Timetable Redesign:

Capacity Strategy 2026 Netherlands

By	ProRail Capacity Management
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Index

1 Introduction

After 2025, timetable year 2026 is the second year in which TTR (Timetable Redesign) will be partially implemented. ProRail has agreed to actively participate in TTR together with a number of other European countries. The experiences gained during the development of the capacity strategy for the 2025 timetable, the feedback after publication and the evaluation are input for the capacity strategy for timetable 2026.

TTR stands for redesign of the capacity allocation process. The aim of this is to achieve a harmonized timetable at European level and a uniform working method for requesting and allocating capacity. So that international train paths connect, temporary capacity restrictions are coordinated, and information about infrastructure changes is shared with each other in a timely manner. The aim is also to allocate capacity to international passenger trains earlier, so that ticket sales can start earlier and passenger transport companies can compete with aviation. For freight transporters, the goal is to keep sufficient capacity and high-quality international train paths available until the moment of operation.

The first phase within TTR is the capacity strategy. This phase starts 5 years before the start of the timetable and runs until 3 years before the start of the timetable. This is followed by the phase of the capacity model, for which the capacity strategy is the basis.

The capacity strategy covers the following:

- The available infrastructure at the start of the 2026 timetable and during 2026;
- Principles for the design and programming of temporary capacity restrictions and a selection of the expected major temporary capacity restrictions;
- Expected traffic developments and border crossing capacity.

These points have been discussed and coordinated with the infrastructure managers of the neighboring countries, Infrabel and DB Netz. This document displays the results, which will subsequently be published. Stakeholders such as railway undertakers, carriers and infrastructure managers from surrounding countries can use this information to develop plans. The purpose of this document is to inform; the capacity strategy is not binding.

This document starts with a description of TTR and the process and scope for the capacity strategy. Subsequently, the substantive elaboration is described in the chapters for infrastructure, temporary capacity restrictions and traffic developments. Appendix A contains a list of abbreviations used in this document.

New in capacity strategy 2026 compared to capacity strategy 2025:

- Expansion of the geographical scope;
- Timeline feedback process stakeholders;
- Main feedback on capacity strategy 2025 processed in 2026.

2 Process and scope TTR-capacity strategy

2.1 Capacity strategy within the TTR-process

Timetable Redesign starts with the capacity strategy 5 years before the start of the timetable. This phase lasts 2 years, after which the capacity model phase starts. The capacity model phase runs from 3 years to 1.5 years before the start of the timetable. Both the capacity strategy and the capacity model fall within the Medium Term Process (MLT) with which ProRail works.

The TTR phase of capacity planning and supply starts 1.5 years before the start of the timetable. At ProRail, this is the current phase of preparation of the annual timetable. The timetable preparation phase is followed by the annual timetable phase as we currently know it at ProRail 11 months before the start of the timetable.

For each phase of the TTR process there are changes compared to the current processes of ProRail. In addition, the impact of those changes becomes larger if the planning phase is closer to operation. Figure 1 indicates the different phases of TTR. The TTR process description contains more information about the content of each planning phase.

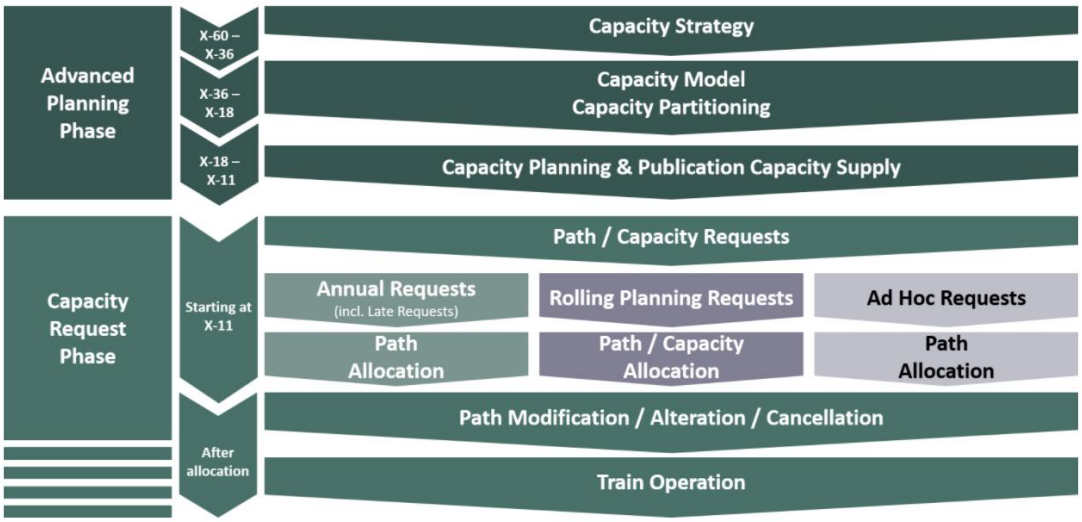


Figure 1: Scheme of TTR phases

2.2 Shortened planning for capacity strategy 2026

The preparation of the capacity strategy for timetable 2026 started later than the prescribed 5 years, namely in July 2022. That is 3.5 years before the start of the timetable. Therefore, the planning has been merged for both the capacity strategy and model phase. Table 1 shows the adjusted planning for the 2026 capacity strategy. Section 2.5 provides a detailed schedule for the process of developing the capacity strategy.

Table 1: Planning of capacity strategy 2026

Timeline (in months)	Timeline	Milestone / activity
X-41	July 2022	Start capacity strategy
X-41 tot X-37	July 2022 – November 2022	Collect input and create draft version capacity strategy
X-37	November 2022	Harmonize capacity strategy with neighboring countries
X-36	December 2022	Create final version and publish capacity strategy

Appendix C shows the planning of the capacity strategy for the years 2027 and 2028, with 2028 being the first year for which the intended timeline for TTR is achieved.

2.3 Minimum Viable Product

2025 is the first timetable year for which TTR applies. That is why a number of infrastructure managers have opted for the Minimum Viable Product (MVP) method for the 2025 capacity strategy. This means that only the most important points are included in the first version, in order to have a product in a short time that can be discussed and harmonized between the countries. After a number of iterations between participating countries, the capacity strategy for 2025 has been published.

Participating countries of the MVP are:

- Belgium: Infrabel
- Germany: DB Netz
- Italy: RFI
- Luxembourg: ACF
- Netherlands: ProRail
- Austria: ÖBB Infra
- Switzerland: TTR@CH (SBB Infra, BLS Infra & Schweizerische Trassenvergabestelle)

The experiences gained during the development of the capacity strategy for timetable 2025 and the feedback after publication are input for the capacity strategy for timetable 2026. In addition, there was also an evaluation between infrastructure managers of the participating MVP countries and, led by RNE, also with all other countries that have published a capacity strategy for 2025. All improvements have been included in the 2026 capacity strategy.

2.4 Scope capacity strategy

2.4.1 Time scope

Timetable 2026 starts Sunday December 14, 2025 and ends Saturday December 12, 2026. This is the scope for major TCR's. For developments in the timetable and infrastructure, both the changes up to the start of the timetable and the changes during timetable year 2026 are important. We therefore include all changes from 2023 up to and including 12 December 2026.

2.4.2 Geographic scope

The scope of TTR is the entire network, excepted regional lines and supply lines on which no more than one railway undertaker operates.

For the 2025 capacity strategy, the countries that participated in the MVP chose to include only the larger border crossings with heterogeneous traffic. For the capacity strategy 2026, we will expand this with border crossing Heerlen – Herzogenrath.

For the Netherlands, the following border crossings are in scope for the 2026 capacity strategy:

- Oldenzaal – Bad Bentheim (NL-D)
- Zevenaar – Emmerich (NL-D)
- Venlo – Kaldenkirchen (NL-D)
- Heerlen – Herzogenrath (NL-D)
- Eijsden – Visé (NL-B)
- HSL Hazeldonk – Meer (NL-B)
- Roosendaal – Essen (NL-B)

ProRail does not include the other border crossings in the capacity strategy for 2026. If necessary, these can be added in later TTR phases or for the capacity strategy for later timetable years. This will then be in consultation with the infrastructure manager of the neighboring country concerned.

Within the Netherlands, ProRail has included the route sections of the main traffic flows via the above-mentioned border crossings in the scope. Compared to 2025, in 2026 we will enlarge the scope with the following route sections: Sittard – Heerlen, Sloe – Roosendaal, Beverwijk – Amsterdam Sloterdijk (via Haarlem), Schiphol – Duivendrecht and Weesp – Lelystad.

Figure 2 shows the geographical scope for the 2026 capacity strategy within the Netherlands. The route sections of the participating MVP countries that fall within the scope of the capacity strategy for 2026 are included in Appendix B.

Within the Netherlands, ProRail will further expand the scope for the capacity strategy in the coming years, so that the entire network will be included in the capacity strategy within a few years. For the 2027 capacity strategy, ProRail intends to add all diversion routes of the main traffic flows to the border crossings to the TTR scope. The aim is to have the entire network in scope by 2028, although we are dependent on neighboring countries for border route sections.

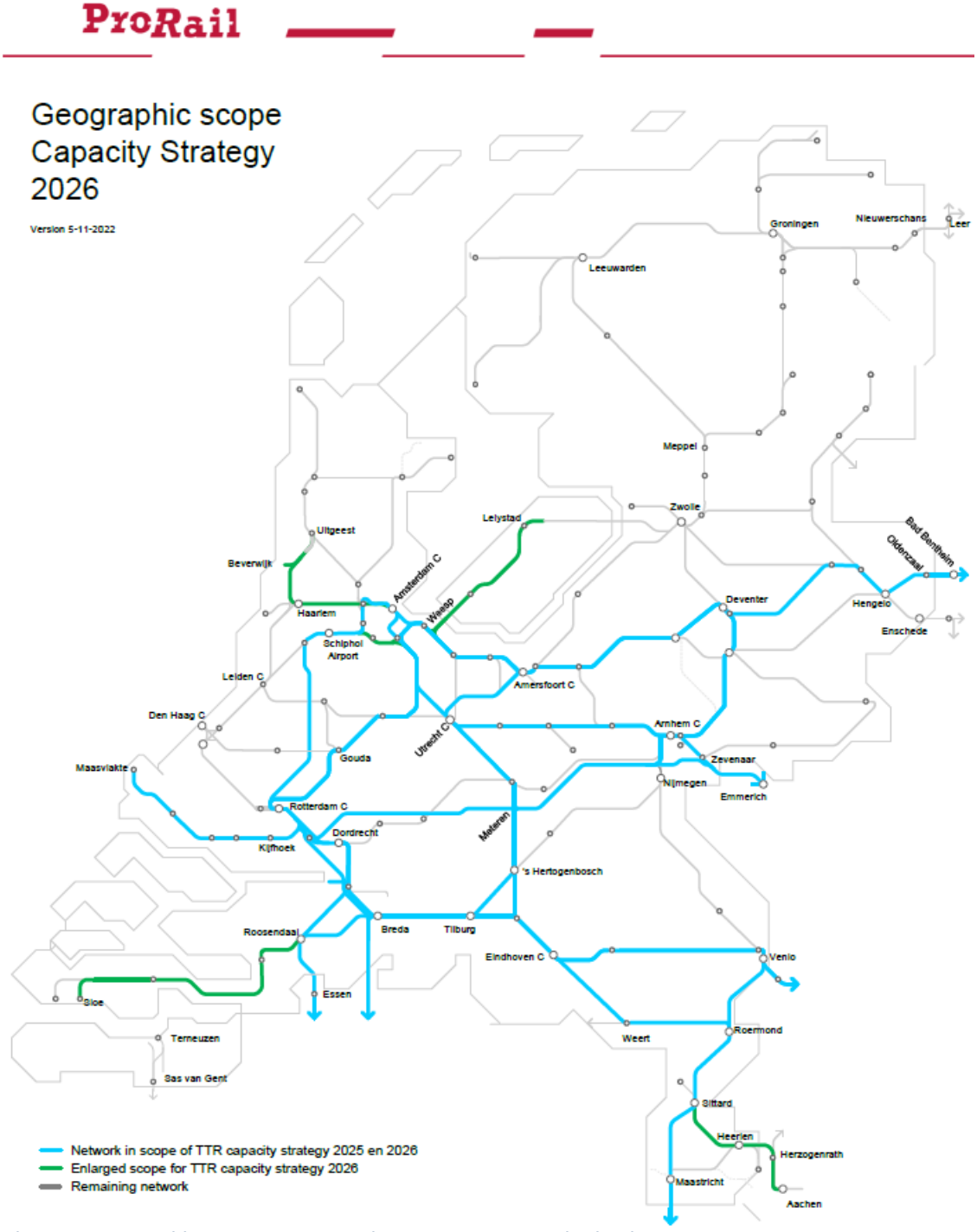


Figure 2: Geographic scope TTR Capacity Strategy 2026 Netherlands

2.5 Capacity strategie development process

The capacity strategy for timetable 2026 is drafted by the department Capacity Management of ProRail. Information about expected traffic developments is collected from railway undertakings and concession providers, whereby the input from the MLT process is also used[1]. In addition, the feedback on the capacity strategy for 2025 has been included.

The national capacity strategy is then coordinated with the infrastructure managers of neighboring countries. The aim is to ensure that the geographical scope, the scheduling of temporary capacity restrictions and the intended traffic developments fit together.

ProRail shares the draft version of the capacity strategy with all railway undertakings, whereby railway undertakings have the opportunity to provide feedback.

The Director of Capacity Management of ProRail approves the capacity strategy. Subsequently, the capacity strategy will be published in December 2022 on the websites of both RNE and ProRail.

Table 2 shows the time schedule used by ProRail, based on the publication of the capacity strategy in week 50 (36 months before the start of the timetable for the concerned year). For 2026, we still deviate from the intended timeline due to the shorter time between the publication of the 2025 capacity strategy and the 2026 capacity strategy.

Table 2: Timeline for align and publish capacity strategy

Capacity strategy 2026	Capacity strategy 2027 and beyond	Milestone / activity
Until week 46 2022	Until week 36 2023	Create and coordinate content internally at ProRail
Week 47 2022	Week 38 2023	Coordinate with infrastructure managers in neighboring countries
Week 47 2022	Week 41 2023	Harmonized draft version ready
Week 47 2022	Week 42 2023	Submit draft version to the managers of ProRail departments Infra Development, Logistics Development and Management Capacity
Mid week 47 – week 50 2022	Week 43 2023	Draft version capacity strategy share with railway undertakings and request for feedback
Eind week 50 2022	Week 47 2023	Process any changes
Week 51 2022	Week 48 2023	Submit any changes to the managers of ProRail departments Infra Development, Logistics Development and Management Capacity
Week 51 2022	Week 49 2023	Final version ready and submitted to the director of CM for approval
Week 51 2022	Week 50 2023	Publication on the RNE and ProRail website

1 Traffic developments in the form of MLT product steps are kept confidential. That is why it is checked for each product step whether it can be included in the capacity strategy.

3 Expected infrastructure for timetable 2026

3.1 Principles for available infrastructure for 2026

The starting point for the capacity strategy is the available infrastructure at the start and during timetable 2026, including the new infrastructure that will become available in 2023, 2024 and 2025. The aim is to describe the expected available infrastructure for 2026, both the added (positive) capacity and the decreased (negative) capacity. Criteria for this are:

- Within geographic scope
- Ready for operation no later than 2026:
    - Inquiry for infrastructure measures can be included in this, with the aim being that the project will be completed by 2026 at the latest.
- Only projects where the end situation is ready for operation:
    - Impactful project phases are included in section 4.6
- Changes to the infrastructure functionality; tracks and switches, security, permitted axle loads or other changes that have an impact on the timetable.

The map of Figure 3 shows the infrastructure changes that meet all the above criteria. In Table 3 and Table 4, all infrastructure changes are subdivided into projects with an increase in capacity (Table 3) and a decrease in capacity (Table 4). A brief description is given for each project, including the effect on logistics. For each project the planned commissioning date indicates when the infrastructure change becomes ready for operation. This date indicates the current schedule or forecast. It is possible that the planning of projects will shift, which is why it has been indicated that it is an expected planning. The feasibility of commissioning indicates the degree of certainty, where *risky* indicates that there is a chance that the project will not be completed on time, *probable* indicates a greater chance that the project will be completed on time, and *certain* indicates that the project will be completed on time.

In addition to the infrastructure change projects that meet the above criteria, there are other infrastructure projects where the functionality changes. These projects are included in appendix 10 of the Network Statement[2].

[2] *See appendix 10 of Network Statement 2024, version 1.0, 9 December 2022, reference T20180019-117460140-6314*

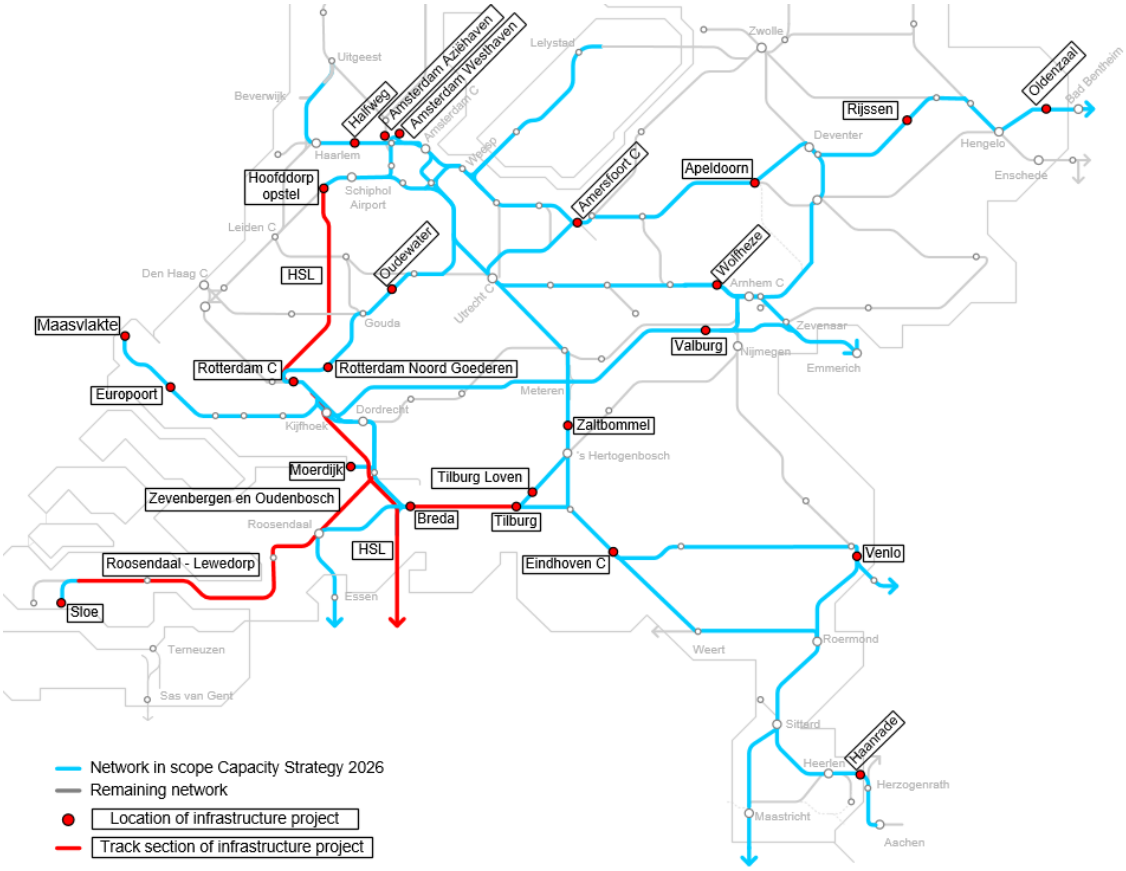


Figure 3: Locations with infrastructure projects with capacity impact

3.2 Expected increased infrastructure capacity

Table 3: List of infrastructure projects with additional capacity effects in the Netherlands up to 2026

Location	Description	Effect on logistics	Planned commissioning date	Commissioning feasibility	Finance secured
Amsterdam Westhaven	New stabling yard	Extra capacity for stabling 110 units of passenger rolling stock	07/2023	Certain	Yes
Apeldoorn	Adjustments layout and extra platform track. Instead of 3 through platform tracks there will be to 2 through	Trains from the direction of Deventer and Zutphen can turn around simultaneously at the platform. Shorter	09/2023	Certain	Yes

	platform tracks + 2 dead end tracks for direction Deventer and Zutphen	running times and more simultaneities			
Tilburg – Breda	Adjustment layout and fourth platform track Tilburg. Remove switches Gilze-Rijen. Adjustment signalling Tilburg - Breda	Higher platform capacity and shorter headway times	09/2023	Certain	Yes
Sloe	Electrification second set of stabling tracks for freight trains	More capacity for freight trains with electric traction	11/2023	Certain	Yes
Oldenzaal	Additional platform track in side position and increased speed through the station	Regional train can turn around simultaneously with through long-distance passenger trains and freight trains. Shorter running times	12/2023	Risky	Yes
Tilburg Loven	Extension track 202a and electrification track 203	Up to 660m long freight trains possible. Departure towards 's Hertogenbosch with electric traction	07/2024	Probable	Yes
Amersfoort Centraal	Adjustments layout west side of the station	Shorter running times and more simultaneities	09/2024	Risky	Yes
Rotterdam Centraal	Adjustment of layout and extension of platform tracks	Shorter running and headway times, more platform tracks for long trains	11/2024	Probable	Yes
Hoofddorp stabling yard	Adjustment of layout and 4 additional tracks in central control panel	Extra capacity at Hoofddorp stabling yard	12/2024	Risky	Yes
HSL Breda border – Rotterdam Lombardijen and Rotterdam - Hoofddorp	Measurements for noise limits	Capacity for more trains and shorter running times	12/2024	Probable	Yes

Amsterdam Aziëhaven	Extra storage track for 740m long freight trains	Capacity for more 740m-long freight trains	05/2025	Risky	Yes
Moerdijk	2 storage tracks for 740m long freight trains	Freight trains with length of 740m can start/end at Moerdijk	Q2/2025	Risky	Yes
Rotterdam Noord Goederen	New stabling area for passenger trains, side track for 740m long freight trains	Extra capacity for stabling of passenger rolling stock, enable 740m long freight trains on corridor Kijfhoek – Bentheim / Amsterdam / Onnen	09/2025	Probable	Yes
Valburg	New container terminal	New origin and destination for freight trains	10/2025	Risky	Yes
Haanrade	Making switches operable for central control	Faster handling of freight trains from/to Haanrade possible. Shorter occupation times for the Heerlen - Herzogenrath section	05/2026	Risky	Yes
Europoort	Electrification of 2 arrival and departure tracks	Freight trains with length of 740m can start/end at Europoort	2025/2026	Probable	Yes
Venlo	Adjustments layout and longer platform tracks	Stopping with longer trains possible	2026	Risky	Yes
Eindhoven Centraal	Adjustments layout east side	Shorter running times and more simultaneities	2026	Probable	Yes
Maasvlakte	New railway yard Maasvlakte Zuid, construction of first set of 6 tracks for 740m long freight trains.	Capacity for more freight trains to/from Maasvlakte	Q4/2026	Probable	Yes

3.3 Expected reduced capacity of the infrastructure

Table 4: List of infrastructure projects with reduced infrastructure in the Netherlands up to 2026

Location	Description	Effect on logistics	Planned commissioning date	Commissioning feasibility	Finance secured
Track section Roosendaal – Lewedorp	Removal of several switches and side tracks, and remove rail connection to Phillip Morris.	Less possibilities for traffic control	08/2023	Certain	Yes
Oudenbosch and Zevenbergen	Remove sidetracks and switches	Less possibilities for traffic control	08/2023	Certain	Yes
Oudewater	Remove sidetracks and switches Adjustments of signalling	Less possibilities for traffic control Shorter headway times	11/2023 2026	Certain Probable	Yes Yes
Zaltbommel	Remove sidetracks and switches Oud-Zaltbommel	Less options for traffic control at this location. At Geldermalsen and Meteren, compensation of traffic control options is realized	12/2024	Certain	Yes
Wolfheze	Remove middle track and switches, adjustment of signalling	Less possibilities for traffic control. Shorter headway times	11/2025	Risky	Yes
Rijssen	Remove sidetrack and switches	Less possibilities for traffic control	2025	Probable	Yes
Halfweg	Remove sidetrack and switches	Less options for traffic control at this location. At Sloterdijk partial compensation of traffic control options is realized	2025	Probable	Yes

4 Temporary Capacity Restrictions

4.1 Principles for TCR Design, Planning and Allocation

4.1.1 General

ProRail plans its works on and near the tracks in Temporary Capacity Restrictions (TCRs), making a distinction between Periodical TCRs (also: Weekly TCRs or Maintenance Windows) and Regular TCRs (or just TCRs). In addition, ProRail plans measurement and video inspection trains.

Periodical TCRs are (usually) weekly recurring TCRs and are planned supply-driven and later filled with concrete work. Regular TCRs are tailor-made based on known activities.

This chapter describes the principles for the design, planning and allocation of the above-mentioned types of TCRs.

The principles below are based on the working method for the timetable year 2023. Known trends and developments that are important for the design, planning and allocation of TCRs are added.

4.1.2 Line specific elaboration of principles in “Corridor Book”

The so called “Corridor Book” contains a more detailed elaboration of many of the planning rules for regular TCRs mentioned in this chapter, specified by line, section or location. The Corridor Book 2024 is available for applicants through the ProRail Logistics Portal (currently in Dutch only). The Corridor Book is published by ProRail annually around X-19 months.
ProRail is working on an earlier moment for publication and an improved accessibility of the Corridor Book for international applicants.
The Corridor Book describes:

- The standard deviation routes for freight and passenger traffic
- Sections which can not hold planned TCRs simultaniously
- Standard path alteration solutions in case of TCRs

4.1.3 Consultation Process

Phasing of major projects (depending on needs of project; preferably before X-30)
This part of the process is only completed for large, usually multi-annual projects with a complex construction phasing. A consultation with applicants is done in multiple meetings about the way the work will be done.

The result of this process step is a detailed plan that contains the available tracks during each construction phase and its duration, as well as constraints for the TCR planning. An alternative timetable could be agreed upon for one or more construction phases.

The phasing steps are fitted into the draft of the multi-year national TCR planning.

Masterplanning phase (X-29 to X-21)

In this process step, a first estimation is made of the capacity needs per project with an indication of the TCRs in terms of number, location, duration and the extent of the capacity restriction (total or partly closure). The cluster possibilities of TCRs on a line section are determined for the first time.

A first version of the national TCR planning is made and subject to a preliminary consultation with applicants and coordination with other infrastructure managers.

The result of this process step is a publication of Major and High TCRs at X-24 and a feasibility check on the planning possibilities of Medium TCRs on X-21. At the end of this phase, the Masterplan is established, which sets out the projects that will be done in the primary focus year, with a view to the four subsequent years.

Preparation for final publication (X-17 to X-12; for minor TCRs up to X-4)
The exact size (at track level) and duration of the TCR is determined and consulted with applicants. Clustering of TCRs is finalized. The final national TCR planning is made, coordinated with neighbouring infrastructure managers, and consulted with applicants.

The TCRs with Minor impact are determined, incorporated into the planning of larger TCRs and consulted with applicants.

The result of this process step is at the publication at X-12 of all Medium, High and Major TCRs and at X-4 of all Minor TCRs.

4.1.4 Dispute Resolution (“escalation process”)

The dispute resolution procedure that applies to applications from applicants and the required capacity for TCRs is described in section 4.5.5 of the ProRail Network Statement.

4.2 Maintenance Windows

The capacity for maintenance is currently out of balance: contractors' working schedules do not fit well with the Maintenance Windows model. ProRail is investigating necessary adjustments of the model, including duration, day of the week, (non-)total closure and frequency, in the study “Maintenance Windows of the Future”. Guiding principle is to limit the impact of the adjustments on traffic as much as possible. The results of the study can have consequences for the principles mentioned in this paragraph.

In addition, ProRail is looking for capacity to implement the results of the TWAS study concerning maintenance.

4.2.1 Design

- Maintenance Windows are allocated in the yearly timetable on all track sections in the Netherlands and facilitate TCRs for short-cycle maintenance as well as other minor TCRs.
- In the Maintenance Windows, works can be planned without further consultation of RUs or coordination with neighboring IMs, both before and after the X-4 publication,

provided that the works fit within a Maintenance Window in terms of duration, space and conditions.

- The number of Maintenance Windows at a certain location depends on the historical and/or expected need for maintenance and projects. Also, additional Maintenance Windows can be planned on connecting track sections of the Maintenance Windows if no more traffic is possible there. In most locations, several Maintenance Windows are planned per week.
- Maintenance Windows are planned throughout the network in such a way that (deviation) routes remain available on all days of traffic demand between the main origin and destination locations of freight trains and night trains, including border crossings with / locations in Germany and Belgium. The weekly recurring model of Maintenance Windows and the available routes for traffic is shown (at network level) in appendix E. This is the situation in 2023 and an indication of what the situation could be in 2026, taking into account the research referred to in the framed block at the beginning of this paragraph.
- Maintenance Windows are mainly planned at night hours, are spread as much as possible over all nights of the week and are basically planned when there is as little traffic as possible.
- In addition to Maintenance Windows at night, daytime windows are also scheduled, particularly at siding lines and yards.
- Each Maintenance Window lasts at least 4 hours.
- Each Maintenance Window is repetitive on a weekly basis, except:
    - at locations where this is not possible due to traffic needs and the absence of diversion routes;
    - if the demand for Maintenance Windows is so low that a bi-weekly or four-weekly schedule is also sufficient for performing works and reducing ad hoc impact to traffic as a result of ad hoc TCRs;
    - if works require a TCR larger than the periodically scheduled windows, these are planned on a fixed date by means of a Low Frequency Maintenance Window or a Maintenance Window with Additional Conditions.
- Maintenance Windows are designed on single-track and double-track sections so that work can be done safely. This often results in a total closure of a single-track or double-track section. Exceptions are made in order to keep large maintenance and service facilities accessible.
- When changes are made to the infrastructure, the Maintenance Windows are redesigned. Maintainability is taken into account in the redesign of the infrastructure.
- If there are any Maintenance Windows on a deviation route due to another TCR that has been planned earlier than the Maintenance Window, the Maintenance Windows will be cancelled. In the ad hoc phase, the cancellation of Maintenance Windows must be explicitly agreed.
- Non-activated Maintenance Windows will be cancelled 12 days in advance. Exceptions apply. This term will be harmonized at European level in the context of TTR to 14 days in advance.

4.2.2 Solving conflicts between Maintenance Windows and train paths

- When planning the Maintenance Windows simultaneously with the 7*24 hour timetable of traffic (BasisDagen), conflicts between the Maintenance Windows and trains are being solved.
- As a result of TTR, this procedure may be revised as Maintenance Windows will be part of the Capacity Supply from a timetable year to be determined.

4.3 Regular TCRs

In this paragraph, “Regular TCRs” are referred to as “TCRs”.

4.3.1 Design

4.3.1.1 (Non) closure of track sections and clustering of TCRs

- The spatial extent of a TCR does not exceed the size needed for the safe execution of the planned works. This includes a safety zone. In addition, tracks where as a result of the works no train traffic is possible will be included in the possession.
- Works are planned in total closures on single-track and double-track sections. As many activities as possible from different projects are executed simultaneously (clustering).
- On multi-track sections and transport nodes (yards), the principle is to plan no total closures. When designing a TCR and clustering with other projects, a trade-off is always made between more impact during a shorter period of time or a solution with less impact for during a longer time. The trade-off is made on total impact and costs.
- On all track sections, the maximum size (distance) of a TCR does not exceed pre-defined “sub-corridor” for reasons of quality of alternative passenger transport, unless this is technically not possible otherwise.
- Depending on the results of the “Single-track working on double-track sections” study, this way of planning TCRs may be applied in the future. Safety, technical possibilities and sufficient residual capacity are the most important aspects that are taken into account.

4.3.1.2 Duration and time setting of a TCR

- The duration of a TCR is depending on the planned works (no longer than necessary), taking into account a time buffer to prevent exceeding the planning. Usually the duration of a Medium or High impact TCR consists, if there are no particular interest of applicants, of a full number of days and one adjacent night.
- There is shift to a more rational assessment between impact on traffic and costs. As a result of this, it can be expected that in 2026 TCRs are less often split up in 2-days TCRs planned during weekends. Additionally, see the last point mentioned in paragraph 4.3.1.3.
- The duration of a TCR is typically chosen between the end of the passenger service in the evening and the start of the passenger service in the morning, taking into account the interests of freight traffic and long-distance passenger traffic.
- The exact starting and ending times of a TCR is set 23 weeks in advance. The time setting of the TCR is optimized for the train service as much as possible, while the duration of the TCR remains unchanged. This process might be changed as a result of TTR.

4.3.1.3 Time of execution and distribution of TCRs

- The planning of TCRs takes into account:
    - The availability of deviation capacity (one or more deviation routes)
    - Works on border route sections / deviation routes abroad (in coordination with neighboring IMs, including the Aachen-Montzen border section between Belgium and Germany)
    - Major public events
    - Accessibility of large maintenance facilities for rolling stock
    - Accessibility of service facilities
    - Accessibility of terminals and shipping companies
    - Road works and local railway works
        - causing extra train passengers
        - needed for alternative transport (“buses”)
        - accessibility for local traffic and emergency services (availability of level crossings)
    - Avoiding peak deployment of scarce resources from contractors (mechanics), suppliers of switches and software suppliers
    - Minimum intervals between TCRs of the same project due to their construction planning
    - Avoiding simultaneous impact on multiple sides of a transport node
    - Avoiding simultaneous impact in several sections of a main passenger flow
    - Spreading the impact over time for passengers on the level of track sections and main passenger flows
    - Minimum intervals between software changes at Rail Traffic Control Centers
    - Impact on traffic (see paragraph 4.3.1.4)
- To achieve a feasible planning of TCRs for contractors and an economically responsible deployment of resources, ProRail is committed to more equally spread of works throughout the year and over the days of the week. To this end, more often than before, TCRs will be planned outside weekends and holiday periods. When choosing activities to be done outside weekends and holiday periods, impact for passengers, costs for freight RUs, feasibility of the alternative transport, the use of critical resources and a spread of the extra impact across RUs and regions are the most important factors.

4.3.1.4 Impact of TCRs

- When determining the number, duration and execution time of TCRs, in addition to the aspects mentioned in the previous paragraphs, an impact indicator is taken into account.
- The impact is expressed in ERM (Extra Experienced Passenger Minutes) based on (weighted) extra travel time of travelers as a result of deviation or alternative transport.
- An impact indicator for freight transport is under development (EGU, Extra Goods Hours).
- As a result of the foreseen increase in the amount of works by ProRail, an increase in the impact must be expected. The basic principle is that the impact increases less than the increase of turnover (“Less more impact”).

4.3.1.5 Multi-annual TCR distribution

- On a national level, ProRail aims to spread the amount of works and TCRs evenly over the years with a view to impact for all traffic, travelers, available contractor capacity and budgets.
- ProRail is optimizing the work packages per track section ('sub-corridor') for several years, taking into account traffic impact. As a result, on sub-corridor level the number of TCRs can vary significantly from year to year.
- ProRail plans activities spread as much as possible over all quarters, between holidays and non-holidays and between working days and weekend days

4.3.1.6 Minor TCRs

- Minor TCRs, including preparation works and post-processing works for projects, grinding, inspections and repairs, are planned in a Maintenance Window.
- If technically necessary or economically justified, longer TCRs are used (up to approx. 9 hours). These TCRs are usually planned in the night of a scheduled Maintenance Window and during the evening before.

4.3.2 Solving conflicts between Regular TCRs and train paths

- The path alteration process (in the planning systems) as a result of TCRs is done after the (annual) path allocation process.
- Standard traffic handling rules are leading in this. These are part of the annual timetable publication. If no standards apply, a customized solution can be developed, also as a part of the annual timetable.
- If stabling capacity is in a TCR and those tracks can not be used for stabling rolling stock, replacement capacity will be offered elsewhere. From the last node on both sides of the TCR, the route to the nearest alternative stabling yard is kept available, if necessary, by canceling maintenance windows .
- Adjustments to annual timetable trains as a result of TCRs prevail to trains requested ad hoc.
- This procedure will change as a result of TTR. The effective year of the change has yet to be determined.

4.4 Video inspection trains and other measurement trains

4.4.1 Design

- These activities are planned as a train (so not as a TCR) and where possible planned during daytime, if necessary with track adjustments and/or limited timetable adjustments for other trains.
- At locations where the measurements cannot be performed during daytime, these trains are scheduled during the night. In view of the distances traveled by the measurement trains, no distinction is made at night between track sections with and without a planned maintenance windows. In some cases, maintenance windows are canceled.
- Measurement and video inspection trains can use freight paths.
- Measurement and video inspection trains are planned in the Donna planning system with so called “periode codes”. Depending on the type of train, these are planned in the annual timetable or during the ad hoc phase.

- The repair of identified defects takes place as much as possible in planned Maintenance Windows. If that's not possible, an additional TCR is planned on an ad hoc basis.
- If permitted by the characteristics of the measuring and data processing, specific Maintenance Windows are being reserved in the advance planning for repair activities and manual measurements.
- The procedure for planning measurements trains will be evaluated in 2023 and adjusted where necessary.

4.5 Alternative principles during the 80-weeks TCR at Emmerich-Oberhausen

4.5.1 General

- ProRail is taking into account an 80-weeks TCR, with alternating single-track availability and total closure for international train traffic, for the construction of a third track between Emmerich and Oberhausen by DB Netz from the beginning of November 2024 to the end of May 2026.

4.5.2 Regarding regular TCRs on deviation routes in the Netherlands

- During the 80-weeks TCR, ProRail will only plan works on the deviation routes that are reasonably necessary during that period or that do not cause extra impact; ProRail will reschedule as much work as possible to the periods before and after the 80-weeks TCR (before November 2024 and after May 2026).
- During the above-mentioned period, ProRail will plan TCRs with a maximum duration of one weekend on the deviation routes from Kijfhoek to Venlo, from Kijfhoek to Bad Bentheim and several other routes within the network.
- ProRail will publish an adapted version of the Corridor Book for the period of the 80-weeks TCR. The basic principle is that, given the construction needs of DB Netz and the necessary projects by ProRail, as much traffic as possible will be facilitated. This is expected to be less than under 'normal' circumstances.
- The capacity that will be offered per market segment on the routes from Rotterdam to the border crossings in Bad Bentheim, Emmerich and Venlo may depend on the remaining capacity for traffic on the Emmerich-Oberhausen section. Criteria for this will be included in the Network Statement in accordance with Article 17 of Annex VII of EU Directive 2012/34.

4.5.1 Regarding Maintenance Windows in the Netherlands

- ProRail expects an additional need for maintenance on deviation routes because of heavier use during the 80-weeks TCR at Emmerich-Oberhausen.
- ProRail plans as much maintenance as possible in scheduled maintenance windows. At the same time, ProRail schedules as few maintenance windows as reasonably possible to leave remaining capacity for traffic. This is a precarious balance during the 80-weeks TCR. At times the capacity for traffic may be less than in the normal situation.
- ProRail strives to make traffic possible between the Netherlands and Germany during all nights, except during the Sat/Sun night, via at least one of the border crossings Venlo, Emmerich or Bad Bentheim.

4.6 Selection of Major Impact TCRs in 2026

4.6.1 In the Netherlands

Network segment	Purpose	Impact TCR	Duration	Start	1	2	3
Amsterdam C. – Weesp / Bijlmer / Sloterdijk	Increased capacity and transfer capacity at and around Amsterdam C.	8 out of 10 platform tracks available at Amsterdam C.; during 3 weeks per year 6 out of 10 platform tracks available.	Several years	End of 2023-april 2028	Yes	Yes	Yes
's-Hertogenbosch – Boxtel / Tilburg	Increased capacity; freight trains Kijfhoek – Eindhoven via 's-Hertogenbosch instead of Breda - Tilburg	Prolonged speed restriction (80km/h) between 's-Hertogenbosch en Vught Aansluiting and 2 out of 3 tracks available.	Several years	May 2025	Yes	Yes	Yes
Schiphol Airport – Bijlmer / Weesp	Increased transfer capacity Amsterdam Zuid	2 out of 4 platform tracks available. Reduced capacity for traffic.	9 months	May 2026	Yes	Yes	Yes

Figure 4: List with a selection of Major Impact TCRs with temporary capacity impacts in TT2026

1 = project proposal defined
2 = project approved by ProRail management
3 = financing secured

4.6.2 On border sections in neighbouring countries

To the extend currently known to ProRail. Information about this TCR will be provided to applicants via DB Netz.

Country	Line	Purpose	Impact	Duration	Start
Germany	Emmerich-Oberhausen	Construction of a 3rd track	Capacity restrictions on the line Emmerich - Oberhausen	80 weeks	Nov 2024 – May 2026

5 Traffic planning principles and expected traffic flows

The starting point for the traffic flows for timetable 2026 is the allocated timetable 2023, including the intended developments in both passenger and freight traffic up to and including 2026 in the scope of the MVP. Thereby we use the intended Medium Term (MLT) product steps. For freight traffic, we also use the forecasts for 2026, from which we derive the number of freight paths required per origin-destination relationship.

5.1 Traffic planning principles

In the capacity strategy, we assume the number of trains per category that can run per hour. The following categories are used:

- Freight trains;
- Passenger trains, subdivided into:
    - High-speed trains;
    - Long distance trains;
    - Regional express trains;
    - Regional trains

The number of trains per category is indicated for the busiest hour, which is usually the morning rush hour. If there are trains from the above categories that run only 1 or a few times a day, these trains are not included separately in this capacity strategy. These trains are included in the capacity model, the next TTR phase. In addition, there are train paths that cannot be used every hour of the day due to exclusions with other trains, due to bridge openings, due to restrictions due to noise or due to TCR's and/or Maintenance Windows.

For freight traffic, we only include train numbers for commercial freight trains in this TTR phase. This does not include individual locomotives and trains of transporting contractors. Furthermore, freight trains in the special transport category (e.g. out of gauge) will not take into account in this phase.

For the different train categories, several parameters are included in Table 5. These parameters serve as a starting point for planning. All other parameters for each train category are included in the Network Statement for 2024 [3]. These include:

- Loading gauges: Appendix 12
- Axle loads and load per unit of length for freight trains: Appendix 13
- Automatic train control systems: Appendix 14
- Tractive power supply systems: Appendix 17
- Platform lengths: Appendix 19 [4]
- Standard freight paths: Appendix 22

[3] *Network Statement 2024, version 1.0, 9 December 2022, reference T20180019-117460140-6314*
[4] *Appendix 19 provides an insight into maximum platform lengths per corridor. The overview of track and platform lengths on the Logistics Portal includes the exact current length per (platform) track. Impactful changes to these (platform) lengths within the scope of the Capacity Strategy will be mentioned in the list of infrastructure projects.*

In the 2026 capacity strategy, we identify the relevant changes compared to the parameters from the Network Statement 2024, taking into account any other limitations in the infrastructure.

Table 5: Parameters for capacity planning for each train category

Category	Parameters
Freight train; standard freight path	Speed: max 100 km/h Traction, length, weight and planned speed: See appendix 22 of Network Statement 2024
High-speed passenger train	Speed: max. 300 km/h Length: max. 400m
Long distance passenger train	Speed: max. 140km/h - 200 km/h Length: Depends on stopping locations, see appendix 19 of the Network Statement
Regional express passenger train	Speed: max. 140km/h Length: Depends on stopping locations, see appendix 19 of the Network Statement
Regional passenger train	Speed: max. 140km/h Length: Depends on stopping locations, see appendix 19 of the Network Statement

5.2 Developments in passenger traffic

Starting points for the development of passenger traffic are:

- Annual timetable 2023 (without scaling down)
- 2024: Timetable developments as known in Preparation Annual Timetable
- 2025-2026: Intended product steps as known in MLT process

Intended timetable developments Preparation Annual Timetable 2024:

- Domestic long-distance trains Schiphol – Rotterdam – Breda on the HSL with 200 km/h instead of 160 km/h
- Three-country train: Aachen - Maastricht – Visé and Herzogenrath – Maastricht - Liège
- Acceleration of long-distance train Amsterdam C - Berlin with temporary measures

Intended timetable developments MLT-2025:

- High-frequency regional train paths Hoofddorp – Amsterdam Central (8x/hour)
- Connecting long-distance trains from the HSL via Amsterdam South to Amersfoort / Enschede / Leeuwarden / Groningen
- 6th long-distance train per hour on the HSL between Rotterdam and Schiphol
- From 2 to 4 regional express paths per hour between Breda and Eindhoven

Timetable development in study MLT-2025:

- 2nd long-distance train Brussels – Rotterdam per hour, with a long-distance train from Brussels via Breda ending in Rotterdam 1x/hour, and a long-distance train running directly from Antwerp to Rotterdam 1x/hour and then continuing via Amsterdam South to Lelystad.

There are no intended timetable developments for MLT-2026.

5.3 Developments in freight traffic

Starting points for the development of passenger traffic are:

- Annual timetable 2023 (without scaling down)
- 2024: Timetable developments as known in Preparation Annual Timetable
- 2025-2026: Intended product steps as known in MLT process

Intended timetable developments MLT-2025:

- Freight trains to/from new container terminal in Valburg
- Longer freight trains to/from Moerdijk possible, after Moerdijk has been made suitable for 740m trains. Train length depending on any infrastructure restrictions on hinterland connections.
- Freight trains of 740m from/to Europoort possible, after 2 tracks at Europoort have been electrified. Train length depending on any infrastructure restrictions on hinterland connections.
- Longer freight trains at Tilburg Loven possible, after the track has been made suitable for trains of 660m. Train length depending on any infrastructure restrictions on hinterland connections.

Intended timetable development MLT-2026:

- As soon as project Rotterdam Noord Goederen is ready for operation, it will be possible to process freight trains of 740m length on Rotterdam Noord Goederen. Research is currently underway into what this means for the freight paths via this location. This will be further specified in the Capacity Strategy for 2027.

For 2026, the forecasts for numbers of freight trains are also included for the capacity strategy. Because a separate forecast is not made for each year, we use the train numbers from the forecast for 2025 for 2026. The number of freight trains is based on the high scenario from the Reference Forecast from 2021 (RPGV2021) for the target year 2025. This RPGV has been drawn up for the Integral Mobility Analysis (IMA) that will be published in 2021. The RPGV2021 has the target years 2030, 2040 and 2050. To obtain a forecast for 2025, the results have been scaled back by ProRail based on the growth factors from the forecast for 2030.

Table 6 shows the forecasts for the border route sections for 2026, including a comparison with the train numbers from the realization of 2021. Appendix D shows the forecast for 2026 for all route sections in the Netherlands.

Table 6: Number of freight trains in 2021 and 2026 (train numbers average working day in both directions together)

Number of freight trains per day (both directions, rounded to fives)	Realization 2021[5]	Forecast 2026[6]
Oldenzaal (NL) – Bad Bentheim (D)	30	55
Zevenaar (NL) – Emmerich (D)	105	110
Venlo (NL) – Kaldenkirchen (D)	65	70
Heerlen (NL) – Herzogenrath (D)	0	0[7]
Eijsden (NL) – Visé (BE)	5	10
Roosendaal (NL) – Essen (BE)	35	55

The starting point is that the available capacity for freight trains may be used for a maximum of 75%, so that railway undertakings have some flexibility. A freight path that is available 24 hours a day in each direction offers capacity for up to 18 commercial freight trains per direction, i.e. 36 freight trains in both directions combined. This number is lower when freight paths from different directions converge.

Table 7 shows the number of freight paths per hour per direction in normal operation that are minimally required on the border route sections within the MVP scope. The current (from the 2023 timetable) numbers of freight paths per border route section offer sufficient capacity in normal operation, so we use the current freight paths as a starting point for 2026.

Table 7: Minimum number of freight path required for timetable 2026

Minimum number of freight paths per hour per direction	Timetable 2026
Oldenzaal (NL) – Bad Bentheim (D)	2
Zevenaar (NL) – Emmerich (D)	4
Venlo (NL) – Kaldenkirchen (D)	3
Heerlen (NL) – Herzogenrath (D)	0
Eijsden (NL) – Visé (BE)	1
Roosendaal (NL) – Essen (BE)	2

5.4 International traffic flows

The intended product steps for passenger traffic and the forecasts for numbers of freight trains lead to the required capacity on the border route sections for 2026.
Table 8 and Table 9 show the available capacity for the border crossings with Germany and Belgium respectively. These train numbers are given for different train types that are listed in Figure 5.

[5] *Realization based on the 95% percentile rounded to fives. Source: Annual report on rail freight traffic in the Netherlands 2021, February 2022, www.prorail.nl*
[6] *RPGV2021_2025H-M_LO20*
[7] *Aantal goederentreinen in zowel realisatie 2021 als prognose 2026 is 0-2, afgerond op 5-tallen is dat 0*

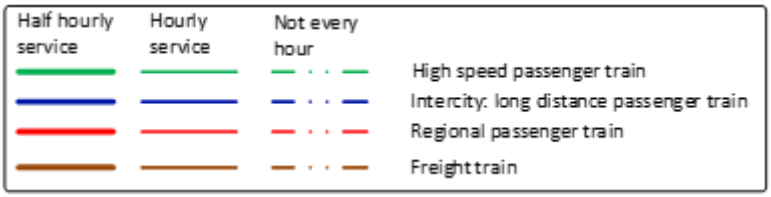
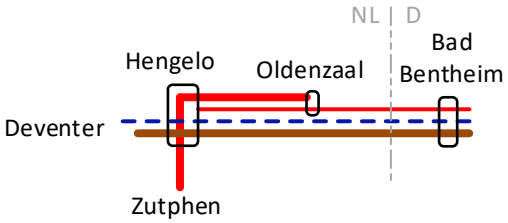
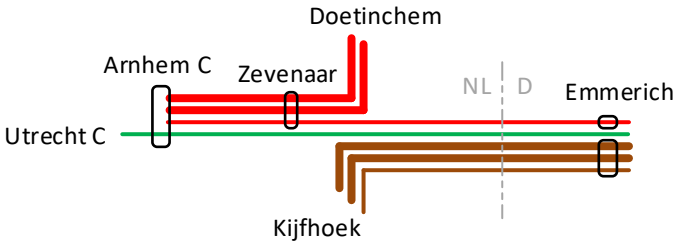
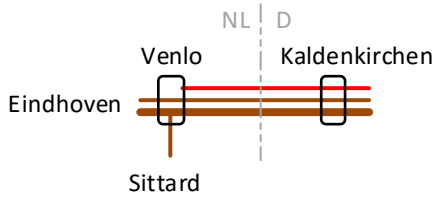


Figure 5: Legend number and type of train paths

Table 8: Capacity 2026 border crossings Netherlands-Germany under normal circumstances

Border crossings Netherlands – Germany	**Train paths per hour per direction**		
	Long distance passenge	Passengers regional	Freight
Oldenzaal (NL) – Bad Bentheim (D) 	0,5	1	2
Zevenaar (NL) – Emmerich (D) 	1	1	5 D →NL 4 NL → D[8]
Venlo (NL) – Kaldenkirchen (D) 	0	1	3

[8] *Number of freight trains in direction NL --> D is lower than the opposite direction because of exclusion with regional passenger trains.*

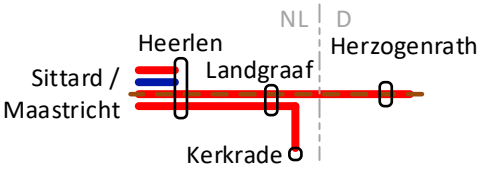
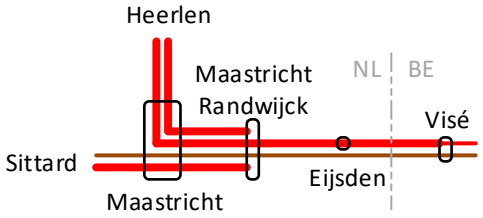
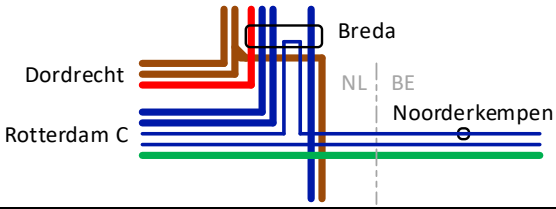
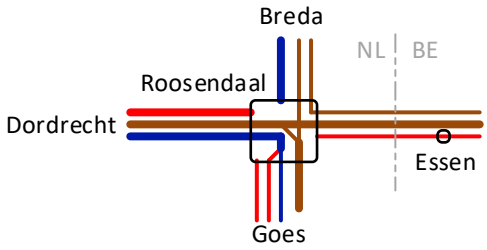
Heerlen (NL) – Herzogenrath (D) 	0	2	0[9]

Table 9: Capacity 2026 border crossings Netherlands - Belgium

Border crossings Netherlands - Belgium	**Train paths per hour per direction**		
	Long distance passenger	Passengers regional	Freight
Eijsden (NL) – Visé (BE) 	0	2	1
HSL Hazeldonk (NL) – Meer (BE) 	2x high speed (300 km/h) 2x long-distance (200 km/h)	0	0
Roosendaal (NL) – Essen (BE) 	0	1	3 BE → NL 2 NL → BE

The available capacity at the border crossings mentioned in the tables above are part of the line model that is possible for the 2026 timetable. This line model is shown in Figure 6.

[9] *Freight trains are possible at this border crossing. In the hour that a freight train runs, a regional passenger train is cancelled.*

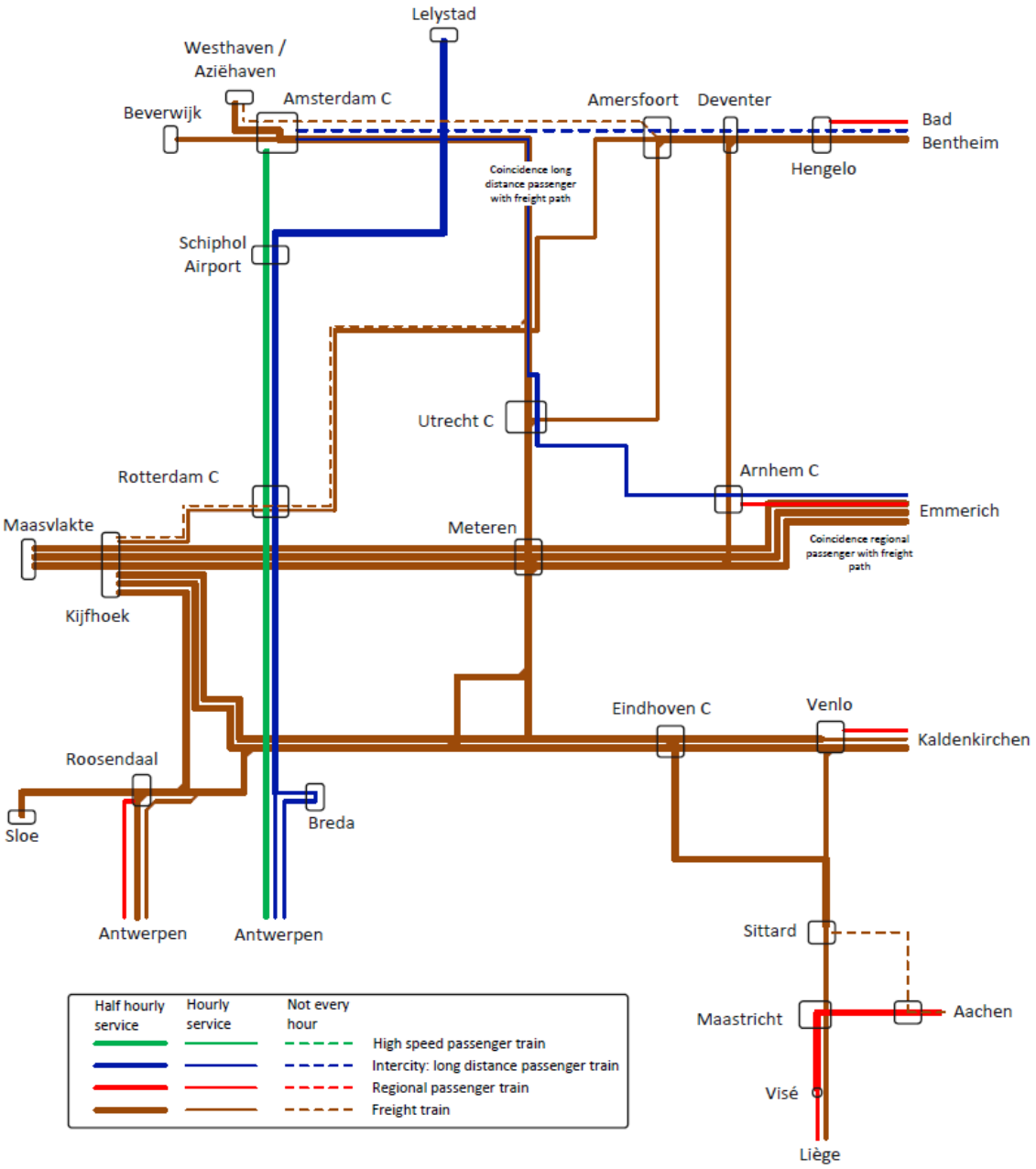


Figure 6: Possible line model 2025 international train paths via border crossings in scope

5.5 Impact of TCR's abroad on traffic flows

DB Netz expects work on the Emmerich – Oberhausen section to be carried out from November 2024 to May 2026. During this 80-week period, DB Netz has planned the construction of a third track between Zevenaar border and Oberhausen. The available capacity of the Zevenaar – Emmerich border crossing will therefore be lower until May 2026 as a result of single-track and total closures due to this work. That is why we indicate in this paragraph what the intended logistical elaboration is during this TCR that has been coordinated with DB Netz. We distinguish the situation in which the Emmerich border crossing has a single-track closure and in which it is completely closed. In this paragraph we show train numbers per day based on available capacity per hour. The reason for this is that freight forecasts are given in train numbers per day. In addition, passenger trains do not run with the same number every hour and there is also a difference between day and night.

Single track closures

During weeks with single-track closures, both international long-distance passenger trains and regional passenger trains can continue to run via Zevenaar – Emmerich. For freight traffic, a maximum capacity of 80 freight trains per day applies, in both directions combined. This means a shortage of 30 freight trains per day on the Zevenaar – Emmerich border, given the forecasts for 2026 (see Table 10). These freight trains can be diverted via the border crossings Venlo – Kaldenkirchen, Oldenzaal – Bad Bentheim and Heerlen – Herzogenrath, because there is still sufficient residual capacity there. Venlo is the best alternative for most freight trains if Zevenaar-Emmerich offers insufficient capacity due to origin-destination relations. The starting point is therefore that most freight trains will be diverted via Venlo and a smaller part via Oldenzaal. Table 10 shows the numbers of freight trains per border crossing with diversions due to single-track closures.

Total closures

During weeks with total closures, regional passenger trains at Zevenaar - Emmerich will be canceled. Starting point is that international long-distance passenger trains will be diverted via Venlo. Part of the international freight trains can be diverted via the border crossings Venlo – Kaldenkirchen and Oldenzaal – Bad Bentheim. In addition, there is limited capacity at the Heerlen – Herzogenrath border crossing.

However, the capacity of the Venlo – Kaldenkirchen border crossing is limited and must also process diverted passenger trains in addition to diverted freight trains. Border crossing Oldenzaal – Bad Bentheim is not a good alternative for a large part of the freight trains and also has a maximum capacity. Table 10 shows the number of freight trains per border crossing in the event of a complete blockage. This means that without additional measures and the current Order in Council, there would be no capacity at the border crossings with Germany for approximately 65 freight trains per day in the high growth scenario[10].

[10] *Further explanation of these figures can be found in: Logistical analysis of activities Third Track, version 1.0, 19 April 2021*

Table 10: Number of freight trains for different scenarios of closure of border crossing Zevenaar – Emmerich

Number of freight trains (per working day for both directions, rounded in fives)	Forecasts 2026[11] Normal operation	Single-track closure	Total closure
Oldenzaal (NL) – Bad Bentheim (D)	55	60	70
Zevenaar (NL) – Emmerich (D)	110	80	0
Venlo (NL) – Kaldenkirchen (D)	70	95	95
Heerlen (NL) – Herzogenrath (D)	0	0	5
Totaal aantal goederentreinen NL-D	**235**	**235**	**170**

That is why ProRail and DB Netz have looked for ways to solve the capacity shortage. In addition, DB Netz intends to cancel the regional train that runs once per hour in each direction via the Venlo – Kaldenkirchen border crossing. This is only needed in weeks of total closure of Emmerich – Oberhausen and provides capacity for 30-35 freight trains at this border crossing. This does mean that the capacity on the routes within the Netherlands to the Venlo border must be increased. That is why a 5th freight path per hour in each direction is needed between Breda and Tilburg, so that the freight paths Kijfhoek – Venlo between Breda and Tilburg are separate from the freight paths Roosendaal – 's Hertogenbosch. In weeks of total closure, it will then be necessary to cancel the 4th intercity between Breda and Eindhoven. ProRail intends to create this extra capacity for freight trains during weeks with total closure in coordination with railway undertakings.

Table 11: Number of train paths per hour per direction in normal operation

Normal operation	Long distance passenge	Passengers regional	Freight
Oldenzaal (NL) – Bad Bentheim (D)	0,5	1	2
Zevenaar (NL) – Emmerich (D)	1	1	5 D -> NL 4 NL -> D
Venlo (NL) – Kaldenkirchen (D)	0	1	3
Heerlen (NL) – Herzogenrath (D)	0	2	0[12]

[11] *The Freight Transport Reference Forecast (RPGV2021_2030H-M_LO20) has been drawn up for the Integral Mobility Analysis (IMA) that is published in 2021.*
[12] *Freight trains are possible at this border crossing. In the hour that a freight train runs, a regional passenger train is cancelled.*

Table 12: Number of train paths per hour per direction at single-track closure Emmerich - Oberhausen

Single-track closure Emmerich - Oberhausen	Long distance passenge	Passengers regional	Freight
Oldenzaal (NL) – Bad Bentheim (D)	0,5	1	2 [13]
Zevenaar (NL) – Emmerich (D)	0,5	1	2 approximately (capacity for 40-45 trains per direction per day)
Venlo (NL) – Kaldenkirchen (D)	0	1	3
Heerlen (NL) – Herzogenrath (D)	0	2	0[14]

Table 13: Number of train paths per hour per direction at total closure Emmerich - Oberhausen

Total closure Emmerich - Oberhausen	Long distance passenge	Passengers regional	Freight
Oldenzaal (NL) – Bad Bentheim (D)	0,5	1	2,5
Zevenaar (NL) – Emmerich (D)	0	0	0
Venlo (NL) – Kaldenkirchen (D)	0,5	0	3,5
Heerlen (NL) – Herzogenrath (D)	0	2	0[15]

[13] *This number deviates from the number published by DB Netz (2.5 freight paths per hour per direction) in the Capacity Strategy 2026. This agree-to-disagree is known to both IMs and will be further elaborated with regard to the TCR Emmerich – Oberhausen. Further developments will take into account the coordination formats set out in Annex VII.*

[14] *Freight trains are possible at this border crossing. In the hour that a freight train runs, a regional passenger train is cancelled.*

[15] *Freight trains are possible at this border crossing. In the hour that a freight train runs, a regional passenger train is cancelled.*

6 Appendices

6.1 Appendix A: List of Abbreviations

BE:	Belgium
D:	Germany (D: Duitsland)
EGU	Extra Goods Hours
ERM	Extra Experienced Passenger Minutes
MLT:	Medium term (MLT: Middellange termijn)
MT:	Managementteam
MVP:	Minimum viable product
NL:	Netherlands
RNE:	Railnet Europe
TCR:	Temporary capacity restriction
TTR:	Timetable redesign

6.2 Appendix B: Geographic scope TTR-capacity strategy MVP-countries

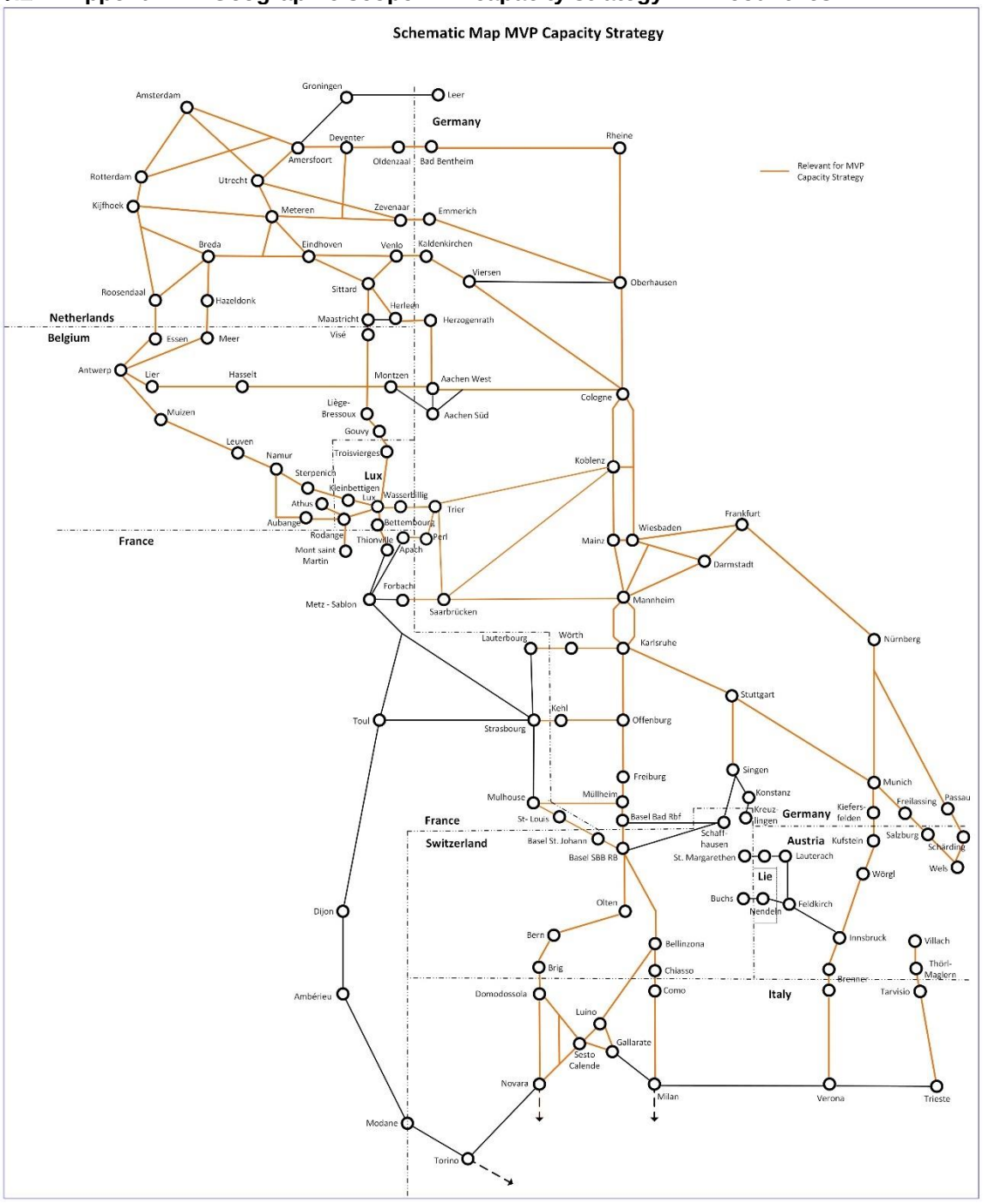


Figure 7: Scope capacity strategy for participating countries in MVP

6.3 Appendix C: Capacity strategy planning for 2027 and 2028

TT2027

Timeline	Timeline	Milestone/Action
X-48	December 2022	Start of the Capacity Strategy phase
X-38	October 2022	Input collection and creation of draft Capacity Strategies
X-38 to X-36	October 2023 December 2023	Harmonisation of Capacity Strategies
X-36	December 2023	Validation and publication of Capacity Strategies

TT2028

Timeline	Timeline	Milestone/Action
X-60	December 2022	Start of the Capacity Strategy phase
X-60 to X-54	December 2022 June 2023	Input collection and creation of draft Capacity Strategies
X-54 to X-36	June 2023 December 2024	Harmonisation of Capacity Strategies
X-36	December 2024	Validation and publication of Capacity Strategies

(first fully TTR compliant timeline)

6.4 Appendix D: Forecasts number of freight trains 2026 (equal to 2025)

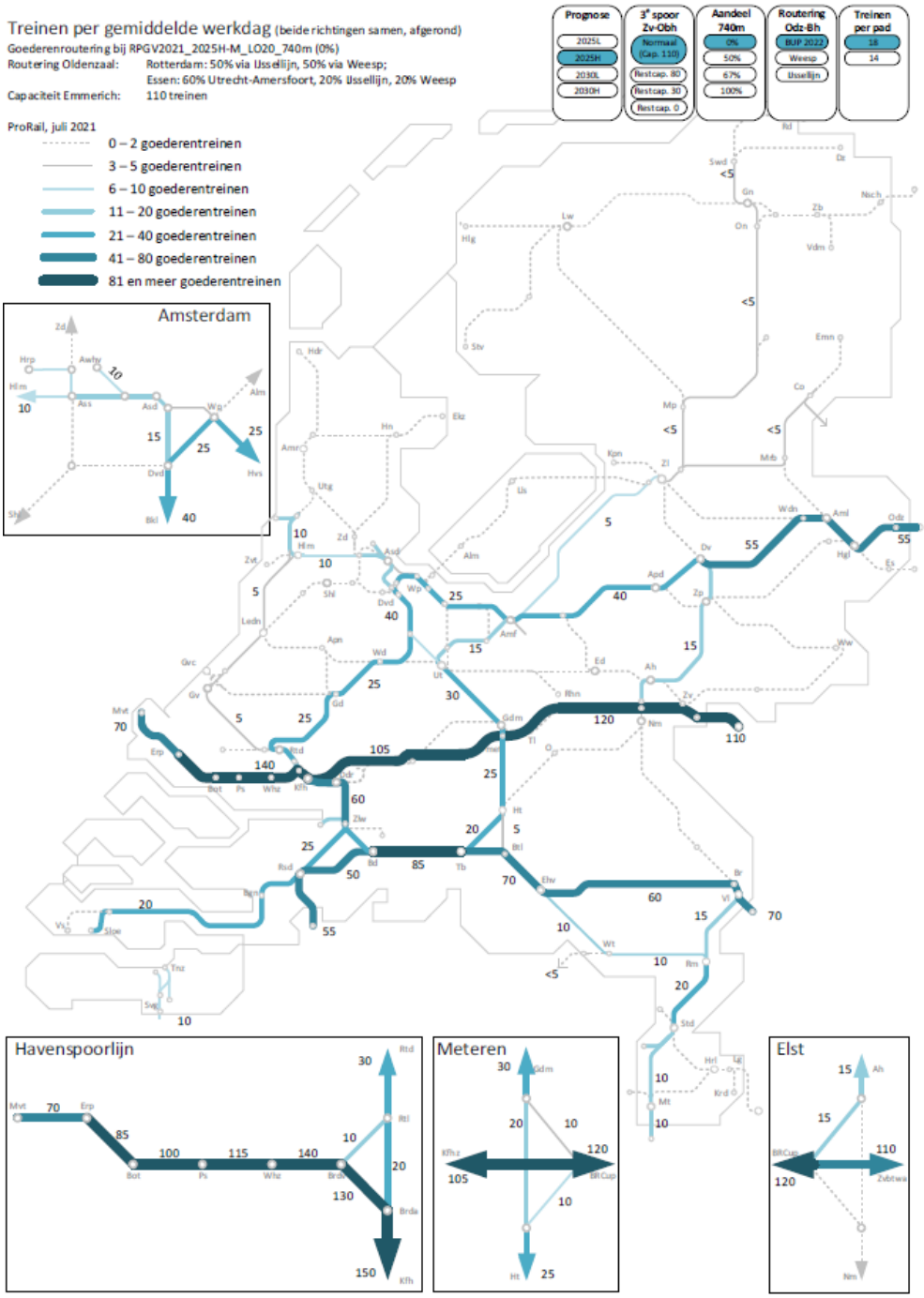
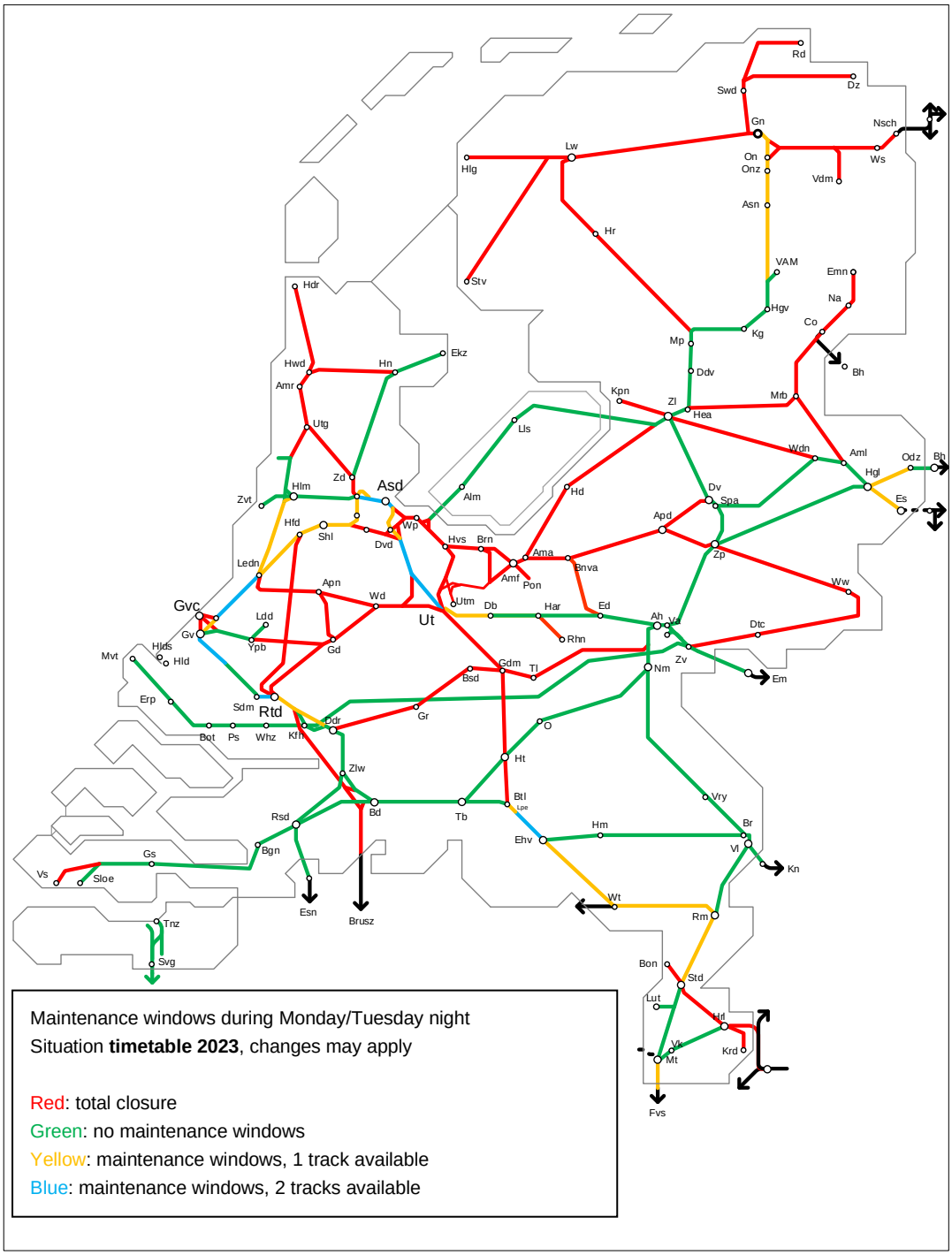


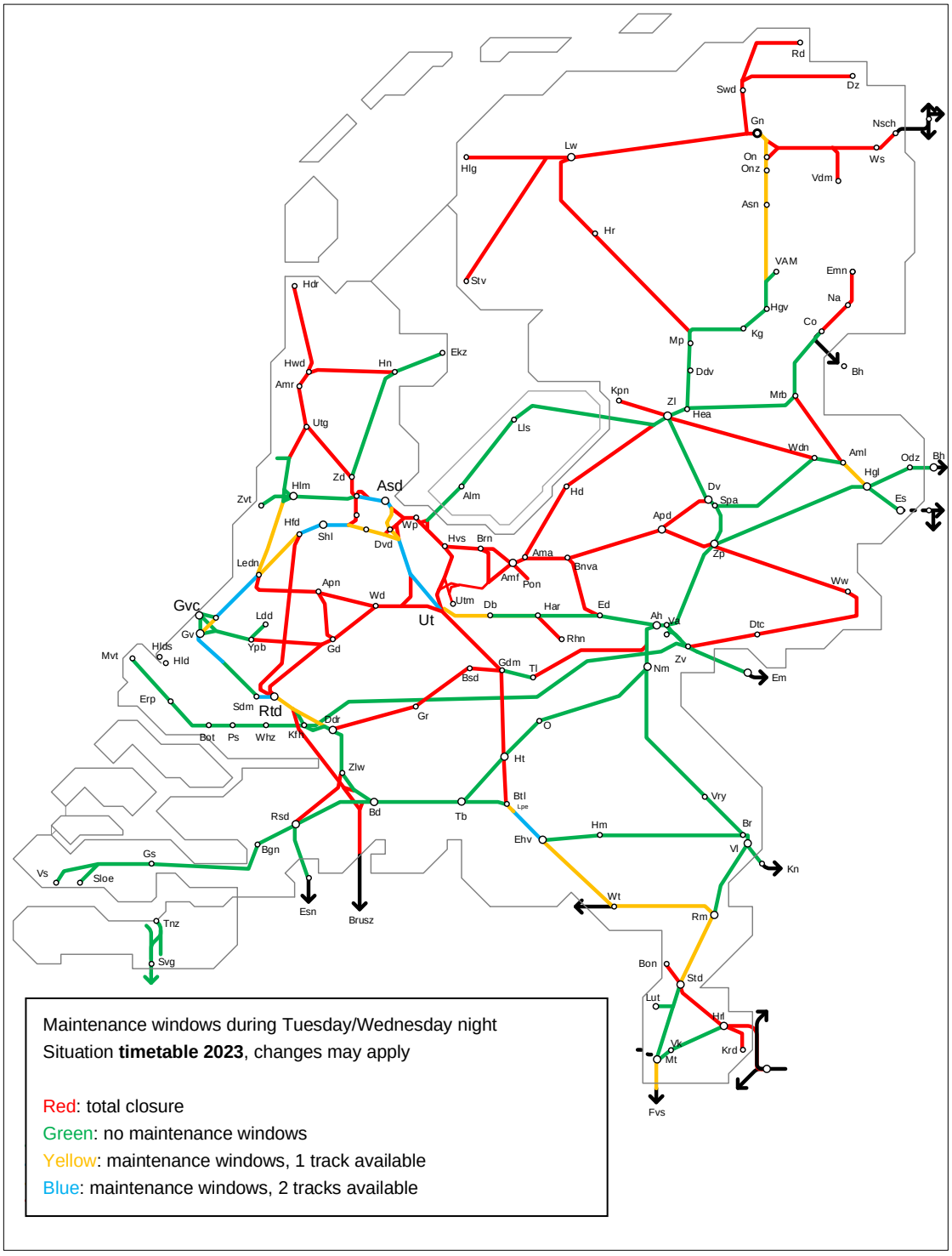
Figure 8: Forecast numbers of freight trains for 2025 per average working day (no separate forecast has been made for 2026)

6.5 **Appendix E**: weekly recurring model of Maintenance Windows (nights only, 2023)

Nacht ma/di



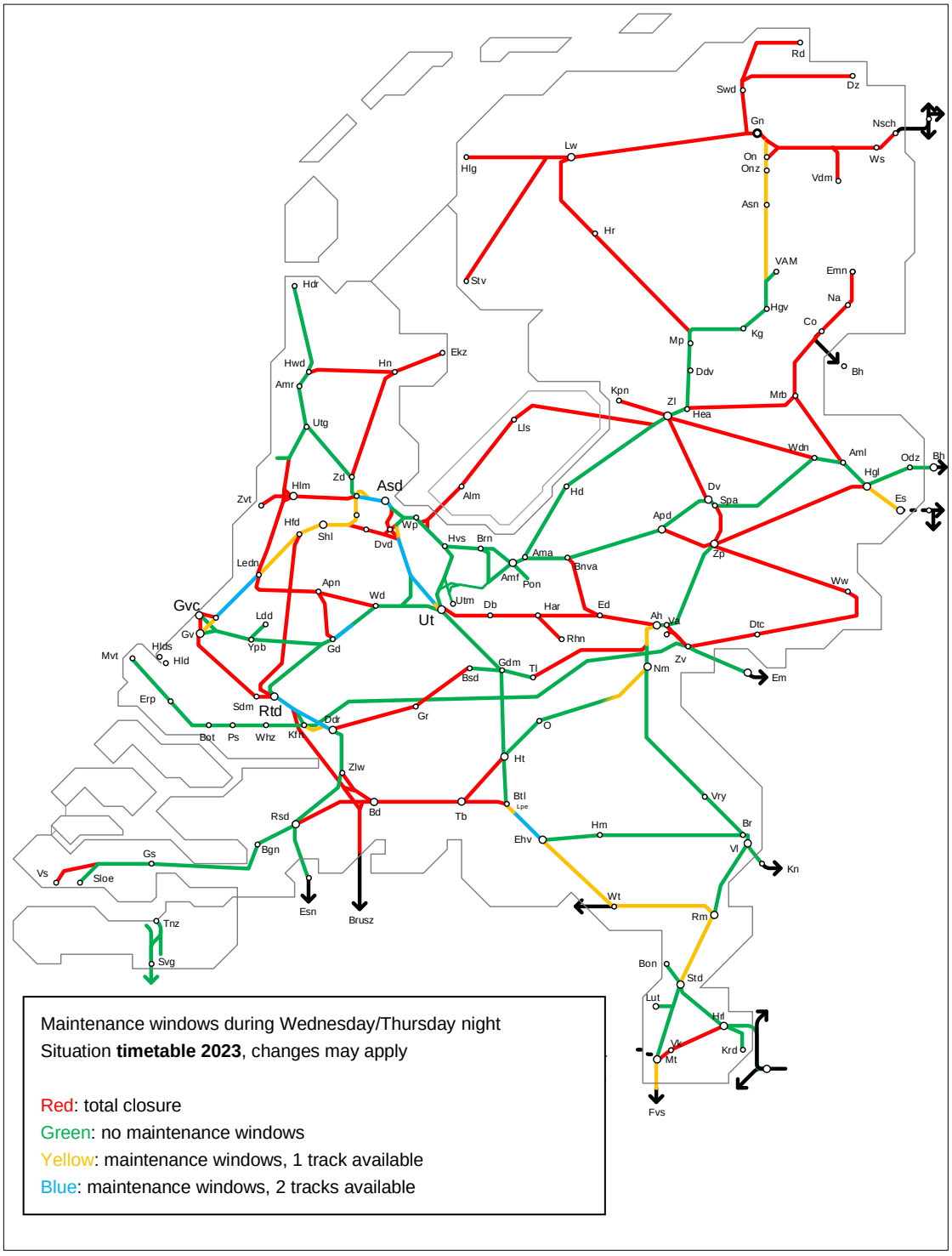
Nacht di/wo



Maintenance windows during Tuesday/Wednesday night
Situation **timetable 2023**, changes may apply

Red: total closure
Green: no maintenance windows
Yellow: maintenance windows, 1 track available
Blue: maintenance windows, 2 tracks available

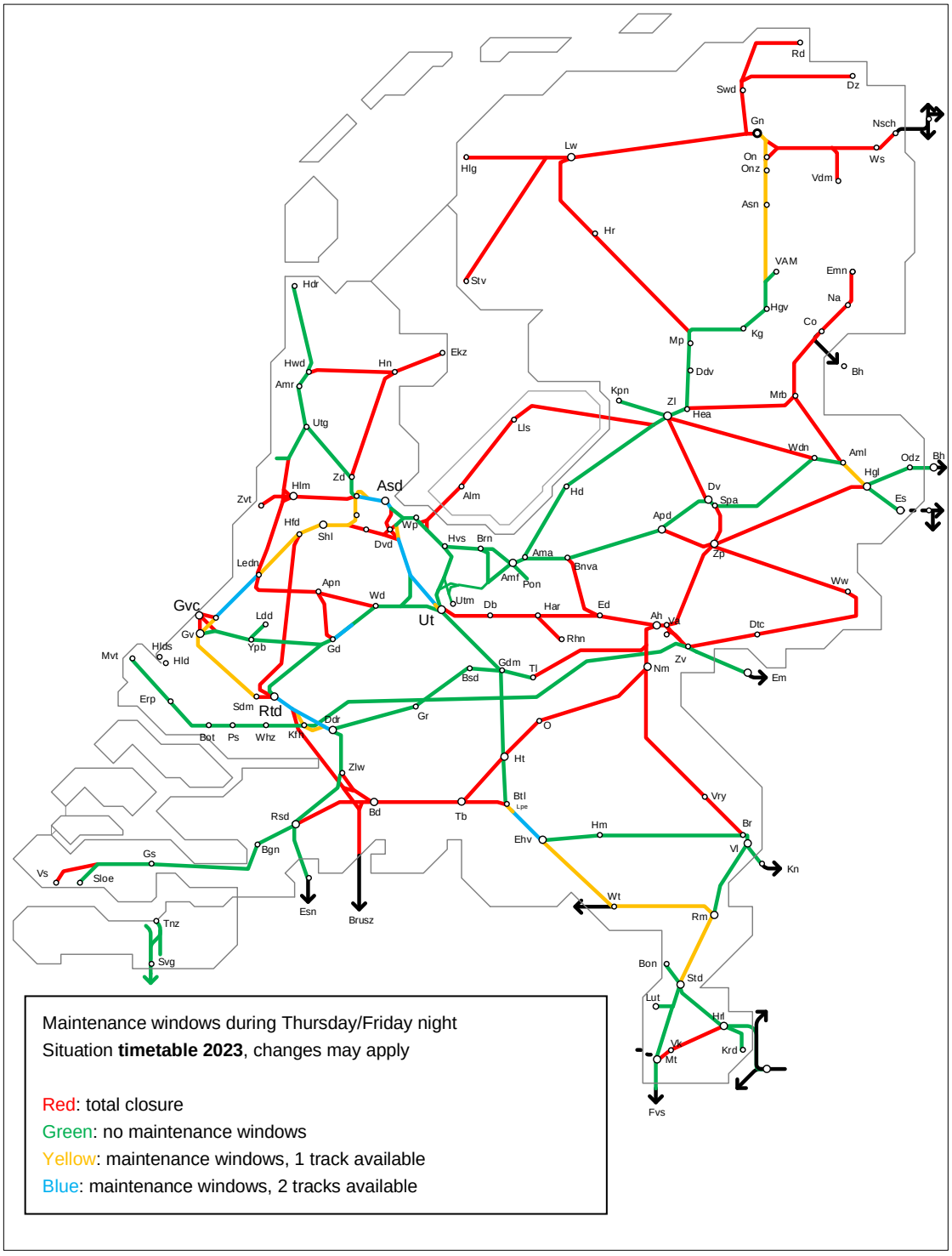
Nacht wo/do



Maintenance windows during Wednesday/Thursday night
Situation **timetable 2023**, changes may apply

Red: total closure
Green: no maintenance windows
Yellow: maintenance windows, 1 track available
Blue: maintenance windows, 2 tracks available

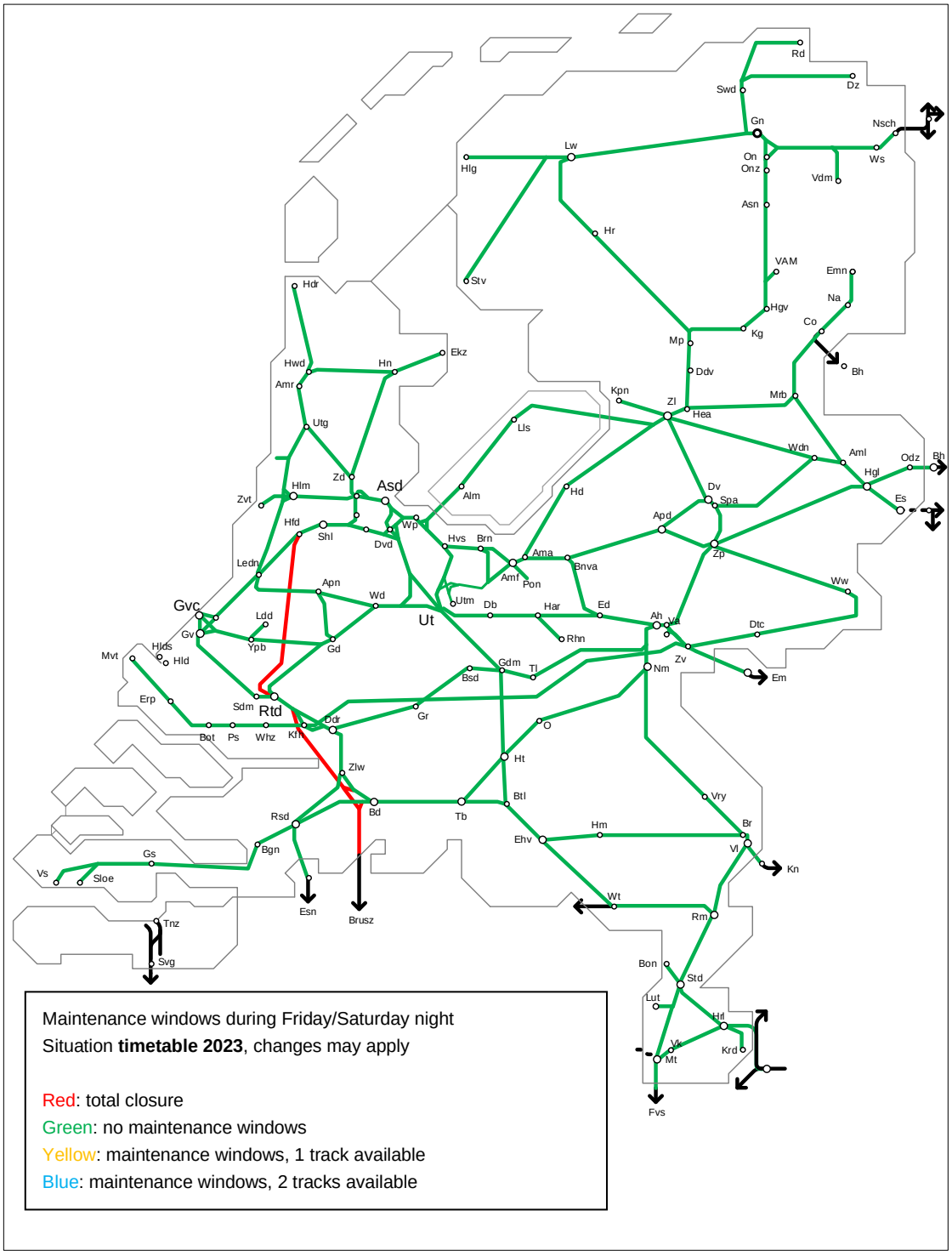
Nacht do/vr



Maintenance windows during Thursday/Friday night
Situation **timetable 2023**, changes may apply

Red: total closure
Green: no maintenance windows
Yellow: maintenance windows, 1 track available
Blue: maintenance windows, 2 tracks available

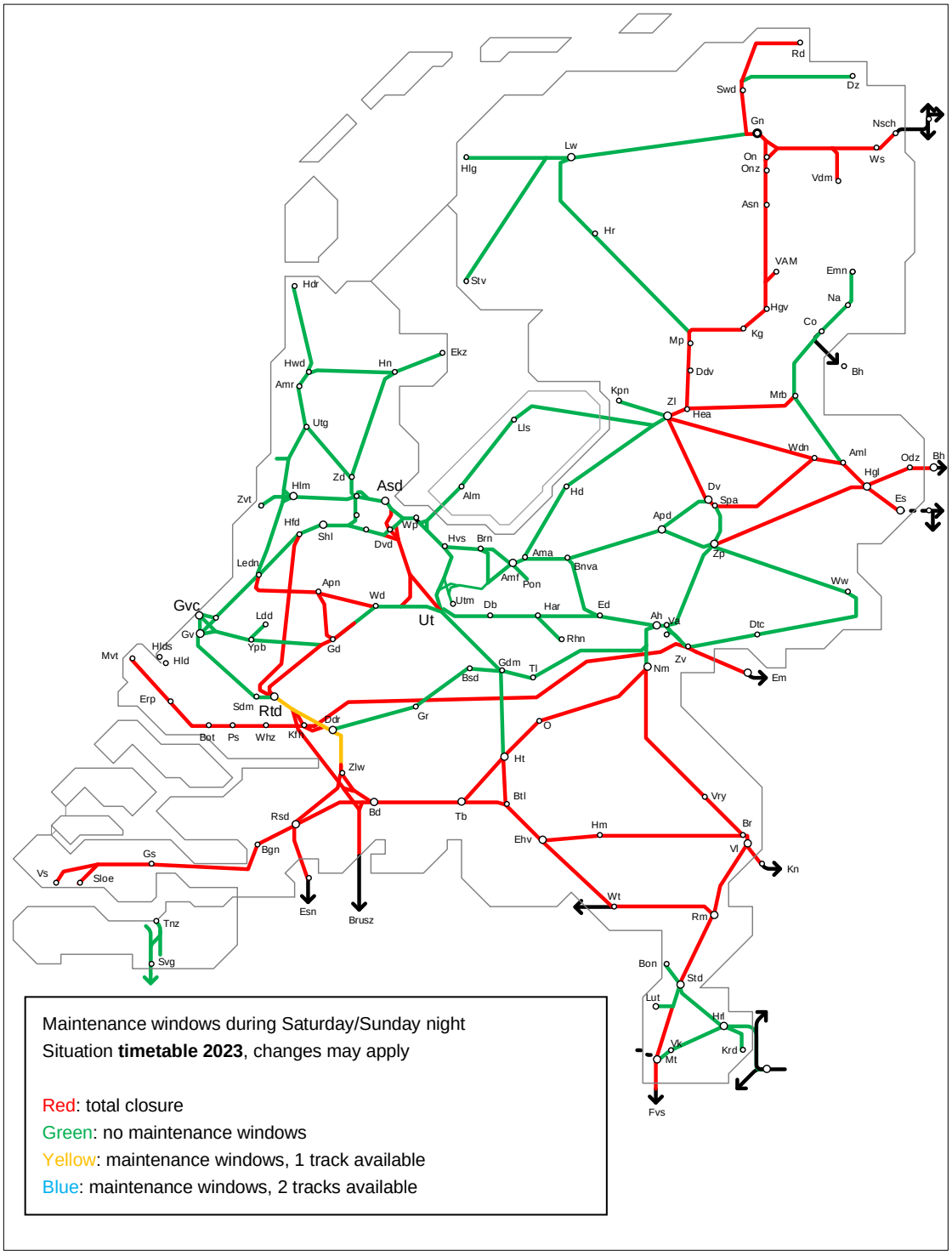
Nacht vr/za



Maintenance windows during Friday/Saturday night
Situation **timetable 2023**, changes may apply

Red: total closure
Green: no maintenance windows
Yellow: maintenance windows, 1 track available
Blue: maintenance windows, 2 tracks available

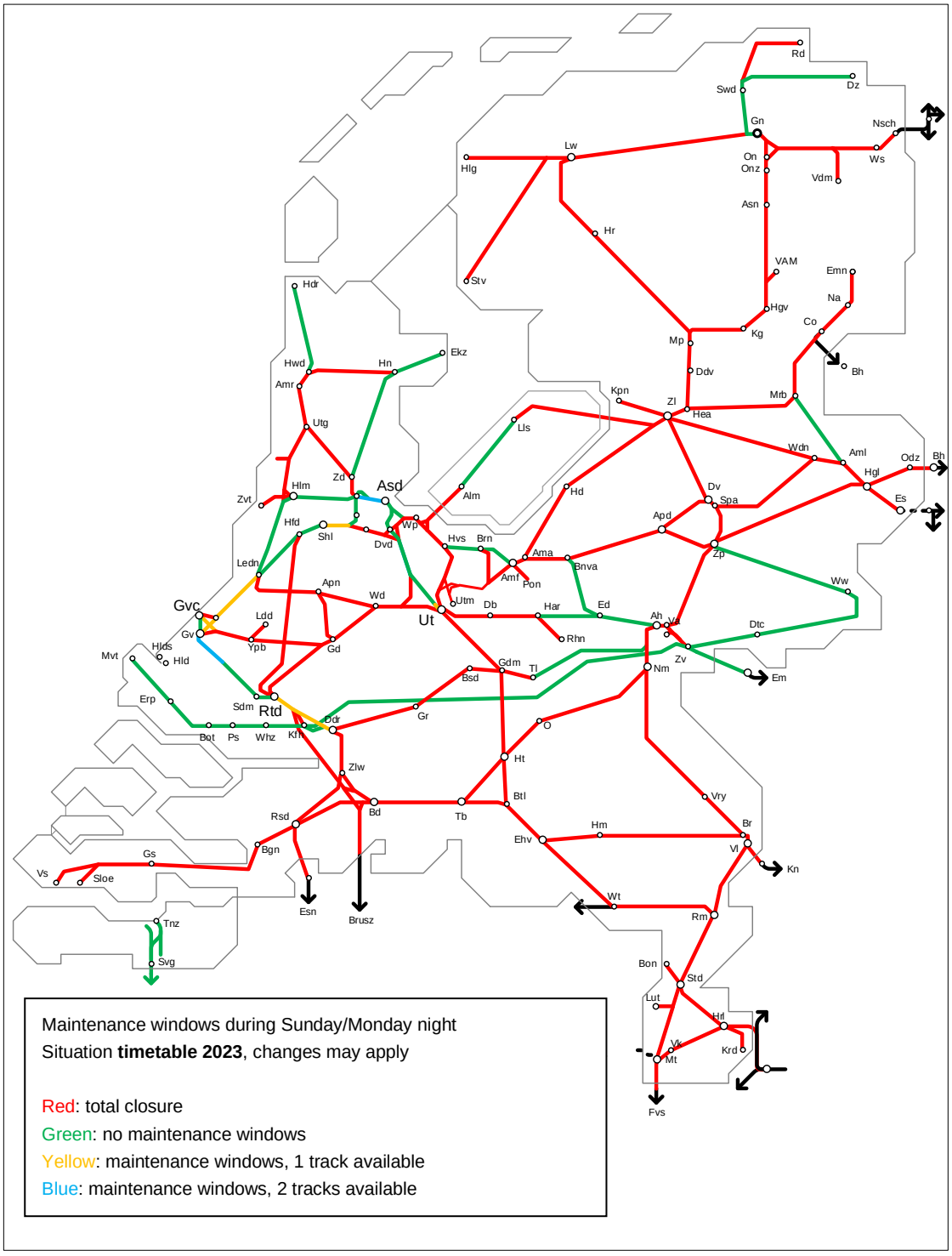
Nacht za/zo



Maintenance windows during Saturday/Sunday night
Situation **timetable 2023**, changes may apply

Red: total closure
Green: no maintenance windows
Yellow: maintenance windows, 1 track available
Blue: maintenance windows, 2 tracks available

Nacht zo/ma



Maintenance windows during Sunday/Monday night
Situation **timetable 2023**, changes may apply

Red: total closure
Green: no maintenance windows
Yellow: maintenance windows, 1 track available
Blue: maintenance windows, 2 tracks available

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