of rerouting overviews is agreed on the RFC level.

Special conditions for year 2022 (as CIP developments are not yet finalised):

The RFC shall ensure that the content of rerouting overviews is agreed and published in CIP Document section and alternatively also on the RFC website by 10 January 2022 at the latest.

2 Definition of re-routing scenarios

Each re-routing scenario is defined by:

- identification of the ICM line, for which re-routing scenario is prepared
- list of relevant re-routing options (line sections and subsections)
- detailed information for each re-routing line subsection

When ICM lines and rerouting options are defined, the CIP topology, especially the segment definition, shall be considered to enable the smooth import to CIP.

In case of the ICM line belonging to 2 or more RFCs, the cooperation on identification of rerouting options is needed between all concerned RFCs.

To ensure that the same parameters are provided by multiple RFCs for the same line, if a rerouting option, or part of it, belongs to a specific RFC, this RFC should collect the infrastructure parameters for this option and provide it also to other concerned RFCs.



Annex 2: Re-routings overview template Update to be approved by High Level Group: RNE/RFC

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All above listed information shall be collected and provided in the single excel file.

For one ICM line, several re-routing line sections can be defined and each re-routing line section can consist of multiple re-routing line subsections. Each subsection is defined by Starting and Ending point and should cover just one single IM network. This means, that if re-routing section is over the network of 2 IMs, in minimum 2 subsections have to be defined (one for each IM network). In addition, one subsection should represent one set of basic parameters. Thus, if the e.g. track-gauge is changing in the re-routing section, this section should be split to 2 subsections with 2 different track-gauges.

To provide the precise overview which re-routing line sections and subsections are related to which ICM line, one of the bellow mentioned approaches shall be followed:

First approach: All information provided in one overview table

- One table listing and describing all re-routing line subsections and indicating the ICM line and re-routing line section to which it relates
- With this approach, the first 2 columns (indicated as optional) in the excel file template shall be used
- PROS
 - Single table to import
- CONS
 - Multiple columns to be filtered to prepare the scenario for single ICM line
 - Same re-routing option listed several times (if applicable for more ICM lines)

Second approach: Structured document with multiple sheets

- Structured document consists of:
 - One sheet providing detailed info for each re-routing line subsection just once
 - One sheet for each re-routing scenario, indicating the relevant ICM line and re-
 - routing line section mapping/linking all relevant re-routing line subsections to it
- PROS
 - o Each re-routing line subsection is listed just once
 - All information for one re-routing scenario within single table
- CONS
 - Additional sheet needed to map re-routing line subsections to scenarios

Each RFC can decide, which approach is more suitable for its needs.

3 Information to be provided for each re-routing line subsection

The specific excel file template, available at the end of this document, shall be used by all RFCs to collect the necessary information about all re-routing options (sections and subsections). The bellow listed information shall be collected for each re-routing line subsection and shall be then included in the re-routing scenario to be used during the real ICM case, together with map. In addition to the information collected via the excel file, the additional information already available in CIP will be included in the re-routing scenario.

The information indicated as mandatory should be provided for each re-routing line subsection. Provision of the optional information is up to the decision of the individual IM.



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In case the required value cannot be chosen from the list of pre-defined values, the RNE CIP administrator (<u>support.cip@rne.eu</u>) shall be contacted and list in CIP and excel file template will be extended accordingly. Such change shall not be a reason for revision of this document, but if a revision of this document is initiated for different reasons, in such case the bellow lists of values shall be updated accordingly.

The detailed information about the information displayed in the rerouting scenario are explained bellow:

Column A – ICM line section – optional

- to describe the ICM line to which the re-routing option relates to, in case the first approach of definition of re-routing scenario is used;

Column B - Re-routing line section - optional

- to describe the re-routing line section to which re-routing line subsection relates to, in case the first approach of definition of re-routing scenario is used;

Column C - Re-routing line subsection (A->B) - mandatory

 to describe the re-routing line subsection, for which the information in the next columns relates to; the subsection is defined by pair or points (point A and point B) within single IM network;

Column D – Relevant IM – mandatory

to describe the IM network, to which the re-routing line subsection belongs to;

Column E – Usage – Mandatory

- to specify, whether the re-routing line subsection can be used for freight, passenger or both types of traffic
- only one option from drop-down menu shall be chosen:
 - Freight
 - Passenger
 - Passenger & Freight

Column F - Traction power - mandatory

- To specify the traction power of the re-routing line subsection
- If part of section is electrified and part not, the section should be stated either as not electrified or preferred approach is to split the section to 2 subsections)
- only one option from drop-down menu shall be chosen:
 - 25 KV AC
 - 15 KV AC
 - 3 KV DC
 - 1,5 KV DC
 - not electrified

<u>Column G – Line category</u> – mandatory

- to specify the line category; based on line category the information about axle load is known
- only one option from drop-down menu shall be chosen:
 - E5
 - E4
 - D4L



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- D4
- D3
- D2
- CM4
- CM3
- CM2
- C4/CE
- C4
- C3L
- C3
- C2
- B2
- A
- national category

Column H - Minimum number of tracks - mandatory

- To specify the minimum number of track available on the re-routing line subsection
- only one option from drop-down menu shall be chosen:
 - Three or more
 - Double-track
 - Single-track

Column I & J - Maximum gradient (per direction) - mandatory

- To specify the maximum positive slope on the re-routing line subsection, per direction
- Indicated direction (A->B) represents the direction from point A to point B (point A and B are defining the subsection (column C)
- Opposite direction (B->A) represents the direction from point B to point A (defined in column C)
- Only one option from drop-down menu shall be chosen:
 - Gradient <= 5</p>
 - 5 < Gradient <= 10</p>
 - 10 < Gradient <= 15</p>
 - 15 < Gradient <= 20</p>
 - 20 < Gradient <= 25</p>
 - 25 < Gradient <= 30</p>
 - 30 < Gradient <= 35</p>
 - Gradient > 35
 - Upon request

Column K - Gauging - mandatory

- To specify the gauge profile on the re-routing line subsection
- only one option from drop-down menu shall be chosen:
 - A
 - DE3
 - EBVO1
 - EBVO3
 - G1
 - G2



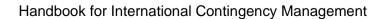
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- GA
- GB
- GB1
- GB2
- GB&G2,
- GB+&G2
- GC
- GHE16,
- PTb+
- Upon request

Column L - Intermodal Freight Code - mandatory

- To specify the operability of intermodal loading units in regards of height and weight (UIC Leaflet 596-6) on the re-routing line subsection
- Only one option from drop-down menu shall be chosen:
 - P/C 99/429
 - P/C 90/410
 - P/C 82/412
 - P/C 80/410
 - P/C 80/405
 - P/C 80/400
 - P/C 78/402
 - P/C 75/405
 - P/C 72/398
 - P/C 72/391
 - P/C 70/400
 - P/C 70/390
 - P/C 67/391
 - P/C 67/389
 - P/C 65/395
 - P/C 60/390
 - P/C 60/384
 - P/C 60/380
 - P/C 57/381
 - P/C 55/385
 - P/C 52/368
 - P/C 50/380
 - P/C 50/370
 - P/C 47/360
 - P/C 45/375
 - P/C 45/364
 - P/C 45/358
 P/C 45/358
 - P/C 45/358
 P/C 45/351
 - P/C 45/351
 P/C 38/357
 - P/C 33/349
 - P/C 33/349
 P/C 32/351
 - P/C 32/331
 P/C 22/341
 - not in use





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- upon request

Column M - Track gauge - mandatory

- To specify the track gauge of re-routing line subsection
- Only one option from drop-down menu shall be chosen:
 - 1435 mm
 - 1435/1520 mm (both available)
 - 1435/1668 mm (both available)
 - 1520 mm
 - 1668 mm
 - Narrow gauge

Column N - Maximum speed - mandatory

- To specify the maximum speed on the re-routing line subsection applicable for freight traffic
- Only one option from drop-down menu shall be chosen:
 - >=121 km/h
 - 101-120 km/h
 - 81-100 km/h
 - 61-80 km/h
 - <=60 km/h

Column O - Maximum train length as published in Network Statement - mandatory

- To provide the information about maximum train length, that is published for the re-routing line subsection in network statement
- Published usually with disclaimer that it is the best-case scenario
- Only one option from drop-down menu shall be chosen:
 - >750 m
 - 700 750 m
 - 650 699 m
 - 600 649 m
 - 550 599 m
 - 500 549 m
 - 450 499 m
 - 400 449 m
 - 350 399 m
 - 300 349 m
 - < 300 m
 - Upon request

<u>Column P – Maximum train length operational in case of ICM – optional</u>

- To provide the information about maximum train length that is feasible on the re-routing line subsection in case of ICM case
- For a lot of IMs might be the same as the maximum train length published in network statement (column N)
- The precise value to be provided as free text



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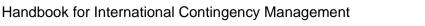
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Column Q & R - Maximum train weight (per direction) - mandatory

- To specify the maximum train weight on the re-routing line subsection, per direction
 - Indicated direction (A->B) represents the direction from point A to point B (point A and B are defining the subsection (column C)
 - Opposite direction (B->A) represents the direction from point B to point A (defined in column C)
- The precise value shall be provided as free text value in tons preferred; if more information needs to be provided, the column miscellaneous can be used;)

Column S – Signalling Class B – mandatory

- To provide information about Signalling class B
 - Only one option from drop-down menu shall be chosen:
 - 75 Hz
 - AB
 - ALSN
 - ASFA
 - ATB EG
 - ATB NG
 - BAL + KVB
 - BAPR + KVB
 - BMVU
 - BT
 - Crocodile
 - Crocodile + TBL1(+)
 - EBICAB (700)
 - EBICAB ATC
 - EMS with BT
 - Euro-Signum/Euro-ZUB (P44 per ETM)
 - Euro-Signum/Euro-ZUB (P44 per ETM) + PZB
 - Euro-Signum/Euro-ZUB (P44 per ETM) + SCMT
 - KVB
 - LS System
 - MEMOR II+
 - PAB
 - PZB
 - PZB + LZB
 - SB
 - SCMT
 - SHP
 - T
 - TBL (1+)
 - ZUB123 ATC
 - No class B system
 - Not signalling controlled
 - Upon request





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Column T - Class A - mandatory

Information not to be filled in - will be taken from CIP

Column U - Capacity Indication - optional

- To provide the rough indication about the possible available capacity for re-routing
- Only one option from drop-down menu shall be chosen:
 - Excellent (> 75 %)
 - Good (50 75%)
 - Limited (10 50 %)
 - Extremely limited (<10 %)
 - Upon request

Column V - Capacity Indication Explanation - optional

- To indicate the amount of theoretically available paths
- Only one option from drop-down menu shall be chosen:
 - > 50 trains per day per direction
 - appr. 25 –50 trains per day per direction
 - appr. 10 –24 trains per day per direction
 - appr. < 10 trains per day per direction
 - o upon request

Column W - Length of re-routing option (in km) - mandatory

The precise value to be provided

Column X – Official communication language – optional

- To specify the official language to be used on the re-routing subsection, defined by national law
- The language shall be stated in English as free text

Column Y - Implemented language tools - optional

- To provide the information about the implemented measures concerning the Directive 2007/59/EC on the certification of train drivers ... Annex VI Art 8
- The information shall be provided in English as free text

Column Z - Miscellaneous / Restrictions - optional

- To provide any additional information, e.g. about restrictions, train length, etc.
- Information shall be provided in English as free text



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4 Re-routing overview template

								Maximum gradient						Maximum train length		Maximum train weight		Signalling		Capacity		_			
ICM line section (opt.)	Re- routing line section (opt.)	Re-routing line subsection (A->B)	Relevant IM	Usage	Traction Power	Line category	Minimum number of tracks	Indicated direction (A->B)	Opposite direction (B->A)	Gauging	Intermodal Freight Code	Track gauge	Maximum speed	As published in Network Statement	Operational in case of ICM (optional)	Indicated direction (A->B)	Oposite direction (B->A)	Class B (to be filled in)	Class A (to be taken from CIP)	Indication (optional)	Indication explanation (optional)	Length of re- routing option (in km)	Official communication Language	Implemented language tools	Miscellaneous / Restrictions
				-																					

