



Position Paper

Brussels, 1 February 2023

Rail infrastructure capacity and traffic management: implementation of TTR and DCM

EXECUTIVE SUMMARY

With this position paper¹, the Community of European Railway and Infrastructure Companies (CER) would like to share its members' views in regard to the upcoming update of the EU legislation on timetabling and path allocation in rail sector.

In particular, this position paper outlines that to make Timetabling Capacity Redesign for Smart Capacity Management (TTR) a success story it is important to ensure that:

- capacity partitioning takes into account inputs from applicants and shall not lead to over-fragmentation, or to a situation where some parts of capacity remain unused (artificial waste of capacity);
- establishing of rolling planning concept is a key element to ensure that the new capacity allocation and management fits the market needs;
- with respect to national timetabling and capacity models, TTR shall be introduced integrally in all countries. At the same time, national specificities must be allowed for as long as they do not undermine the whole implementation;
- RNE could have the role of a European entity supporting IMs in the capacity allocation and management by monitoring the implementation of mandatory common rules, process improvement and issuing recommendations (there shall be no change to RNE's current ownership, RNE shall continue to perform its current functions, and no decision-making or enforcement powers shall be vested on RNE);
- railway sector would support that the rail traffic management is performed by IMs based on a commonly agreed framework, and not by a centralised entity at the European level;
- there is a legal obligation to provide multi-annual funding to IMs in the timeframe of the capacity strategy, in accordance with policy goals of developing rail traffics;
- the new capacity process addresses the current lack of harmonization, synchronisation and coordination of the capacity allocation processes in the EU;
- the use of path ordering tools is improved, so that the applicants can choose between using their own solution for placing path requests or a single centralized tool for all their capacity needs (both tools shall be interfaced and automatically synchronised). IT implementation should be based on TAF/TAP TSI;
- the new capacity allocation rules neither lead to additional administrative burden, nor to institutional or operational fragmentation;
- it is key that Commercial Conditions will be in place and are applied reciprocally to IMs and RUs, thereby supporting that capacity is not wasted by any of the actors;
- advance pre-planning is designed especially for the lines with high capacity demand, as part of core networks and international relevance, and takes into account inputs from applicants;

¹ This paper will be reviewed once the European Commission publishes their proposal for a Regulation on cross-border capacity management.

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Besides, the position paper contains a legal analysis that shows that only a few Articles of the SERA Directive raise doubts about their full alignment with the envisaged TTR process. Consequently, implementation of TTR requires only a very surgical change to the SERA Directive, and would not require a full-fledged revision of its text. The sector would like to stress that the latter should be avoided to ensure timely TTR implementation.

Furthermore, it is important to create legal certainty and a strong legal basis for TTR, which should be achieved by the proposal for a Regulation of the European Parliament and of the Council, draft of which is expected to be published in Q2 2023. This upcoming legislative initiative should remain limited only to what is necessary to implement TTR, and should mostly build upon the existing provisions of the SERA Directive.

1. INTRODUCTION

As the current EU legislation on timetabling and path allocation in the rail sector does not fully fit the market needs, the European Commission committed in the Action 19 of its Sustainable and Smart Mobility Strategy to “*put in place measures to better manage and coordinate international rail traffic, including if necessary through revised rules for capacity allocation*”. Accordingly, the European Commission plans to publish a proposal for a Regulation of the European Parliament and of the Council that will establish new rules on rail capacity allocation and management in Q2 2023². It has been outlined by the Commission that this upcoming Regulation would “*create the conditions necessary to improve rail infrastructure capacity and traffic management, covering all types of rail traffic*”.

It is expected that the capacity allocation and management process outlined in this upcoming proposal for a Regulation will be very much based on the **Timetabling and Capacity Redesign (TTR)**. TTR is the project led by the rail sector, namely by RailNetEurope (RNE) and ForumTrainEurope (FTE), which aims at creating a new process for allocation of rail capacity, by improving the current practices, in particular by achieving harmonized request deadlines that fit the needs of both freight and passenger rail operators, increased efficiency (capacities, resources, IT) and optimized use of existing infrastructure capacity.

With this position paper, the Community of European Railway and Infrastructure Companies (CER) would like to share its members’ views in regard to the upcoming update of the EU legislation on timetabling and path allocation in the rail sector. The position paper starts by briefly outlining the main stages of the proposed TTR process, followed by the benefits TTR would bring to the rail sector, and as a result to society as a whole. Then, the position paper lists the points that the sector finds crucial to be addressed by the upcoming change of the EU capacity allocation and management processes.

Furthermore, the position paper provides the analysis of which specific provisions of the Directive 2012/34/EU establishing a single European railway area (SERA Directive) (might) stand on the way of the full roll-out of the capacity allocation process as currently envisaged by the TTR project. From this analysis it is concluded that only very few small adjustments to the SERA Directive are necessary. Therefore, the sector calls on the European Commission to limit the legislative changes to the SERA Directive to what is absolutely necessary to implement TTR, and not to start a full-fledged revision of SERA Directive. In other words, it is crucial that the proposal for a Regulation on rail capacity allocation and management mostly builds upon the existing provisions of the SERA Directive, instead of essentially re-writing it.

The position paper also provides information about Digital Capacity Management (DCM) which is the IT ecosystem behind TTR. It provides a definition, as well as elaborates what is needed to implement DCM and the expected benefits. Finally, the sector’s expectations in regard to the role of Europe’s Rail Joint Undertaking partnership in the implementation of the TTR and DCM are outlined.

² Commission’s initiative “*International freight and passenger transport – increasing the share of rail traffic*” https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13134-International-freight-and-passenger-transport-increasing-the-share-of-rail-traffic_en.

2. WHAT IS ENVISAGED BY THE TTR PROJECT?

One of the main principles of the current capacity allocation process is that it establishes one yearly deadline for capacity requests. Besides, the current EU legislation regulating rail capacity allocation does not harmonize the deadlines fitting different traffic needs for path allocation across the EU, giving Member States the possibility to define details within timeframes in national capacity allocation frameworks. Also, the approaches to later changes and modifications, as well as capacity restrictions and works, are not harmonized, or only partly harmonized, in the current EU law, which leads to divergences between the EU Member States.

The idea behind the TTR project is to make better capacity available for rail, allowing for internationally harmonized and higher quality paths for all rail users, to make modal shift and the EU Green Deal possible. TTR covers all stages of rail infrastructure capacity planning and allocation (see Annex 1 – indicative timeline of TTR process), and all capacities on the rail network, independent from corridors or national views. One of the key features of TTR is that, in addition to the annual scheduling process, it would allow for capacity requests to be submitted on any day of the year (rolling planning concept), with the objective of higher quality and reliability than today, as well as it would offer the currently lacking harmonization of capacity planning and allocation processes across the EU.

The new timetabling and capacity management process is built around the following core process steps.

a) Capacity strategy

The TTR process starts with the capacity strategy phase up to 5 years in advance of the yearly timetable change. This capacity strategy provides an overview of indicative future infrastructure development and capacity needs (i.e. demand forecast) to be shared and as much as possible harmonized with neighbouring IMs and to involve and inform applicants, as well as relevant public authorities, as early as possible. The result of the capacity strategy is a document in a standardised format consisting of the overview of 1. expected infrastructure capacity, 2. temporary capacity restrictions (principles for the planning of temporary capacity restrictions and principles for capacity allocation for regular maintenance windows), and 3. traffic flows (description of main principles to be used in the planning of elements in the capacity models).

b) Capacity model with capacity partitioning

The capacity strategy then feeds into a capacity model, in which capacity is partitioned according to the market needs, taking into account the input from applicants. According to the TTR process, the capacity has to be partitioned in capacity for commercial needs as well as for unavailable capacity due to maintenance and construction works (temporary capacity restrictions - TCRs). The goal is to have an optimization of available capacities at an early stage and to provide scenarios in case of heavily utilized lines.

c) Capacity planning and publication of capacity supply

Subsequent to the capacity model, in the capacity planning phase a 365-days capacity diagram is developed, which is called "capacity supply". The capacity supply will be as close as possible to market needs, reducing the risk to waste capacity. The capacity supply for the upcoming timetable year is published as from eleven months before the timetable change and shows the capacity that is available for booking and the capacity for larger already known and internationally coordinated TCRs. Capacity Supply is the result of a common RU-IM dialogue ensuring that it fits the market needs as much as feasible in

timings and path characteristics. Further optimization is achieved with the annual repetition of the creation of the capacity supplies: Learnings from previous years improve the supplies of subsequent years. Securing the quality and usability of the safeguarded capacity shall enable the modal shift goal for freight and passenger traffic.

d) Capacity requests³

i. Annual requests. In TTR, initial path requests for the upcoming annual timetable have to be placed at the latest at 8,5 months before the yearly timetable change (today: 8 months before). Only the requests placed within this deadline are processed with priority. Applicants are also given the possibility to request capacity after this deadline (*late path requests*). The paths resulting from annual requests shall not use capacity safeguarded for Rolling Planning and ad hoc request.

In the TTR process it is proposed that applicants have the possibility to make observations on the draft offer within two weeks (today: within one month according to Article 45(3) of SERA Directive). The observations should refer to a deviation of the draft offer from the initial path request. This shortening of the observation period would be possible only once common processes and harmonized use of IT are implemented.

ii. Rolling planning requests. While today applicants can request paths either under the annual scheduling process or submit late/ad hoc path requests providing only "leftover capacities", TTR provides an additional possibility to introduce requests for paths, i.e. the so-called rolling planning requests. The specificity of rolling planning requests is that the capacity can be booked at any time between four and one month(s) before the first day of operation, for a period of up to 36 months. Building on the essential aspect of safeguarded capacity (in form of bandwidths or specific paths) the quality of such paths shall be much higher than today's "leftover capacities". Introducing rolling planning as a new instrument in parallel to the existing concept of the framework agreement, or, generally speaking, introducing the possibility to request capacity outside of the annual timetable deadlines with multi-annual validity, will also lead to an improved handling of annual requests as with rolling planning the annual requests will be reduced. This will support the shortening of path elaboration phase and consultation phase. The rolling planning concept shall be developed in way that the demands of passenger transport are also mapped.

Multi-annual dimension of the rolling planning. Based on applicants' expectations to have planning security beyond one timetable year, TTR allows for guaranteed capacity for up to 36 months. When requesting rolling planning capacity applicants can specify the duration for which the relevant capacity would be needed (up to 36 months); they will then be allocated a train path for the current/upcoming timetable period (depending on when the request is submitted) and a "slot" for upcoming timetable periods. The slot corresponds to a time-window within which several paths can be constructed and provides the applicants with a guarantee to receive (an offer for) a path within this time window when the timetable for the relevant year is constructed.

iii. Ad hoc requests & short-term ad hoc requests. TTR also allows for some paths to be requested later as *ad hoc requests* (from two month before the annual timetable

³ In regard to the terminology used to describe different types of paths requests throughout the paper, it could be noted that the ongoing revision of TAF/TAP TSIs contain a proposal that the revised TAP/TAF TSIs will be applicable to all request types (including subsequent changes to paths by RUs and IMs, incl. TCRs) and will no longer only focus on the "short notice path requests".

change and until 30 days before the day of operation) or at a very short notice as *short-term ad hoc requests* (less than 30 days before the operation).

e) Path modifications, alterations and cancellations

i. Path modifications. Sometimes due to market changes both freight and passenger RUs require certain adaptations to be applied to the respective paths. It is possible for applicants to place a path modification request any time after a path has been allocated.

ii. Path alterations. While it is aimed to reduce such situations to the absolute minimum, sometimes it still may be necessary for IMs (and allocation bodies) to adjust, replace or withdraw already allocated paths.

iii. Path cancellations. An applicant may always cancel an allocated path. The capacity released due to a cancellation is made available again in the capacity supply for new requests.

3. WHAT ARE THE BENEFITS OF TTR?

- **Improved customer experience and increased customer satisfaction for passenger and freight RUs, as well as higher end-customer satisfaction. Ultimately this would increase the competitiveness of rail compared to other modes of transport and would help to shift traffic to the railways.**

Different applicants need different capacity at different times for different periods. Freight RUs mainly value safeguarded high-quality capacity for requesting later and/or on a shorter notice, also for transport contracts not limited to a single timetable period. In contrast, passenger RUs mainly value the improvement of the current annual timetabling process with earlier capacity allocation and with a higher stability of the paths. IMs and RUs value a harmonized international process for TCR planning and timetabling which is transparent, efficient and provides the necessary capacity to execute TCRs.

TTR offers high quality train paths in the short, medium and long term while addressing the needs of **freight and passenger markets** with optimized and harmonized request deadlines. Revised and new request methods for spot to multi-annual traffic (ad hoc and rolling planning requests) provide more flexibility, while the annual timetabling process is improved.

Earlier Annual request deadline: this capacity request method offers RUs the possibility to request capacity earlier in the upcoming annual timetable and to receive an earlier response than today. Provided adequate IT, this is based on a shorter path construction time that allows for a stable and earlier available path offer. As a result and combined with early and stable inclusion of TCRs, **the ticket booking systems of RUs can be opened earlier:** almost 6 months prior to the timetable change which is almost two months earlier than today. This would be a major benefit especially for passenger RUs as it enables earlier information and ticket sales to customers. This increases rail's competitiveness compared to airlines and bus services, which already sell tickets much earlier. Early clarity is also beneficial for passenger and freight RUs' resource planning (rolling stock, drivers) to facilitate stable freight traffic, and for their communication with end customers. Multiannual, stable and predictable funding of the IM is needed to avoid track closures on short notice e.g. in the middle of the timetable year due to construction sites, which despite the introduction of annual requests can prevent RUs from an earlier opening of booking systems.

Rolling planning requests: This alternative capacity request method to the annual requests will draw from capacity already assigned in the capacity model and safeguarded for the specific purpose of short notice requests. Rolling planning requests have a **quick response time, thereby providing more flexibility to react to fluctuating market needs** as they occur. In addition, the multiannual validity of the request breaks with the current system's limitation to one single timetable. There is no need to place separate requests for consecutive timetable periods. This reduces the number of annual 'phantom' requests as there is less need to request train paths based on best guesses. The high-quality capacity offers based on dedicated ('safeguarded') capacity and short answer periods support applicants in their long-term planning and thus in their investments and contractual commitments to their end customers. The rolling planning requests provide a multi-annual promise of capacity. This is important for freight RUs and their customers. In some cases, this also provides benefits to passenger RUs, for example by potentially facilitating seasonal and charter passenger traffic, as well as by allowing for a multi-annual booking for commercial trains. Besides, rolling planning may enable a further stabilisation of the annual timetable process, on the assumption that due to freight RUs mainly using rolling planning requests, less capacity for freight trains is requested in the annual timetable, reducing "artificial" conflicts in that busy period, which would be positive for IMs, and all RUs that need capacity in the annual timetable. The positive effects of rolling planning demand a change in behavioural patterns by applicants.

Ad hoc requests: this capacity request method allows to request recurrent and individual paths in the current timetable as well as for short term ad hoc requests by using dedicated, residual and unplanned capacity.

- **More available capacity on the existing railway infrastructure by reducing wasted capacity through optimizing the planning and allocation process of rail capacity.** Optimized usage of capacity (new capacity partitioning approach, harmonized international processes and IT support) may lead to a **3%⁴ commercially usable capacity increase** on the whole European rail network⁵. This gain in capacity may translate into **113,81 million⁶ more train km for RUs** and **361,84 million EUR⁷ additional revenues from Track Access Charges** for IMs.
- **Additional financial benefits and return on investment:** 1 billion EUR⁸ investment for the implementation of TTR and DCM is more than offset by 2⁹ billion EUR expected benefits annually. These benefits are shared among IMs (10%), rail industry

⁴ As stated in the RNE business case for TTR which can be found [here](#).

⁵ The processes and rules for capacity allocation (e.g. timing) are valid for all kinds of paths for all kinds of line (single track, regional line, high speed line).

⁶ RNE Calculation method for estimate: Taking into consideration the 9th IRG-Rail Market Monitoring Report ([2019 - Market Monitoring - IRG Rail \(irg-rail.eu\)](#)) a total of 3,793.57 Mio train-km were performed in the European Union in 2019, which is used as a reference year. An increase of 3% will lead to a potential of additional 113.81 Mio. train-km. However, it needs to be noted, that transport increase is a combination of market demand, price and service structure and therefore a capacity increase does not automatically lead to additional train runs.

⁷ RNE calculation method for estimate: Taking into consideration the 9th IRG-Rail Market Monitoring Report ([2019 - Market Monitoring - IRG Rail \(irg-rail.eu\)](#)) a total of 12,061.31 Mio EUR as TAC were performed in the European Union (25 countries) in 2019. An increase of 3% will lead to additional 361,84 Mio. EUR. However, it needs to be noted, that transport increase and therefore TAC increase is a combination of market demand, price and service structure and therefore a capacity increase does not automatically (only at congested lines - e.g. lines to major ports) lead to additional train runs.

⁸ According to RNE business case for TTR created by MC Mobility Consultants GmbH which can be found [here](#).

⁹ According to RNE business case for TTR created by MC Mobility Consultants GmbH which can be found [here](#).

(23%) and RUs (67%)¹⁰. These benefits concretely include approximately 200 million EUR for IMs (additional infrastructure charges, efficiency gains – automated vs. manual processes), 460 million EUR for the rail industry (energy sales, not taking in consideration benefits for additional rolling stock, higher maintenance, etc.) and up to 1,340 million EUR for RUs (mainly the possibility for additional train runs and therefore potential for increased turnover). Benefits accruing to RUs are important to support them to stay in business and to remain competitive compared to other modes of transport so that they can help shift traffic onto the railways. The return on investment is expected to be faster due to the faster roll out of TTR compared to building new infrastructure. A calculation by Rail Freight Forward (RFF) shows that the estimated investment needs to reach an equal increase in capacity is 97%¹¹ lower for TTR compared to building new physical infrastructure. TTR also leads to reduced operating and administrative costs of rail transport. In addition, it generates additional earnings due to modal shift based on a “just-in-time” rolling planning customer-friendly approach.

- **Increased modal shift:** Due to TTR, a modal shift of >0,5% from road to rail is expected which leads to potential benefits of 23,5 billion EUR/year on a European level (reduction of external effects: congestion, accidents)¹². By increasing the market share, TTR will have secondary positive effects, including a higher need for rolling stock (rail supply industry), an increased use of service facilities. A higher market share will also help to meet higher socio-economic goals, e.g. Green Deal/decarbonization goals.
- **Increase in connectivity, transparency and cooperation:** Better connection of stakeholders is expected in capacity planning, including service facilities, IMs, authorities, and applicants. Higher transparency and easier accessibility for all stakeholders is likely to lead to a better cooperation on international and national level.
- **Better products:** Improved reliability and stability of train paths including TCRs is expected to increase the perceived reliability and user-friendliness of the whole rail sector, benefiting customers of both, rail passenger and freight services. For improved reliability the necessary resources for TCRs must be already allocated at the time of planning. Without the required TCR budgets, advanced planning will not be reliable.
- **Better international alignment and an increase in efficiency and utilization of rail capacity thanks to advance planning:** Advanced planning in form of capacity strategy, capacity model, and capacity supply can provide predictability and stability, as it enables RUs to know better in advance what can be expected in terms of available slots, and reserve capacity accordingly. It allows for harmonized early cross-border and national capacity planning, an early overview of possible future capacity bottlenecks, an overview of the available volumes on a European scale and to facilitated consultation of traffic solutions during different periods (e.g. TCRs). It allows for a more accurate long-term planning of infrastructure use, including TCRs, which will minimise the impact of infrastructure works on traffic services. The process will also provide more time to resolve conflicting path requests, will help to avoid duplication of work as well as facilitate planning of resources of RUs, such as turnarounds, rolling stock and staff. The increase in efficiency

¹⁰ RNE calculation method for estimate: the calculation concerning the benefit sharing is based on a model identifying the major cost drivers (TAC and Energy cost) and their allocation to the respective providers (Infrastructure manager, Industry and RUs). More information can be found in the RNE business case for TTR created by MC Mobility Consultants GmbH which can be found [here](#).

¹¹ RNE document “TTR introduction” from August 2, 2022 (Page 10)

¹² According to RNE business case for TTR created by MC Mobility Consultants GmbH which can be found [here](#).

and utilization of the existing and future rail network capacity reduces the effects of bottlenecks and thereby safeguards European investments in infrastructure.

4. WHAT IS NEEDED TO MAKE TTR A SUCCESS STORY?

- **It is important to ensure the right balance in capacity partitioning to avoid over-fragmentation of capacity while providing market-oriented timetables and flexibility.** Capacity partitioning should not lead to exaggerated “shredding” of capacity, especially in networks with dense traffic. Namely, the **capacity partitioning should not lead to a situation where some parts of capacity remain unused** while preventing other traffic or leading to adaptation of slots, and thereby decreasing the quality of the latter. The new rules should not be too rigid and/or too strict in regard to the allocation of paths, and **should not result in an artificial waste of capacity** due to services that could have potentially taken place. It should furthermore be ensured that the capacity partitioning system **does not cause any additional difficulties in setting up new train services** on busy routes, in comparison with the current rules.
- **Maximizing both freight and passenger transport** should be the overarching goal of the new capacity and allocation process.
- It is **important to introduce the rolling planning concept** to ensure that the new capacity allocation and management process fits the market needs.
- In several countries there are existing national systems in place that work well nationally, but are not fully aligned with TTR. To make TTR a success, it is **necessary to introduce TTR integrally in all EU countries**, avoiding discrepancies and national specificities that could undermine the implementation as a whole. However, as long as such national specificities of the timetable design do not endanger the overall TTR process, **they should remain allowed.**
- Going forward, **RNE could have the role of a European entity supporting IMs in the capacity allocation and management**, which, however, shall neither affect the current ownership of RNE, nor its current functions as provider of processes and tools to enable commonly applicable processes. The additional functions of RNE as a European level entity could amount to monitoring the implementation of mandatory rules, process improvement and issuing recommendations. No decision-making or enforcement powers shall be vested upon RNE.
- Furthermore, the railway sector would support that the **rail traffic management is performed by IMs based on a commonly agreed framework**, and not by a centralised entity at the European level.
- Currently, the lack of implementation of multi-annual funding of IMs in many European countries undermines the business predictability for the sector and prevents definition of a reliable capacity strategy. Thus, going forward it would be necessary to establish a **legal obligation to provide multi-annual funding in the timeframe of the capacity strategy**, in order to gain benefits from the advance infrastructure planning. Such multiannual, stable and predictable funding of the IM is needed for the advance planning foreseen in the TTR process.
- It is important that the timetable calendar is structured via common time milestones for train paths and works to **address the current lack of harmonization, synchronization and coordination of the capacity allocation processes**, especially in the early phases.

- Furthermore, upcoming change of the rail capacity allocation and management process should result in an **improvement of the use of path ordering tools**. The objective of such improvement should be that applicants have the possibility to use a single point of contact for all their capacity needs. The applicants should be able to choose between using their own solution for placing path requests or a centralized European tool, while these tools should be interfaced and automatically synchronised. At the same time, the one common TAF/TAP TSI standard in direct communication towards the individual IMs should be in place.
- The new capacity allocation rules should **neither lead to additional administrative burden, nor to institutional or operational fragmentation**. In particular, we believe that an additional European network statement would not be feasible. This could probably be better achieved by focusing on harmonizing national network statements.
- **Advance planning would be beneficial only in the cases of lines with high capacity demand**, where there is a need to maximize the number of paths that can be allocated, as well as lines which are part of core networks or have international relevance. In the case of low capacity utilisation, this approach could be counterproductive, as the customers would be restricted even when better services could be provided to them. The different levels of capacity utilisation shall therefore be properly taken into account in the new capacity allocation and management process in order to maintain the necessary flexibility for the customers.
- **Reciprocally applied Commercial Conditions are needed** to avoid unnecessary waste of capacity by any of the actors.

5. WHICH PROVISIONS OF SERA DIRECTIVE ARE NOT FULLY IN LINE WITH THE ENVISAGED TTR PROCESS?

5.1. Capacity strategy

The SERA Directive does not foresee a capacity strategy as defined in TTR, so **there seems to be no obvious conflict between the Directive and this stage of the TTR process**. However, the absence of an explicit regulation creates legal uncertainty.

5.2. Capacity model with capacity partitioning

There are no explicit legal provisions about a capacity partitioning process starting more than [24 months] in advance to the change of the timetable. The SERA Directive neither demands such a capacity partitioning, nor explicitly forbids it. The absence of explicit provisions in EU law can be understood either as prohibiting the capacity model and partitioning concept as defined in TTR, or as allowing these concepts, which results in a high uncertainty as to whether it would be lawful to divide capacity as envisaged in TTR. Without an explicit rule it is harder to make capacity partitioning mandatory for all stakeholders. Therefore, a mandatory provision requiring such capacity partitioning should be established, but **it would not be necessary to amend any of the articles of the SERA Directive** for that purpose. Other legal instruments, directly applicable and targeted on capacity management should be used instead.

5.3. Capacity planning and publication of capacity supply

With exception of the provision of Article 40(5) of the SERA Directive that foresees publication of pre-arranged international train paths, and provision of Article 48(2) that allows to reserve capacity for ad hoc requests, the SERA Directive seems to be based on

the idea that all (remaining) capacity is offered to applicants during the annual scheduling process, allowing the applicants to request whatever paths they need, and obliging the IMs to do their best to accommodate all such requests. It could further be noted that Article 40(5) specify only international paths, while the railways would need an integrated aligned approach from both domestic and international perspective.

5.4. Capacity requests

a) Annual requests

While the annual path request and allocation process in TTR is in many ways very similar to the existing process as defined in EU law, there are some new elements and envisaged changes. The planned shortening of the observation phase (for applicants to place observations on the draft offer) from one month to two weeks would be **incompatible with Article 45(3) of the SERA Directive**. This envisaged shortening of the observation phase is an important element of TTR, which ensures acceleration of the allocation process and, as a result, makes it easier for passenger RUs to open their booking systems at an earlier stage than today.

b) Rolling planning requests

In order to (still) be able to offer rolling planning capacity of good quality at this late point in timetabling process, it is necessary to reserve capacity for these requests during the annual allocation. The IMs thus need to be able to not provide this requested capacity to annual requests whenever such requests are in conflict with the capacity reserved for the rolling planning requests. Given that the rolling planning concept is currently not foreseen in the EU legislation, providing alternative timetable not fully matching those annual requests with such reasoning (i.e. due to the fact that the capacity is reserved for the rolling planning requests) may be considered as being contrary to the provisions of the current EU law regulating capacity allocation, in particular **contrary to the requirement for the IMs to meet all requests for capacity as far as possible (Article 45(1) of the SERA Directive)**.

It should also be noted that, on the other hand, according to Article 48(2) of the SERA Directive infrastructure managers shall, where necessary, undertake an evaluation of the need for reserve capacity to be kept available within the final scheduled working timetable to enable them to respond rapidly to foreseeable ad hoc requests for capacity, which also applies in cases of congested infrastructure. Notwithstanding the terminological difference, the intention behind these existing provisions and the rolling planning concept seems to be very similar, i.e. aiming at allowing IMs to reserve capacity for traffic that does not yet know its capacity needs in due time to submit path requests under the annual scheduling process. Thus, it could also be argued that these existing provisions could serve as a sufficient legal ground for the reservation of rolling planning capacities. In this context it needs to be noted that in the envisaged TTR process the concept of rolling planning requests is not meant to replace ad hoc requests, but constitutes a complementary offer; so, the possibility to reserve capacity for foreseeable ad hoc requests currently provided for in Article 48(2) of the SERA Directive should in principle continue to exist for the "traditional" ad hoc requests.

Multi-annual dimension of the rolling planning

Article 38.2 "Capacity rights" of the SERA Directive states that the right to use specific infrastructure capacity in the form of a train path may be granted to applicants for a maximum duration of one working timetable period. It further states that for the use of capacity for a longer term than one working timetable period, an IM and an applicant may

enter into a framework agreement. While it is possible to argue that the rolling planning in its multiannual dimension relates to the allocation of “slots” rather than specific train paths, **Article 38.2 could also be interpreted in a more restrictive manner, i.e. as prohibiting the multiannual dimension of the rolling planning.**

Currently, the SERA Directive already foresees a tool to reserve capacity for more than one timetable period. **Article 42.1 “Framework agreements” of the SERA Directive** states that a framework agreement may be concluded between an IM and an applicant, and that such a framework agreement shall specify the characteristics of the infrastructure capacity required by and offered to the applicant over a period of time exceeding one working timetable period. It also states that the framework agreement shall not specify a train path in detail, but shall be such as to meet the legitimate commercial needs of the applicant. The multiannual dimension of the rolling planning appears similar to the framework agreement concept of the SERA Directive. However, framework agreements are a voluntary instrument (IMs cannot be required to offer them), while multi-annual rolling planning is an essential element of TTR. Besides, in the TTR process the conversion of rolling planning slots into concrete paths is envisaged to start five months before the yearly timetable change, i.e. already after the handling of the annual requests, and it is possible to place a new rolling planning multiannual request very close to the day of operation, while according to Article 44 of the SERA Directive an applicant who is a party to a framework agreement shall apply for concrete paths (in accordance with the agreement) under the annual scheduling process and the requests are handled in the annual scheduling process (including, in particular, the application of principles of coordination in case of conflicting requests (Article 46 of the SERA Directive), and one month observation period on draft offer (Article 45(3) of the SERA Directive)). Therefore, on the one hand the existing concept of the framework agreements cannot be used to implement rolling planning in its multiannual dimension, while on the other hand, the multiannual rolling planning implemented alongside the existing framework agreements concept, without any additional explicit stipulation in the law, could be interpreted as a circumvention of the rules regulating framework agreements (including Implementing Regulation 2016/545). Therefore, **an explicit stipulation allowing multiannual rolling planning alongside the existing concept of the framework agreement is desired.**

Overall, it is important to note that the multi-annual rolling planning requests in TTR are not meant to replace the current framework agreements, but to provide an additional offer to applicants for whom the current framework agreements are not suitable, but which nevertheless seek planning security beyond one timetable year. The existing possibility for IMs to offer binding framework agreements should remain in place (Art. 42 Directive 2012/34/EU). The possibility to offer binding framework agreements during the year would also help addressing the rail market needs.

c) Ad hoc requests & short-term ad hoc requests

Article 48 “Ad hoc requests” of the SERA Directive only defines that IMs shall respond to ad hoc requests for individual train paths as quickly as possible, and in any event within five working days, and that IMs shall, where necessary, undertake an evaluation of the need for reserve capacity to be kept available within the final scheduled working timetable to enable them to respond rapidly to foreseeable ad hoc requests for capacity. Therefore, **there doesn’t appear to be any obvious conflict between the provision of the SERA Directive on ad hoc requests and the ad hoc & short-term ad hoc requests foreseen in the TTR process.** However, to avoid legal uncertainty it would be best to have a stipulation clearly allowing IMs to offer two different types of ad hoc requests with different procedures & timelines, “ad hoc” and “short-term ad hoc”, as foreseen in the TTR

process. Such clarification could for instance be provided in a Commission Interpretative Guidelines or **by introducing respective specific provisions in Annex VII to the SERA Directive.**

5.5. Path modifications, alterations and cancellations

Currently, the EU law does not contain detailed rules on path modification, alteration or cancellation. Annex VII to the SERA Directive contains a stipulation, according to which an allocated path may be rescheduled by the IM to ensure the best possible matching of all path requests if the rescheduling is approved by the applicant (see point 6). Article 54(2) of SERA Directive allows the IM to withdraw allocated train paths without warning in an emergency and, where absolutely necessary, in case of a breakdown making the infrastructure temporarily unusable.

For cases of cancellations or major modifications of paths by the applicant, Articles 36 and Article 52 of the SERA Directive could be considered as relevant. Article 36 entitles IMs to apply an appropriate charge in case infrastructure capacity that has been allocated is not used and it obliges the IM to do so in case of regular failure to use allocated paths. Article 52 entitles the IM to take account of previous levels of utilisation of train paths in determining priorities for the allocation process and to require the surrender of a train path which, over a period of at least one month, has been used less than a threshold quota defined in the network statement.

In the absence of more detailed rules on path cancellation, modification, or alteration in the existing EU law, it appears that the **procedures for handling these situations envisaged by the TTR project would in principle not be incompatible with the SERA Directive** (and, therefore, could also be described in the Network Statements). Nevertheless, due to the very diverging practice of handling these processes nationally (including also national regulations) **it would be desired to define a provision in the EU law requiring the IMs to set up and apply a single harmonised process.**

6. TARGETED AMENDMENT OF THE SERA DIRECTIVE

As outlined in the preceding chapter, only a few Articles of the SERA Directive raise doubts about their full alignment with the envisaged TTR process. **Only Article 45(3) of the SERA Directive contains a provision that is in clear contradiction with the envisaged TTR process** (observation phase of one month instead of two weeks envisaged in TTR). **All remaining provisions of the Directive contain no obvious conflict with the envisaged TTR process** (several TTR concepts are neither explicitly allowed, nor explicitly prohibited by the existing provisions of SERA Directive, which leaves it open to interpretations).

It therefore should be concluded that **creation of the strong legal basis for TTR requires only a very surgical change to the SERA Directive, and would not require a full-fledged revision of its text.** At the same time, it is important to stress that to create legal certainty and a strong legal basis for TTR, it is necessary to supplement the existing provisions of the Directive with clear description of the stages of the TTR process contained in another EU legal instrument. Therefore, CER supports the Commission's initiative to establish a clear framework in regard to the updated process of capacity allocation and management in a separate Regulation of the of the European Parliament and of the Council, draft of which is expected to be published in Q2 2023. In particular, apart from the allocation rules, it would be necessary that this new legislative text established a clear framework for safeguarding adequate capacity and prioritization of

capacity as defined in the capacity supply, as well as that it contains a framework for harmonizing commercial incentives for path modifications, alterations, and cancellations, and for harmonizing the capacity management process and timelines.

Implementation of TTR is urgently needed to ensure that the rail capacity is used in a more efficient manner, improving the competitiveness of the rail sector and supporting shift to rail. To achieve it more swiftly, **the very time-consuming process of reopening of the SERA Directive should be avoided**. For the timely implementation of TTR, it is crucial that the **upcoming legislative initiative has a target nature and remains limited only to what is necessary to implement TTR**. As outlined above, providing a legal basis for TTR in the EU law does not require a full-fledged revision of the SERA Directive. Otherwise, if considerable number of Articles of the Directive will be re-written, the discussions in the European Parliament and the Council will take years, further delaying the needed update of the outdated EU rail capacity allocation and management rules. In other words, **it is important that the new Regulation on capacity allocation mostly builds upon the existing provisions of the SERA Directive, with very few targeted amendments** to its main text. While it is very important to ensure there is a solid legal basis for the full TTR implementation, which should be achieved by the adoption of envisaged Regulation, it is also crucial to limit legislative changes to what is absolutely necessary.

7. DIGITAL CAPACITY MANAGEMENT (DCM)

7.1. What is DCM?

A common DCM ecosystem is required for the successful implementation of TTR. It is the IT ecosystem that enables TTR covering the capacity management IT of involved actors, nationally at the level of the IMs and centrally at RNE, together with technical and user interfaces to RUs, building on common standards. DCM provides the tools to **digitalize the rail capacity management along the TTR process**: capacity model, capacity planning, annual requests, rolling planning, ad-hoc and short-term requests, and TCRs allocation. By doing so, the **DCM ecosystem will be able to provide train paths** for occasional traffic, path orders during the timetable (rolling planning) and the annual timetable **in time, as well as internationally coordinated**. Ideally, **DCM will eventually lead to automated train path allocation** and will support capacity optimisation. Also, national pre-arranged path catalogues can be included in DCM.

DCM aims at providing **solutions for all parts of capacity management, for all rail traffic on the entire European rail network**. It would allow for effective planning according to market needs while reducing the planning workload for RUs and IMs. DCM could make a significant contribution to the national IMs with its ability to quickly and, if necessary, automatically construct paths without the need to hold all paths in a pre-constructed form.

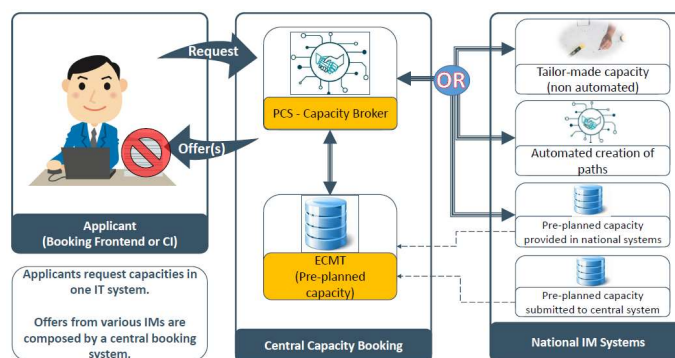
The **DCM ecosystem connects IMs' and applicants'/RUs' capacity management systems while providing easy access for all relevant stakeholders**. It allows multiple applications to coexist and communicate, including the national systems of stakeholders, using common standards and databases.

Its major components are:

- **National tools, e.g. legacy and future systems for European capacity management**. IMs and RUs have developed and invested in sophisticated and

national IT systems. However, national systems follow only national requirements and national IT landscape architectures are unique in each country. There is limited automated communication across borders and harmonization is largely done manually without a single point to collect all relevant information (e.g. TCRs). Such legacy systems need to be integrated via central IT to enable automated communication and harmonization across borders.

- **Central IT systems** that hold everything together, incl. common databases and common standards (following established TAF/TAP TSI). The central IT **combines several tools for the coordination and communication of TCRs, the provision of available capacity and the path allocation process**: TCR Tool, European Capacity Management Tool and Path Coordination System and Capacity Broker. These tools may be further assessed regarding their suitability. RNE builds and operates this Central IT, which combines the capacity offer from national sections for international path requests.
- **Interfaces for stakeholders** for easy access and participation.



7.2. What are the benefits of DCM?

Together with TTR, DCM will increase the competitiveness of rail passenger and freight services thereby becoming a key enabler for the modal shift towards green transportation. It leads to significant advantages for applicants/RUs, IMs and governments with relatively little investments compared to the level of investments needed for new infrastructure:

- **Increased customer responsiveness**: applicants/RUs will be able to request national and international ad hoc paths shortly before the departure of the train. RUs will be able to request and follow up all paths (long term, short term) within a single, common IT landscape. In addition, based on multiannual capacity commitments between IMs and RUs, RUs can meet customer expectations beyond “artificial” timetable periods of 12 months that are currently only known in rail.
- **Improved reliability of timetables and timeliness**: applicants can request train paths at a time when they are certain about their actual needs which for passenger RUs might be based on European integrated timetables, PSO contracts, or commercial interest for open access services. IMs will be better able to meet timetable deadlines than before, despite an increasing number of freight path requests and TCRs on their networks. Constructing train paths with the help of DCM will be based on faster harmonisation procedures that increase the speed at which path request can be handled. It also improves the quality of information exchange between stakeholders, as information is delivered in the same format to all actors across borders.

- **Improved harmonization at borders and enabler for integrated European timetable:** DCM would lead to an improved harmonization of train paths at borders at all stages of the timetabling process, from requests in annual timetable and running timetable incl. rolling planning and ad hoc. By increasing the capacity on highly utilized lines of the European rail network, DCM also would be an enabler for the integrated European schedule.
- **Increased available capacity and speed of path allocation:** constructing train paths with harmonized, demand-oriented parameters for each market segment and packing them into homogenous bundles as an option for highly used lines has the potential to increase available capacity.
- **Cost reduction:** DCM would support Ministries of Transport in fulfilling their task of providing infrastructure. It would leverage the investment in hardware and could be implemented faster than building new infrastructure, thus buying time for the planning of essential new infrastructure. At the same time, DCM would free up time of schedulers by automating semi-manual processes of path construction.

7.3. What is needed to implement DCM?

The digitalization of capacity management along the entire lifecycle of a train paths requires large efforts and can therefore only be built up gradually with respect to investments. However, **logical starting points** must be defined and are already feasible:

- **Legal basis:** Harmonized common processes should be established in the EU law, as it would not be possible to connect diverging processes and interfaces established in the national IT systems in different countries. TAP/TAF TSI should be used as a basis, creating a universal communication between various national systems of the Member States, and in particular should establish common implementation deadlines. However, the timing of TTR/DCM implementation must not lead to a de-prioritization of the implementation of the requirements of the TAF/TAP TSI regulation - neither for time nor financial reasons. TAF/TAP TSI requirements shall be implemented first, as a prerequisite for DCM implementation.
- **Usage:** All IMs and RUs should be able to and start using commonly built central IT for harmonizing and publishing capacity (models and supplies), which are available as TCR Tool and European Capacity Management Tool (ECMT) and Path Coordination System (Capacity Broker) – PCS CB.
- **Support for IT products:** The establishment of ambitious IT products for improved capacity allocation - including short term requests - must be supported. IMs organised in RNE currently develop several Minimum Viable Products (MVPs). One of which is the establishment of national automatization of ad hoc traffic and their international alignment, enabling harmonized answers to cross-border requests within minutes. Partaking IMs currently are DB Netz and SBB Infra: with their train path construction service system Click & Ride (C&R), DB Netz has achieved a level of almost 50% automation in ad hoc and short-term services. Being developed as MVP, IMs are able to share costs of national developments, reducing the overall costs significantly.
- **Legacy Integration:** national algorithms and other DCM modules have to be integrated in the existing IT landscape of the respective IMs.
- **Infrastructure representation:** A prerequisite for a complete digitalization of the capacity management is the existence of the actual infrastructure in digital form.

To explore all possibilities of fulfilling applicants' wishes in accordance with existing rules and regulations and, if necessary, to find solutions by calculating different variants, DCM needs a complete, up-to-date and correct digital representation of the current and future rail infrastructure. All IMs should start creating this digital representation of infrastructure in the short term. It must be determined which underlying database to be used to create digital representations of the infrastructure, as currently different infrastructure databases, i.e. RINF and CRD, are in use.

- **Connectivity:** It would be unrealistic and suboptimal to create one single European planning tool. Instead, the Central IT will act as an intermediary that allows national DCM solutions to communicate with each other. This IT solution is developed within the TTR IT Landscape and TAF/TAP TSI specifications. By fulfilling TAF and TAP communication standards by all actors, communication between individual actors without using the central systems remains possible, too.
- **Financing:** Experience has shown that the cost of software development, the mapping of the entire infrastructure, the integration into the legacy IT landscape and the question of international connections is initially underestimated. The European Commission provides the possibility for co-funding for central and national IT, which can help to ease the financial burden. RUs and national IMs need funding and resources such as skilled employees to modernise their IT and link it to the European level – using existing mandatory standards like TAF/TAP. For instance, funding for the development of IT support for the required high quality capacity demand reports is needed for both, IMs and RUs.

8. THE EUROPE'S RAIL JOINT UNDERTAKING EFFORTS IN THE FIELD OF CAPACITY MANAGEMENT SHOULD BE TAKEN INTO ACCOUNT

We would like to stress that there are already on-going important projects in the field of capacity allocation and management in the framework of the Europe's Rail Joint Undertaking partnership (ERJU), which includes major European IMs and RUs, as well as sectoral stakeholders such as e.g. CER and RNE. For example, the MOTIONAL project covers integrated solutions in the area of advanced traffic management and capacity allocation, and is jointly financed by the EU and the members of the ERJU (the EU financing amounts to EUR 38 million contribution to the project's total costs of EUR 86 million). It is important that such existing funded projects of the ERJU that relate to capacity allocation & management are taken into account by the Commission when developing the new capacity allocation and management initiative, to avoid that these on-going efforts are duplicated.

Annex 1 – Indicative Timeline of the TTR Process

The following table, which is taken from the RNE issued document “Description of the Timetabling and Capacity Redesign Process, Version 3.0”, provides an overview of the TTR process from the early stage of the advance planning starting at X-60 until the train operation. X refers to the timetable change, while the digit afterwards indicates the months prior to this change. It is however important to stress that the exact process has been subject to further development, with some details being clarified and adjusted, which will be reflected in the following updates of the TTR Process Description.

Activity / process step	Time	Explanation
Capacity strategy	X-60 – X-36	<p>IMs’ long-term capacity planning for a dedicated line, part of a network or entire network. Between IMs, various planning approaches exist. Therefore, coordination is needed.</p> <p>Applicants and other stakeholders will be informed about the state of the capacity strategy between X-54 and X-36. (mail, website, event...). The capacity strategy will be published at X-36 as Annex to the network statement</p>
Capacity model	X-36 – X-18	<p>A capacity model is built based on the IMs’ capacity strategy, market requirements (e.g. new service plans), TCRs according to the RNE TCR Guidelines for a dedicated line, part of a network or full network. This model shows (<i>details tbc. at upcoming meeting of TTR process group</i>):</p> <ul style="list-style-type: none"> • Scope-geography: the models are published for the complete network with the possible exception of regional lines/feeders/outflows with a single applicant. • Scope-unit: the models are published per train-path-line section and direction. • Scope-time: the capacity partitioning (i.e. capacity shares per segment) in the capacity model shall be done at least for a timetabling year. • Publication tool: the publication shall be done via the capacity hub (European capacity management tool), unless the IM already has an existing tool for capacity models; in that case, it can be done also via national tool and the interface has to be developed as soon as possible. • Content-TCRs: Major and High impact TCRs (as published at X-24), buffer-blocks for medium TCRs, buffer-blocks for minor TCRs,

Position Paper

Rail infrastructure capacity and traffic management: implementation of TTR and DCM



		<p>buffer-blocks for prolonged TCRs, buffer-blocks for late TCRs.</p> <ul style="list-style-type: none"> • Content-ATT-passenger: expected number of slots for regional passenger trains and long-distance passenger trains on a standard weekday/weekend. • Content-ATT-freight: expected number of slots for freight trains on a standard weekday/weekend. • Content-RP: expected number of slots for rolling planning on a standard weekday/weekend. • Content-ad hoc: expected number of slots for ad hoc on a standard weekday/weekend.
Capacity partitioning	X-24 – X-18	<p>The commercially available part of the capacity model (i.e, capacity not needed for TCRs, which can be requested by applicants) is partitioned, according to market needs, axis by axis, for use through two operative modes</p> <ul style="list-style-type: none"> • Capacity (either pre-planned or just available) for Annual Timetable requests • Capacity for Rolling Planning requests • Unplanned capacity (remaining capacity not being covered by market needs), e.g. to be used later on for ad hoc requests <p>The pre-planned capacity (either for Rolling Planning requests or yearly basis), is defined and shared with the relevant stakeholders.</p> <p>The Rolling Planning capacity will then be safeguarded to make sure that due to the existence of two operative modes it remains available until shortly before start of operation.</p> <p>The partitioning logic may change axis by axis and year by year as long as it does not impact already promised Rolling Planning capacity.</p> <p>International leading entities are involved in the process.</p>
Consultation phase	X-24 – X-16	<p>Applicants will be consulted on various issues (intended capacity offer, Network Statements, TCRs)</p>
Capacity planning	X-18 – X-11	<p>Based on the partitioned capacity model, and capacity needs announcements, a feasible capacity supply according to axis characteristics will be elaborated.</p>

Position Paper

Rail infrastructure capacity and traffic management: implementation of TTR and DCM



		For cross-border lines, activities shall be harmonised between IMs and RFCs.
Feasibility studies	From X-15	Applicants have the possibility to request feasibility studies.
Publication of capacity supply	After X-12	<p><u>Capacity for Annual Timetable requests:</u> In the form of pre-constructed paths or bandwidths.</p> <p><u>Capacity for Rolling Planning requests:</u> In the form of a number of possibilities based on capacity bands for a defined time window, incl. principal characteristics:</p> <ul style="list-style-type: none"> • Line/section-related • Parameters (length, speed, weight, etc.) • Standard running time <p>Internationally harmonised commercial methods/conditions will prevent the blocking of capacity.</p>
Types of path requests	<p>Ongoing</p> <p>Ongoing</p>	<p><u>Rolling Planning requests:</u> Can be requested at any time between 1 and 4 months ahead of the first day of operation; requests can cover an operation period of up to 36 months; answered according to the principle of first come – first served</p> <p><u>Ad hoc requests:</u> Traffic for which pre-constructed products cannot be used (until 30 days before operation) or traffic requested in a very short notice (less than 30 days before operation for all remaining capacity). It is possible for applicants to place ad hoc requests at any time after the last day for late path requests (X-2) and during the running timetable (until X+12). The very last running day of an ad hoc train can be on the day before the next timetable change (X+12)</p> <p><u>Annual Timetable requests:</u></p> <ul style="list-style-type: none"> • For traffic to be asked for an entire TT year or less, at the defined deadline • Requests placed after the deadline will be served based on the residual capacity for Annual Timetable requests or unplanned capacity

Position Paper

Rail infrastructure capacity and traffic management: implementation of TTR and DCM



	X-8.5	
Path/capacity allocation Rolling Planning requests	Ongoing	<p>Path elaboration based on dedicated capacity for first TT period (running or upcoming) and elaboration of a slot, which will be converted in a path year by year for the upcoming annual timetable period(s). Allocation according to the principle of first come – first served.</p> <ul style="list-style-type: none"> • Path offer for running TT period • Capacity commitment (slot) for the following and the subsequent TT period(s)
Path allocation Annual Timetable requests (in principle unchanged, but deadlines changed)	<p>X-8.5</p> <p>X-6.5</p> <p>X-5.5</p> <p>X-5.25</p>	<p>Path elaboration based on dedicated Annual Timetable or available capacity and conflict resolution procedure in case of conflicting requests.</p> <ul style="list-style-type: none"> • Draft offer, start of consultation phase • Final offer, start of acceptance phase • Final allocation
Path allocation Annual Timetable requests placed after deadline	<p>After</p> <p>X-5.25</p>	<p>Path elaboration based on residual capacity for Annual Timetable requests or unplanned capacity</p>
<p>Path modification*/alteration**/cancellation*</p> <p>* = requested by applicant</p> <p>** = requested by IM (e.g. in case of TCR at short notice or minor impact)</p>	<p>After allocation</p>	<p>Minor modifications: IMs take them into account</p> <p>Major modifications: Cancellation of allocated path/slot and new request</p> <p>Alteration = IMs offer an alternative, acceptance of applicant is required</p> <p>Partial or full cancellation of path: possible</p>
Train operation		<p>Train operates according to the path allocated by the IM and accepted by the applicant</p>

The detailed description of the TTR Process can be consulted [here](#).

Position Paper

Rail infrastructure capacity and traffic management: implementation of TTR and DCM



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The Community of European Railway and Infrastructure Companies (CER) brings together railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. The membership is made up of long-established bodies, new entrants and both private and public enterprises, representing 73% of the rail network length, 76% of the rail freight business and about 92% of rail passenger operations in EU, EFTA and EU accession countries. CER represents the interests of its members towards EU policy makers and transport stakeholders, advocating rail as the backbone of a competitive and sustainable transport system in Europe. For more information, visit www.cer.be or follow us on Twitter [@CER_railways](https://twitter.com/CER_railways) or [LinkedIn](https://www.linkedin.com/company/cer).

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