

1. Starting situation / need for action

1.1. General

Rail transport is the second-largest mode of transport in Germany and high **growth potential** is ascribed to it particularly in relation to rail freight transport. In the wake of the 2009 economic recession, which particularly affected rail freight transport as a result of a 17 percent decrease in the volume of transport, the medium-term forecast of the Federal Ministry of Transport, Building and Urban Development predicts annual growth rates of approx. 5 percent in 2010 and thereafter average growth rates of 4 percent, which means that they could once again reach their peak of 2008 by the year 2013. Yet rail passenger transport is also expected to have an albeit lower growth potential of 1.2 percent per annum¹. For the year 2010, these forecasts were adjusted upwards for freight traffic². This indicates that rail transport is set to benefit from an increase in the total volume of traffic in the long term. The Federal Environment Agency even sees the potential for freight transport to shift up to 40 percent of road freight from road to rail by the year 2025³.

In order for this forecast to materialise, not only do the currently available logistics business models need to be considered, but scope must also be created for the development of innovative business models. There is also **huge development potential** for **competition in the railway sector** specifically in this area. This applies not only to rail freight transport, but also to rail passenger transport which, owing to the tendering of transport services for up to 40 million train kilometres in Germany⁴ over the next 10 years, will be characterised by an increasing diversity

¹ Federal Ministry of Transport, Building and Urban Development and ITP, Rolling medium-term forecast for freight traffic and passenger rail services in winter 2009/2010, as at February 2010, page 2.

Press release issued by the Federal Ministry of Transport, Building and Urban Development on 12 August 2010 entitled "Freight traffic picks up speed"
Section 2 August 2010 entitled "Preight traffic picks up speed"

³ Federal Environment Agency "Strategy for sustainable freight traffic" 18/2009

⁴ Competitors' Railway Report 2008/2009, page 14

of railway undertakings offering transport services and using service facilities. Here too, making the best possible use of existing infrastructures is a prerequisite for the successful side-by-side existence of different railway undertakings at one service facility.

Furthermore, the aim should not just be to work towards expanding railway networks, siding tracks and interfaces between modes of transport such as ports and terminals. Making the **best possible use** of the existing **infrastructure**, particularly in bottleneck areas, is also a relevant factor for success. Service facilities that facilitate shunting manoeuvres and train-handling operations required as traffic junctions in railway traffic are critical to the success of the implementation of new rail transport services. These service facilities must effectively be accessible to all railway undertakings.

1.2. Regulatory framework

In order to ensure that all railway undertakings have access to the existing railway infrastructure, the legislator in Germany imposes the obligation on **infrastructure managers** to organise this access in conformity with political goals.

The regulatory embedding of the use of service facilities arises from Section 14 subsection 1 sentence 1 of the General Railway Act which states that infrastructure managers are obliged to grant non-discriminatory access to their service facilities within the meaning of Section 2 subsection 3c of the General Railway Act. As such, the obligation to grant non-discriminatory access leads on to the obligation of infrastructure managers pursuant to Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations, if possible, to grant all usage requests and, if applicable, to apply non-discriminatory and transparent priority regulations when resolving conflict arising from usage requests (Section 10 subsections 5 und 6 of the Rail Infrastructure Usage Regulations). These regulatory rights and obligations are based on the overall political objectives of railway regulation, which - on the basis of the European Directives, specifically Council Directive 91/440/EEC on creating and expanding access to the railway infrastructure and Directive 2001/14/EC of the European Parliament and of the Council of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification - specifies in Section 1 subsection 1 sentence 1 of the General Railway Act that effective and undistorted competition is to be created and that an attractive range of railway services is to be provided. Elsewhere it states that the efficiency of the railway infrastructure is to be optimised (Section 24 subsection 1 of the Rail Infrastructure Usage Regulations and, such as recital 12 of Directive 2001/14/EC).

1.3. Facts established by the Bundesnetzagentur / need for action

The Bundesnetzagentur has been closely monitoring and examining access to service facilities. It began by taking a close look at the intensity of competition in rail freight transport. It is worth noting in relation to rail freight transport that although its competitors account for around 25 percent⁵, all in all DB Schenker Rail Deutschland AG⁶ still accounts for 75 percent of the total transport performance in the German rail freight transport market⁷. **Competition has developed above all in block train transport⁸ and in transport of groups of wagons** ⁹ because, unlike in single wagon transport, the barriers to market entry in this sector are lower. This is because economic efficiency is not just achieved when a critical number of wagons is reached based on the number of destinations, nor do these segments face any particular pressure from competition from road haulage owing to the high ability to individualise traffic flows.

Because of that, the Bundesnetzagentur **started off by examining access to marshalling yards** in the traditional sense. The infrastructure of these railway stations is characterised by the fact that they generally facilitate the splitting, sorting and formation of trains over a hump for single wagon transport. It is not absolutely necessary to use the infrastructure of a traditional marshalling yard using a hump to facilitate sorting in block train traffic and transport of groups of wagons.

However, the Bundesnetzagentur has been notified repeatedly by competitors of the company that has a dominant position in the market in the freight sector that it is virtually impossible for them to access marshalling yards and other train formation facilities in order to implement their own transport concepts¹⁰. Even though transport concepts are geared primarily to transport of groups of wagons and block train traffic at present, which does not require time-consuming sort-ing procedures over a hump, some shunting manoeuvres are required in order to implement any such transport concepts, such as pushing groups of wagons onto different tracks (over a hump or using a traction vehicle) or switching locomotives. Service facilities have to be able to meet this usage demand (with or without a hump).

For this reason, the Bundesnetzagentur began taking a **holistic view of services facilities** during the review process and started focusing on all service facilities at which trains can be split, sorted, formed and pushed (**marshalling yards and other train formation facilities**). This means service facilities comprise above all marshalling yards (Section 2 subsection 3c (4) of the General Railway Act) and train formation facilities (Section 2 subsection 3c (5) of the General Railway Act), rail freight depots and terminals (Section 2 subsection 3c (3) of the General Rail-

⁵ Annual Report of the Bundesnetzagentur for 2009, page 213.

⁶ Association of German Transport Companies (Verband Deutscher Verkehrunternehmen) (VDV), Manual on Rail Freight Transport (Handbuch Schienengüterverkehr) 2008, page 27, Deutsche Bahn's Competition Report 2010, page 11.

⁷ Association of German Transport Companies, Manual on Rail Freight Transport 2008, page 27, Deutsche Bahn's Competition Report 2010, page 11.

⁸ In so-called block train traffic, as a rule bulk goods are transported from a sender platform connection directly to a recipient platform connection without interruption.

⁹ Transport of groups of wagons combining smaller freight volumes into trains. It is similar to single wagon traffic. However, it is not individual wagons but several wagons combined into groups that are split, sorted and formed into trains.

¹⁰ So also the Competitors' Railway Report (Wettbewerber-Report Eisenbahn) 2008/2009, page 83.

way Act), but also stabling sidings (Section 2 subsection 3c (6) of the General Railway Act) and ports (Section 2 subsection 3c (8) of the General Railway Act). Finally, shunting can take place on two adjacent tracks that are connected by a switch which means intersections with all of the service facilities mentioned in Section 2 subsection 3c of the General Railway Act are conceivable. An exemption could be considered for track infrastructures involving <u>exclusively</u> refuelling facilities (Section 2 subsection 3c no. 1 of the General Railway Act), passenger railway stations (Section 2 subsection 3c no. 2 of the General Railway Act), or maintenance facilities (Section 2 subsection 2 conceivation 3c no. 7 of the General Railway Act).

It is evident that in addition to the equipment and facilities available at a service facility that determine the technical and operational prerequisites for splitting, sorting and forming of trains, of all things it is the **traffic location** in the German railway infrastructure network that is crucial for there being strong demand among many infrastructure managers for a particular service facility. As such, **bottlenecks have emerged in some areas** as a result of traffic flows which mean not all railway undertakings are able to implement their various transport concepts at present.

It is advisable from the regulatory perspective to grant access to the existing infrastructure so as to ensure, <u>insofar as possible</u>, that, in principle, all business models can be mapped on the existing railway infrastructure and that any barriers to market entry in the infrastructure are removed. The desired consequence of this is to **increase use of the existing service facilities** also by **several railway undertakings** which are pursuing different business models and which therefore place different demands on the infrastructure.

In the course of its review, the Bundesnetzagentur discovered some very different and indeed from its perspective **regulatory critical** procedures in relation to the distribution and allocation of usage possibilities in respect of access to marshalling yards and other train formation facilities. The possibility, for example, of allocating a track that leads to a downstream part of the infrastructure or to a different railway infrastructure to a particular railway undertaking for long-term use is not acceptable because of the access restrictions this creates for reaching the downstream part of the railway infrastructure. It also seems to be most critical for non-discriminatory, fair access for all railway undertakings if several users are unable to access not just individual service facilities, but if additional users in entire transport regions are not being offered services that are tailored to meet the specific demand.

The Bundesnetzagentur is fully aware that it is specifically the system of single wagon transport that faces huge pressure owing to its position in intermodal competition and that it responds sensitively to any type of external changes. However, this applies similarly to block train traffic. In order to arrive at results that are in line with market conditions, the Bundesnetzagentur compares the facts it has established and solution approaches regarding **practical suitability and market acceptance** with the participation of the relevant market. It began by concentrating the discussion in a working group composed of the affected companies.

1.4. The working group

This working group was composed of a **cross-section of relevant railway undertakings involved in freight traffic as well as infrastructure managers** who operate marshalling yards and other train formation facilities. The Bundesnetzagentur would like to take this opportunity to thank DB Netz AG, Rail & Logistik Center Wustermark GmbH & Co. KG, DB Schenker Rail Deutschland AG, TX Logistik AG, EVB Elbe-Weser GmbH, Mittelweserbahn GmbH, Horst Mosolf GmbH & Co. KG, Osthannoversche Eisenbahnen AG and SBB Cargo Deutschland GmbH for their valuable cooperation.

The working group analysed the status quo regarding the distribution and allocation of usage possibilities in marshalling yards and other train formation facilities and compared it to railway undertakings' demand that is characterised by the various business models. The Bundesnetzagentur discussed and developed solutions with the working group in order to enhance nondiscriminatory access to marshalling yards and other train formation facilities for new transport services without having to break up long-established structures and existing business models unnecessarily.

1.5. Objective of the position paper

The results of the working group have been incorporated into this position paper along with the Bundesnetzagentur's regulatory assessment and an explanation of the steps it is planning to take in order to inform the market as a whole and to give market players the opportunity to submit their comments.

2. Findings of the working group

2.1. Status quo and starting points for a critical reflection from the market perspective

The working group addressed the issues, (2.1.1.) ways in which usage possibilities (capacities) are allocated in service facilities, (2.1.2.) what rules the various infrastructure managers issue in relation to coordination and resolution of conflicts caused by bottlenecks, (2.1.3.) whether and to what extent infrastructure managers are given responsibility for managing their infrastructure, (2.1.4.) whether service facilities should be subject to separate consideration and whether (2.1.5) infrastructure managers are also obliged to offer additional services, shunting in particular.

2.1.1. Ways in which usage possibilities (capacities) are allocated

To begin with, it was analysed and discussed in the working group how **capacities available are** currently being **allocated** in marshalling yards and other train formation facilities, what usage demand the various railway undertakings have and in what areas they would like infrastructure managers to cater more effectively for their needs.

It is worth mentioning that the allocation of capacity in marshalling yards and other train formation facilities varies greatly between the operators of service facilities. The range of ways in which capacity at service facilities is allocated varies from leasing whole tracks which are specifically determined when the offer is made to the railway undertaking (**pre-determined tracks**), shared use of tracks, for instance, for stabling of partly damaged wagons until a time window is allocated for use of (parts) of an infrastructure (**slots**). In the last case scenario, the actual track is not allocated for use until the day on which it is to be used within the framework of local dispatching by the infrastructure manager. When pre-determined tracks are leased, capacities are allocated to railway undertakings both beyond a working timetable period (**long-term**¹¹) and also on an hourly basis (**short-term**) subject to usage requests. Sometimes railway undertakings can only lease a track for a time window of two hours maximum. Sometimes railway undertakings even file usage requests for capacity for periods that are not due to commence until long after the usage request has been filed (after the current working timetable period has elapsed) (**long-term notice**).

The infrastructure managers who have the option of leasing a track for the long term (as a rule for between 1 and 5 years) very frequently record their lessees as being so-called principal users in accordance with the underlying terms of use. Only if the principal user does not need a track for part of the time (in a working timetable period) and notifies the infrastructure manager accordingly, does the infrastructure manager lease the free time units to so-called secondary users. It is certainly in the financial interest of principal users to notify the infrastructure manager when capacity becomes available since this reduces their leasing costs. In this regard, a few railway undertakings criticised the fact that they only learned about the availability of "residual capacities" when they made inquiries at the infrastructure manager and following consultation with the principal users.

There was consensus in the working group that the railway undertakings **favour different capacity units** depending on the customer's usage request and the transport business model developed for this purpose.

This means railway undertakings not only need the certainty of having ready access to track capacities that have been dimensioned properly to fit in with the operational concept not only for

single wagon transport concepts, the volume of which calls for train formation, train sorting and splitting up of trains using a hump for cost-efficiency and operational reasons. Railway undertakings also need to have reliable access to capacities at service facilities for other transport concepts that not only facilitate shunting itself but that also enable them to adjust to fluctuations in their customers' usage request patterns. Railway undertakings also need planning security in relation to the availability of tracks particularly in the short-distance rail passenger transport sector because of the lengthy duration of transport contracts, for example, for overnight stabling. The **long-term leasing** of pre-determined tracks beyond the working timetable period, giving railway undertakings ample opportunity to absorb fluctuations in customers' usage requests at their own initiative accommodates these concepts. In order to be able to respond with foresight to future customer demand, railway undertakings should file applications for capacity well before they actually begin using the capacity.

On the other hand, railway undertakings need to handle spot traffic which is usually not scheduled in the working timetable. Usually they need just a few tracks for shunting for a **short period** on short-term demand. By the same token, railway undertakings are looking for financially lean business models, particularly when offering new transport services. The demand for these services is based on minimum use of track infrastructures. These business models need a slot system which does not focus on a certain track but on the use of a railway infrastructure offering certain technical parameters and a certain geographical location for a short period.

If railway undertakings do not need to use tracks for a certain extended period of time, the possibility of leasing the tracks permanently in advance is not an attractive option for them in financial terms.

In addition, **leasing pre-determined** tracks prevents optimum use being made of infrastructure capacity in terms of the time it is used for and the extent of the infrastructure used owing to planning decisions taken by infrastructure managers on the day of use since combining the use of tracks is precluded by contractual specifications. If the type of allocation by the infrastructure manager envisages granting a railway undertaking access to a certain track for a certain period of time, it is not possible to allocate a different track to the railway undertaking after a usage request has been granted.¹²

¹² Example:

¹¹ In this position paper, the term "long-term or short-term" refers to the duration of continuous use, whereas the term "at long term notice or at short notice" describes the length of time that elapses between filing a usage request and granting of the usage request.

Railway undertaking 1 requires a track from 6:00 pm until midnight and is allocated track 1 after filing a usage request, railway undertaking 2 is allocated track 2 for the hours it needs the track between 10:00 am to 5:00 pm after filing a usage request. Railway undertaking 3 applies to use a track from 3:00 pm to 7:00 pm. This request can only be granted if the use by railway undertaking 1 and railway undertaking 2 is combined and if they use the track consecutively. However, if tracks are permanently leased to one railway undertaking, this type of allocation does not provide for this "pooling of demand".

In principle, the railway undertakings thought the possibility of **leasing tracks for up to two hours** at short notice was an option worth considering to facilitate flexible, short-term use of railway infrastructure that can be booked at short notice, although they did say the usage possibilities would need to be defined in more detail. Firstly, they said it would not be possible to implement all shunting manoeuvres on these tracks within a strictly limited timeframe of 2 hours maximum. Secondly, they criticised the fact that this offer is not available on a nationwide basis (e.g., one infrastructure manager is currently only offering ca. 26 tracks at 21 locations despite having a nationwide presence). In addition, limiting the purpose of use to preparing and post-processing/transit train movements does not meet the railway undertakings' need to implement shunting manoeuvres in particular.

By contrast, the **slot system** is criticised because the need for buffering is not taken into account when timeframes are too narrow. The infrastructure managers also voiced concern that the slot system transfers the risk of poor utilisation of capacity to them.

Since the requirements relating to the allocation of railway infrastructure varies depending on which logistics transport concept is being used, the working group deliberately refrained from giving sole preference to any specific allocation concept but was adamant that it should be possible to receive capacity at a service facility for a short period (short-term) even at short notice in addition to the possibility of leasing specified tracks for the long term.

2.1.2. Managing (optimising) scarce resources

In close connection with measuring the capacity units, the rules infrastructure managers have for managing scare resources were analysed as part of the coordination and conflict resolution procedure.

As part of coordination and conflict resolution procedure at service facilities at which predetermined tracks are leased for extended periods of time, the principle **first come**, **first served** applies. In conflict situations, priority is always given to the principal user over other requests for simultaneous use except when the secondary user can invoke the priority criterion set forth in Section 10 subsection 6 (1) of the Rail Infrastructure Usage Regulations for its usage request contrary to the principal user, i.e. claiming that only the usage request of the secondary user is the necessary sequence of an agreed train path.

In this connection, a discussion took place on how the priority arrangement specified in the regulations pursuant to Section 10 subsection 6 no. 1 of the Rail Infrastructure Usage Regulations "**necessary sequence of an agreed train path**" is to be construed. The Bundesnetzagentur put up for discussion whether the necessary sequence of a train path should be presumed for the benefit of a user if a usage time window of 24 hours is not exceeded in connection with the train path. Even though a **time window of 24 hours** can be ascribed potential for preventing secondary users from using the tracks, the working group considered this time unit to be an operational parameter that is based on the validity period of train paths. Nonetheless, it was criticised that the presumption was indeed very far-reaching and that infrastructure managers would be well advised to examine the actual criteria for the application of Section 10 subsection 6 (1) of the Rail Infrastructure Usage Regulations and should take a decision based on these criteria if and when conflict arises.

Solutions found within the framework of the coordination process have been criticised by many railway undertakings involved in the working group because they do not offer **secondary users any planning security** for more comprehensive business models since the possibility of secondary use depends on the principal user's fluctuating demand at the respective time of coordination.

Unless infrastructure managers base their capacity allocation on the long-term leasing of predetermined tracks, issues relating to operational planning on the infrastructure (e.g. which usage is tied more closely to the train path time-wise or involves a longer loading period) and financial considerations (e.g. which use generates more revenue) may move into the foreground as the priority criteria. In particular at ports and terminals, priority criteria are oriented to the time required at the interfaces, for instance, what train cargo needs to reach a vessel that is about to sail.

2.1.3. More responsibility for infrastructure managers to examine demand

The demand raised by some railway undertakings that infrastructure managers should assume more responsibility for the administration and management of their infrastructure was a matter of controversial discussion in the working group.

In actual fact, the potential operations railway undertakings can implement on a railway infrastructure are determined by the facilities available on the individual tracks (e.g. train pre-heating, brake testing systems or oil drip trays) as well as their location in the service facility (e.g. at the edge of the infrastructure, behind other groups of tracks or behind the hump). The tracks of service facilities are not all equally suitable for the various operations railway undertakings need to implement, such as shunting, buffering, stabling locomotives or wagons, sorting wagons or passing through. If infrastructure managers manage to **combine the envisaged operations of the railway undertakings with the facilities and location of the tracks in a reasonable way**, allocation of the railway infrastructure can meet the demand. For example, a track whose path leads to another railway infrastructure, such as a siding track, can also be used for the stabling of rolling stock. However, at the latest when a railway undertaking notifies the infrastructure manager that it needs to pass through to the siding track, the infrastructure manager should take this track's purpose of use into account when deciding which party to allocate capacity to.

At present, the tracks at service facilities are very rarely managed according to the operations of shunting, buffering, stabling locomotives or wagons or passing through that they are primarily

supposed to facilitate (in a meaningful way) owing to the structure and location of the track (**pur-pose of use**). In particular, very few infrastructure managers use the purpose of use as a consideration or decision-making criterion when they allocate capacity at present.

By contrast, some participants in the working group said that the railway undertakings themselves were the only parties who could estimate what purpose of use a track could be subject to at any given time. They said that railway undertakings actually developed their operational concepts with this in mind. They should also be allowed to change the actual use. Infrastructure managers have neither the know-how nor the right to restrict the purpose for which railway undertakings want to use a track. The objection was also raised that shifting competencies in this respect could involve more effort and incur additional expenditure for infrastructure managers.

This line of argument was criticised by other participants in the working group who said that railway undertakings can only focus on their own purpose of use in their own considerations and that it is only the infrastructure managers themselves who can have a complete overview of the various usage requests and the most meaningful purpose of use. They said this is why infrastructure managers should take their decisions between the various usages by railway undertakings as neutral mediators and mirror railway undertakings' actual demand in the purpose of use of the respective tracks. The intention is to prevent the desired purpose of use causing bottlenecks in relation to other usages. For instance, stabling at service facilities that are much frequented for shunting manoeuvres by a large number of railway undertakings should be the exception rather than the rule.

2.1.4. Special consideration of the "Big 7"

Another matter of controversial debate among the participants in the working group was whether the so-called "seven large marshalling yards" of DB Netz AG, Mannheim, Maschen, Gremberg, Seddin, Seelze, Nuremberg and Munich North should be accorded **special consideration**. These involve highly-technical service facilities that have fully automated processes in the sorting systems (receiving yard, hump, classification yard and departure yard). These marshalling yards form the core of the single wagon concept of the railway undertaking that has a dominant position in the market in rail freight transport and are operated by DB Netz AG.

Since no other railway undertakings have filed usage requests up to now and any demand that existed was ultimately met by other means and the "seven large marshalling yards" create the basis for the single wagon transport of DB Schenker Rail Deutschland AG which responds very sensitively to external influences, the majority of participants in the working group were in favour of these marshalling yards being ascribed a special role. However, on balance, there is demand for marginal capacities because the **geographical location of the railway stations is also valuable** for shunting as part of the transport concepts used by other railway undertakings. In

this context, one railway undertaking objected to this geographically most interesting capacity being accorded any special treatment.

In connection with the so-called "Big 7", the special features of automatic sequencing in single wagon transport in connection with remotely-controlled shunting locomotives were discussed. Here single wagon transport is sorted (for the most part) automatically via the infrastructure manager's hump control computer after the infrastructure manager has received the necessary information on splitting of the train and on sorting of wagons from the railway undertaking in advance.

For railway undertakings, an interface with the hump control computer provides efficient use of the **automated system at the hump**. It is also possible to enter the data manually on the hump control computer, taking efficiency losses in the overall system into account. Transparency of interfaces was requested in this regard in order to avoid lack in performance because of the need to enter data manually.

2.1.5. More neutral services in marshalling yards

In this context, railway undertakings in particular that are not positioned nationwide at national level expressed their desire to have access to a **range of shunting services**. Some infrastructure managers are offering this service at a few marshalling yards in Germany. Normally, however, shunting services are provided by the railway undertakings themselves or by a cooperation partner locally. Some railway undertakings think they are at a disadvantage vis-à-vis the dominant player who has the historical advantage of already financed rolling stock and a historically grown, nationwide presence. They think a range of neutral services, provided preferably by infrastructure managers, could offset these historical advantages in an equitable way.

2.2. Assessment of the status quo from the regulatory perspective

The **practise described** by the working group also needs to be rated **critically** from the **regulatory perspective**. Even though operators of service facilities, unlike railway infrastructure operators, do not have to meet regulatory requirements regarding the ways in which capacity is allocated or regarding the usage request and allocation procedure pursuant to Section 2 nos. 1 and 2 and Sections 8, 9, 11, 13 und 14 of the Rail Infrastructure Usage Regulations, the organisational scope operators of service facilities have is limited to a certain extent by regulatory requirements. Operators of service facilities are not required to meet explicit requirements as to how they allocate capacity at their service facilities (according to Section 2 nos. 1 and 2 of the Rail Infrastructure Usage Regulations for railway infrastructure operators), nor are they prohibited from extending the period of use beyond the working timetable period (according to Section 11 subsection 2 of the Rail Infrastructure Usage Regulations for railway infrastructure operators). They are only obliged to observe a very small number of deadlines and formalities in relation to the organisation of usage requests and the allocation procedure (cf. Sections 8 und 9 of the Rail Infrastructure Usage Regulations for railway infrastructure operators).

However, within their organisational scope, the operators of service facilities are responsible for fulfilling the regulatory objectives and requirements set forth in the General Railway Act and in the Rail Infrastructure Usage Regulations. The operators of service facilities too are, for example, obliged to offer non-discriminatory access to their railway infrastructure and to provide the relevant services (Section 14 subsection 1 sentence 1 of the General Railway Act, Section 3 subsection 1 sentence 1 of the Rail Infrastructure Usage Regulations), to grant access to their railway infrastructure in such a way as to allow an attractive range of rail services to be provided and to facilitate effective and fair competition in the railway sector (Section 1 subsection 1 sentence 1 of the General Railway Act), to draw up terms of use (Section 10 subsection 1 of the Rail Infrastructure Usage Regulations) and, if possible, to grant all usage requests (Section 10 subsection 3 of the Rail Infrastructure Usage Regulations). In any subsequent coordination and conflict resolution procedures, the operators of service facilities must decide which usage request to grant (Section 10 subsection 6 no. 1 of the Rail Infrastructure Usage Regulations) if usage requests are incompatible and if attempts to reach an amicable settlement have failed (Section 10 subsection 5 of the Rail Infrastructure Usage Regulations). Unless the regulations specifying requirements for the various process levels, beginning with specifying and allocating capacity at service facilities and followed by coordination and conflict resolution procedures, are consistently taken into account, the organisational scope could potentially be misused. The scope for entrepreneurial freedom which operators of service facilities have is limited from the regulatory perspective on the one hand by the prohibitions they face and on the other hand in particular by the obligation to fulfil the requirements set forth in the General Railway Act and the Rail Infrastructure Usage Regulations. In view of these important limitations, infrastructure managers are not permitted to do everything that is not explicitly prohibited.

Certain practical arrangements infrastructure managers have regarding the allocation of capacity at service facilities are critical, if not inadmissible, in regulatory terms compared to standard legislative and regulatory practise.

2.2.1. Obligation to optimise services in order to meet demand (Section 10 subsection 3 of the Rail Infrastructure Usage Regulations)

In particular Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations which says "*Railway infrastructure companies shall, wherever possible, grant all applications for access to service facilities [...]*" is an important obligation for infrastructure managers that is intended to promote competition in the railway market.

It is true that Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations does not contain any obligation to expand the infrastructure because the insertion "wherever possible" modifies the obligation to grant all applications (usage requests) to the possibilities available in the existing infrastructure. However, within the realms of possibility, operators of service facilities are obliged to grant all usage requests. The obligation to grant all usage requests "wherever possible" is not restricted to the correct and conscientious processing of all applications received, but requires the operators of service facilities to <u>leverage</u> the possibilities of allocating capacities <u>as extensively</u> as possible in order to achieve optimum utilisation of the capacity available in their railway infrastructure. Only then can the operators of service facilities come close to meeting the maximum requirement of granting <u>all applications</u>. The wording of Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations therefore imposes an **obligation on the operators of service facilities to optimise the services** they provide.

The obligation set forth in Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations applies even before applications are filed. Operators of service facilities can only meet the requirements set forth in Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations if the possibility of filing applications is preceded by the availability of a range of capacity services oriented to the optimum utilisation of capacity in their railway infrastructure for the benefit of all applications, wherever possible. On the other hand, the freedom operators of service facilities have to divide up and allocate capacity in their infrastructure according to their own rules involves the **responsibility** to meet the regulatory objectives by way of anticipatory **planning**. This is the only way in which the operators of service facilities can meet the objective set forth in Section 10 subsection 3 of the Rail Infrastructure Usage Regulations.

This is also highlighted by a comparison with the requirements railway infrastructure operators are required to meet.

In order to organise access subject to European requirements, the legislator began by defining what kind of usage requests can be filed with railway infrastructure operators. Usage requests are based on the allocation of train paths pursuant to Section 9 subsection 1 of the Rail Infrastructure Usage Regulations. The regulator defined the subject matter of usage requests, namely the allocation of train paths, in Section 2 nos. 1-3 of the Rail Infrastructure Usage Regulations. By contrast, the organisation of access for the operators of service facilities in Section 10 subsection 2 of the Rail Infrastructure Usage Regulations is worded just as transparently as it is in the legal basis (Section 14 subsection 1 of the General Railway Act). Usage requests can be filed for access to the infrastructure and for the delivery of services. The legislator has not issued any other requirements. Nonetheless, it is necessary for capacity to be precisely defined for all services facilities operated in order to ensure that parties with the right of access receive exactly the same information on which they must base their usage requests and that this information is equally transparent for all parties with the right of access. Since the regulator has given the operators of service facilities, contrary to railway infrastructure operators, the freedom to determine the scope of services themselves, it is only the operators of service facilities themselves who can determine the capacity for their service facilities.

The European legislator also recognised the varying needs of railway undertakings when drawing up Directive 2001/14/EC and demanded that "when allocating capacity [...] the needs of the various users must be determined, the relevant wishes must be formulated and optimum solutions [must be] sought". (Bundestag printed paper 835/98, page 3.) This idea is also reflected in the subsequent considerations on Directive 2001/14/EC, like the recitals nos. 12, 14,17.

In addition, infrastructure managers can only achieve the legislative objective set forth in Section 1 subsection 1 sentence 1 of the General Railway Act which is to create an attractive range of rail services if they together with their railway infrastructure help to promote rail traffic (Bundestag printed paper 269/04, page 22). One component for this is to ensure **optimum use is made of their infrastructure**. Optimum use can mean efficient use being made by a railway undertaking. However, if there is demand among several railway undertakings that are using different business models, optimum use of capacity in the light of the objective defined in the General Railway Act is to enable as many railway undertakings as possible to use the infrastructure so that they can generate more rail traffic. Access regulations are an important tool, particularly in former monopolist structures, for preventing the efficiency of an infrastructure from being restricted by organisational, operational or technical measures.

The requirement set forth in Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations is only met if the services provided by an operator of service facilities are available to as many railway undertakings as possible. As the practical analysis conducted by the working group demonstrated, the **demand for capacity varies greatly** both in terms of the volume of capacity required and the length of time for which it is required. Accordingly, operators of service facilities can only meet the requirement set forth in Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations if they provide a wide range of services to meet this demand.

The obligation to structure services to meet demand also ensues from Section 10 subsection 3 sentence 2 of the Rail Infrastructure Usage Regulations which says that "usage requests shall not be treated differently without substantive reasons". The reverse conclusion to this rule of equal treatment is that different usage requests must not be treated equally.

It is not possible to fulfil the requirement of optimising rail services to meet demand if the infrastructure managers lease the tracks on their railway infrastructure to just one railway undertaking for the long term without considering the purposes of use intended with the usage requests. This applies in any case when all the tracks of a service facility are leased.

If tracks are leased permanently to a railway undertaking long before they are to be actually used, infrastructure managers are depriving themselves of the opportunity of optimising the volume of capacity available and the time in which the capacity can be used until the day of actual use that could potentially enable them to grant other usage requests subsequently received. This means it may not be possible to grant usage requests in the order in which they are received because the individual tracks have already been leased to other railway undertakings even though it may have been possible to grant several previously received usage requests even on one track, meaning that one track would have been available for alternative use. This rules out **spatial optimisation** by reallocating different tracks to railway undertakings shortly before they are due to use the tracks or by allocating shared use of the tracks. The infrastructure capacity after the usage request has been filed. This is where infrastructure managers who allocate their capacity in slots are far more flexible since they do not allocate capacity to specific tracks. Another benefit of the slot system is that a long-term time window can be allocated for use of the tracks that is oriented to demand while still offering scope for spatial optimisation.

The additional effort criticised by the working group that infrastructure managers would face both in **planning potential capacities** and in allocating usages as well as with actual dispatching locally results from the requirement set forth in Section 10 subsection 3 of the Rail Infrastructure Usage Regulations and is the **flip side of the organisational scope** that operators of service facilities have contrary to railway infrastructure operators.

2.2.2. Obligation to examine and differentiate the railway infrastructure according to functional aspects (Section 10 subsection 3 und Section 10 subsection 6 (1) of the Rail Infrastructure Usage Regulations)

Whereas Section 10 subsection 3 of the Rail Infrastructure Usage Regulations demands that, wherever possible, all usage requests be granted, Section 10 subsection 6 no. 1 of the Rail Infrastructure Usage Regulations says that for conflict resolution procedures, railway infrastructure companies "shall grant priory to applications, that are *the necessary sequence of an [...] agreed train path*".

The responsibility of operators of service facilities to allocate railway infrastructure capacity in line with demand means the infrastructure needs to be differentiated according to functional aspects beforehand. Infrastructure managers must also use this functional differentiation in conflict resolution procedures, in order to grant priority to the usage request which corresponds to the **functional classification of a track** since <u>this</u> use on <u>this</u> particular track is the "necessary" sequence of a train path.

The **necessary (follow-up) work** in front of and behind a train path has the tendency to **vary greatly**. For example, subsequent shunting of groups of wagons involves different requirements regarding the use of service facilities than shunting in single wagon transport or buffering of wagons that is part of the shunting process. When stabling passenger trains, e.g. railway under-

takings need different track facilities such as train pre-heating facilities than they do when they stable freight trains, e.g. weighbridges. Equally variable is the demand railway undertakings want to be met on the track/tracks of service facilities where the assessment criteria include not just time-related components but also the type of use.

In order to enable railway undertakings to provide services in line with demand within the meaning of Section 10 subsection 3 of the Rail Infrastructure Usage Regulations while catering for the wide range of operations railway undertakings wish to carry out when using the tracks, , shunting, stabling or loading of goods, infrastructure managers should allocate their capacity in such a way that the **railway undertakings' intended operations correspond**, if possible, to the **purpose of use** of the tracks (see above under 2.1.3).¹³

At the very latest when resolving conflict, the operators of service facilities must take the purpose of use into account when deciding which party to give priority to. This is the precise point at which operators of service facilities must decide, for instance, that stabling of damaged carriages on tracks reserved for "shunting" must give way to use that is oriented to "shunting".

Decisions on conflict resolution that are based solely on the temporal link to a train path are not sufficient for assessing the "necessity" of the sequence of an agreed train path, especially when the point in time at which a usage request was filed is the only priority criterion. A complex overlapping of usage requests which seen from a time-related aspect only is almost always the necessary sequence of a train journey, shows clearly that an additional criterion is needed in order to assess which party should be accorded priority. Even the term "necessity" contains not just a temporal but also a practical connection which is also recognised in practise. The practical connection involves the compatibility of the purpose of use of the respective service facility with the actual use of a track. Most infrastructure managers tend to avoid the decision on whether a type of use should be accorded priority over other uses. In their opinion, these logistic decisions should be taken by the railway undertakings. However the functional differentiation prevents this dilemma with its transparent description for all users. It is crucial that capacity is allocated on the basis of functional requirements and that it meets the railway undertakings demands. Infrastructure managers must also take the demand which the use of the railway infrastructure is intended to meet into account as the necessary sequence of an agreed train path and compare it to the track infrastructure used.

When resolving conflicts pursuant to Section 10 subsection 6 (1) of the Rail Infrastructure Usage Regulations, which makes priority of use contingent on "the necessary sequence of an agreed train path", infrastructure managers are obliged to organise this priority regulation appropriately.

¹³ Optimisation example: track 10 which has a loading ramp has been leased. Railway undertaking 1 stables carriages on this track. Track 15 which has no further facilities is empty. Railway undertaking 2 is looking for a track to load goods. Unless the purpose of use is taken into account when tracks are allocated or when a conflict arises, railway undertaking 2 will be reliant on the voluntary cooperation of railway undertaking 1 to provide its rail service.

The Bundesnetzagentur is hence responsible for overseeing the organisation of priority regulations and for monitoring the decision-making procedure.

2.2.3. Obligation to monitor, examine and decide on usage requests filed by railway undertakings (Section 10 subsection 5 und 6 (1) of the Rail Infrastructure Usage Regulations)

In addition to the obligation to accord priority to usage requests that are the necessary sequence of an agreed train path, infrastructure managers are obliged to "seek to find a solution that is agreeable to all parties in respect of applications for simultaneous, incompatible usages" before the conflict is resolved pursuant to Section 10 subsection 5 of the Rail Infrastructure Usage Regulations.

The responsibility incumbent on the operators of service facilities involves more than mediating between the railway undertakings within the framework of the coordination or conflict resolution process and using the usage times, usage volume and usage purpose requested by the railway undertakings for assessment purposes as the priority criterion within the conflict resolution process without further examination.

Rather, the operators of service facilities must check the actual necessity of the usage request filed by railway undertakings for infrastructure capacity in order to actually be able to check and decide, within the meaning of Section 10 subsection 5 sentence 1 of the Rail Infrastructure Usage Regulations, whether usage request are incompatible. Section 10 subsection 5 sentence 1 of the Rail Infrastructure Usage Regulations explicitly says that two prerequisites need to be met before a coordination procedure can be launched. One involves "types of use that are incompatible", the other involves "simultaneous" use. However, this does not mean the fact that simultaneous use alone is sufficient for declaring the uses incompatible. The operators of service facilities must examine and decide whether the usage request is actually necessary in terms of the volume of capacity requested and the length of time for which capacity is needed. They must also take the objective criteria of the purpose of use into account and decide whether use of smaller part of the infrastructure or a different part of the infrastructure would not be sufficient to enable other railway undertakings to use the infrastructure as well. If necessary, the operators of service facilities must assess themselves whether the five tracks requested for a usage period of seven months to meet the railway undertakings' demand could not be reduced to four tracks since this would free up capacity for use of the infrastructure by other railway undertakings. The obligation to examine and monitor usage requests as part of the coordination process will apply in particular when two new usage requests are compared with each other.

As part of the conflict resolution procedure pursuant to Section 10 subsection 6 no. 1 of the Rail Infrastructure Usage Regulations, this obligation to examine and monitor usage requests comes

into play when it needs to be determined which usage request or existing use is the "necessary sequence of an agreed train path". This is where a decision needs to be taken if and when conflict arises between already existing usages and new usage requests.

The regulator assigned operators of service facilities **an active role in the coordination and conflict resolution procedure** in Section 10 subsection 5 sentence 1 and in subsection 6 no. 1 of the Rail Infrastructure Usage Regulations by virtue of the wording "*seek to find a solution*" and also "*shall grant priority to…*". Operators of service facilities can only fulfil this requirement if they verify that the criteria are being met.

A conflict resolution concept and even conflict resolution practise in which an operator of service facilities only arrives at the decision that uses are incompatible or applies priority criteria based on the written form of usage requests only, without checking the actual demand itself, does not meet the requirements of operator of service facilities launching a coordination and conflict resolution procedure at their own initiative within the meaning of Section 10 subsection 5 and 6 no. 1 of the Rail Infrastructure Usage Regulations. The operator of service facilities is permitted to request the railway undertaking to provide the necessary information and must ensure as part of the coordination process that the operational secrets and company secrets of all railway undertakings are observed at any coordination talks that are held (Section 5 subsection 2 of the Rail Infrastructure Usage Regulations).

2.2.4. Non-discriminatory access to the railway infrastructure (Section 14 subsection 1 sentence 1 of the General Railway Act)

Section 14 subsection 1 sentence 1 of the General Railway Act requires infrastructure managers to grant all parties with the right of access non-discriminatory access to the railway infrastructure they are managing. The ban on discrimination in granting access is superseded by the obligation to grant access. This means infrastructure managers have to ensure initially that parties with the right of access have **access to the railway infrastructure operated in the first place**. This also involves the infrastructure managers' obligation to ensure that all parties with the right of access have (equal) opportunity to avail themselves of this right of access.

Operators of service facilities are not prohibited from leasing the tracks of their railway infrastructure to parties with the right of access outside the working timetable for their free disposal. Nor are they prohibited from resolving conflicts based on the first come, first served principle. Operators of service facilities are not tied to specific allocation periods that apply to all parties with the right of access outside the working timetable when they lease tracks either. For each individual regulation, the operators of service facilities can invoke the lack of a prohibition. Each individual regulation in itself does not affect the right of access of parties with the right of access pursuant to Section 14 subsection 1 sentence 1 of the General Railway Act. However, if these **regulations apply cumulatively for the entire service facility**, this means that new parties with the right of access **are actually prevented permanently or for the foreseeable future from accessing** the railway infrastructure simply because they filed their usage request later – even though the regulations ostensibly apply equally to all parties with the right of access. This is incompatible with the principle governing the right of non-discriminatory access to a railway infrastructure pursuant to Section 14 subsection 1 sentence 1 of the General Railway Act.

2.3. Solution approaches and regulatory assessment

After the working group had brought its intensive discussion about existing allocation practise and the demand of the various railway undertakings to a conclusion, it set about developing a number of solution approaches that are aimed at facilitating and enhancing the shared use of "marshalling yards and other train formation facilities".

2.3.1. Contingent for flexible use and for meeting the varying demand of railway undertakings

Section 10 subsection 3 of the Rail Infrastructure Usage Regulations obliges the operators of service facilities to allocate railway infrastructure capacity to meet demand and to optimise the services they provide (see above under 2.2.1).

The majority of participants in the working group deemed it necessary to have a **variable distribution of types of allocation of capacity at service facilities** having realised that owing to the different business models used by railway undertakings, the demands on the allocation of capacity at service facilities vary too. They thought this would meet the need for short-term, flexible use of track capacities as well as the need for long-term availability of pre-determined tracks. They therefore propose removing a certain percentage of the service facilities' tracks from the system of long-term leasing of specific pre-determined tracks and allocating these tracks flexibly for short-term use only (**contingent for flexible use**). This would take the varying needs of railway undertakings into account.

Also with regard to the **risk associated with utilisation of capacity** between much sought after service facilities and less sought after service facilities, the allocation of service facilities into tracks that are leased for the long term and tracks that are subject to the contingent for flexible use facilitates a reasonable distribution of capacity between infrastructure managers and railway undertakings. Infrastructure managers can, for instance, continue to transfer the risk of poor utilisation being made of capacity for tracks that are leased for the long term by leasing the tracks to just one user whereas with tracks that are only available for short-term use, the risk associated with utilisation of capacity for tracks has to be borne by the infrastructure managers themselves. However this becomes less critical in traffic bottleneck areas.

Dividing capacity allocations at a service facility into two contingents, on the one hand by leasing pre-determined tracks for extended periods, while allocating tracks for short-term, more flexible use of the infrastructure on the other, if possible without determining a specific track to be used, is also the appropriate solution taking the aspect of Section 10 subsection 3 of the Rail Infrastructure Usage Regulations into account, which involves **catering for the varying demand of railway undertakings.** In doing so, the optimised allocation of capacity of service facilities is intended to grant access to many railway undertakings. It must be possible to map the business models of many railway undertakings on the infrastructure as otherwise it would not be possible to achieve the European and legislative objectives of expanding access to the railway infrastructure (Directive 91/440/EEC) or of enhancing the allocation of railway infrastructure capacity (Directive 2001/14/EC) or even of ensuring there is an attractive range of services available and that competition is undistorted (Section 1 subsection 1 sentence 1 of the General Railway Act).

The so-called slot system is a good system for **organising flexible use of tracks**. Owing to the concept according to which tracks are not allocated until the day of use, this system offers particular scope for spatial optimisation. This system is therefore particularly relevant also from the regulatory perspective with a view to Section 10 subsection 3 of the Rail Infrastructure Usage Regulations.

Many participants in the working group currently have reservations about so-called "Dispo"tracks (relief tracks) (see above under 2.1.1.) owing to the experience they themselves have gained. However, depending on how the services are designed, this model also appears to be suitable, in principle, for meeting the requirements set forth in Section 10 subsection 3 of the Rail Infrastructure Usage Regulations.

2.3.2. Responsibility of railway infrastructure operators to manage their infrastructure

The obligations set forth in Section 10 subsection 3, subsection 5 und subsection 6 no. 1 of the Rail Infrastructure Usage Regulations make the operators of service facilities responsible not only for granting railway undertakings access to their railway infrastructure for their free disposal but also for optimising the allocation of railway infrastructure capacity and for ensuring it meets demand in order to help achieve the regulatory objective to boost rail transport also in congestion-ridden areas.

The working group identified here an additional starting point for enhancing the possibility of several railway undertakings sharing use of a railway infrastructure. This can be achieved if infrastructure managers look at their **railway infrastructure** from a functional perspective, this means from a perspective that is oriented to **purpose of use** and subsequently ensure that the usages granted correspond to the functional distribution of their railway infrastructure. The aim is to ensure optimum utilisation is made of infrastructure capacity even within the framework of allocating capacity, taking purposes of use into account on the one hand while defining decisionmaking criteria within the framework of priority regulations on the other that are oriented towards the purpose of use.

As part of the conflict resolution procedure, infrastructure managers should not just consider the volume of capacity requested or the length of time for which capacity is requested on the basis of usage requests filed by railway undertakings when taking their decisions, the infrastructure managers themselves should examine whether the use applied for is actually needed.

Looking at the railway infrastructure from a functional perspective within the framework of the allocation of capacity fulfils the responsibility of the operators of service facilities enshrined in Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage not only to actually operate their railway infrastructure but also to manage it in such a way that they can grant as many usage requests as possible. This is also a prerequisite for conflict resolution within the framework of Section 10 subsection 6 no. 1 of the Rail Infrastructure Usage Regulations which also takes the **purpose of use** of the usage request **into account when deciding on the necessity of the sequence of the agreed train path** (see above under 2.2.2.).

It should be taken for granted that the operators of service facilities not only know from the information they receive from railway undertakings what purpose railway undertakings require capacity for, what length of time they require capacity for and for what part of the infrastructure they require capacity but that they also verify that the information they receive is correct. By examining whether the usage request filed by railway undertakings is actually necessary, operators of service facilities are fulfilling their responsibility to ensure the use of their rail infrastructure capacity is oriented to meeting demand.

In the coordination procedure, the operators of service facilities must be able to assess objectively whether usage requests filed are genuinely incompatible and in the event that a conflict arises they must be able to take a final decision which usage request is the "necessary" sequence of a train path. Accordingly, the two solution approaches outlined above meet the requirements set forth in Section 10 subsection 3, 5 and 6 no. 1 of the Rail Infrastructure Usage Regulations from the regulatory perspective.

2.3.3. Exchange for residual capacity

In addition to the long-term leasing of tracks to a principal user, the idea was developed to provide information on any residual capacity which the principal user does not require – either in the working timetable in general or at even shorter notice – on a neutral platform operated by infrastructure managers that is transparent for other railway undertakings. The aim behind this is above all to provide **swift access to existing rail infrastructure capacity**. The current system of coordinating with the principal user is simply too time-consuming.

This system is suitable for counteracting a partial aspect of regulatory issues criticised about the system of plans to lease all the tracks of an entire service facility for an extended period way in

advance of actual use. By publishing railway infrastructure capacity available in a transparent way, railway undertakings filing usage requests consecutively at least have the opportunity of using the residual capacity to plan their own rail services. Since there are no fixed terms available for usage requests, duration of usage or even just for ways in which capacity is allocated, this means there is no information available on what infrastructure is needed to plan rail services, as is the case for use of the railway infrastructure. The infrastructure managers who leverage this organisational freedom for service facilities have an even greater responsibility to provide parties with the right of access with information on any available railway infrastructure capacity. The exchange for residual capacity therefore fills a gap in the allocation system since it enables potential users to receive the information they need to file usage requests for infrastructure ture capacity.

Notwithstanding this, an exchange for residual capacity would not meet the main requirements set forth in Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations either which says that services must be structured to meet demand that is not met by long-term nationwide leasing of infrastructure capacity. In all other respects, although the voluntary offer to establish an exchange for residual capacity is welcomed from the regulatory perspective, it cannot necessarily be enforced on the basis of the current legal situation.

2.3.4. Range of services available in marshalling yards

Some railway undertakings thought that a key solution approach for enhancing joint use of marshalling yards or other train formation facilities would be for the infrastructure managers to offer not just access to the railway infrastructure but in particular also shunting services, namely by providing a shunting locomotive with a locomotive driver and any other staff who might be needed. The **Monopoly Commission** also referred to this solution approach in its second special report on competition in the railway markets published in September 2009 as one way of enhancing access to marshalling yards and train formation facilities with a view to increasing competition.¹⁴

From the regulatory perspective, the obligation of infrastructure managers to provide this service is **not**, however, readily identifiable in the **national regulations**.

On the one hand, the legislator clearly designated shunting services as services associated with marshalling yards pursuant to Section 2 subsection 3c no. 4 of the General Railway Act in the statement of reasons relating to Annex 1 of the Rail Infrastructure Usage Regulations, thereby designating this service a compulsory service. On the other hand, however, in its statement of reasons relating to Section 10 of the Rail Infrastructure Usage Regulations the legislator explicitly said it wanted to relieve infrastructure managers of this obligation, stating historically grown

conditions as the reason. One fact that mitigates against classification as a compulsory service is that the European legislator classified shunting merely as an additional service (cf. Annex 2 no. 3 lit. a) of Directive 2001/14/EC).

The Bundesnetzagentur welcomes the provision of such shunting services at service facilities as a significant contribution towards enhancing access possibilities for smaller, regionally positioned infrastructure managers too.

2.3.5. Special consideration of the "seven largest marshalling yards"

The majority of participants in the working group said they were in favour of the seven largest marshalling yards being accorded special consideration, given their special importance.

From the regulatory perspective, these service facilities are equally part of the railway infrastructure of an infrastructure manager, in this particular case DB Netz AG, whose special importance is reflected less in the infrastructure itself but more in the task it assumes for the single wagon transport concept used by DB Schenker Rail Deutschland AG. On the other hand, another special feature of these "Big 7" is their attractive geographical location in the railway infrastructure for rail freight transport. The Bundesnetzagentur will apply the same **criteria to the** "Big 7" **as it does to all other service facilities**. Nonetheless, it has decided based on discretionary considerations that it is possible to accord special consideration to the seven largest marshalling yards. Within the framework of discretionary considerations, the Bundesnetzagentur can also include already known usage requests filed by railway undertakings.

Regarding the technical facilities available, particularly in relation to the "Big 7", the Bundesnetzagentur assumes that the infrastructure managers are in a position to safeguard the multi-client capability of their technical interfaces in a non-discriminatory way. In any case, they are obliged to describe technical interfaces in a transparent way.

3. Results

The Bundesnetzagentur has arrived at the following results on the basis of the results achieved at the above-mentioned discussions and the solution proposals put forward by the working group and at the relevant regulatory assessment.

¹⁴ Special Report issued by the Monopoly Commission pursuant to Section 36 of the General Railway Act, Bahn 2009 "Paving the way for competition" (Wettbewerb erfordert Weichenstellung), margin number 139.

3.1. Formulation of the functional examination of infrastructure

In order to prepare for rail infrastructure capacity allocation in line with demand, it is essential for infrastructure managers not to consider their infrastructure indiscriminately. Rather, they must take into account the purpose of use a track is intended to fulfil, taking the compatibility of the facilities with the railway undertakings' requirements and the location of the tracks on the infrastructure into consideration, and, in case of dispute, must classify it as a priority criterion.

Specifying purposes of use does not mean that infrastructure managers can allocate tracks exclusively for a particular use unless there is additional objective justification for doing so. This would contradict the general entitlement to access to the rail infrastructure enshrined in the law. It is not the allocation to service facilities that are categorised by law that is crucial but the allocation according to purposes of use (see above under 2.2.2).

As such, the purpose of use must reflect the **actual requirements of infrastructure managers' customers**, which they can determine, for example, by conducting a customer survey. Infrastructure managers should ask their customers at regular intervals to notify them of their requirements so that any current changes in the market can be mapped.

The (partial) description of purposes of use on individual tracks of service facilities is not uncommon even today, as the infrastructure descriptions of a number of infrastructure managers show. As a rule, any such purposes of use are taken into account during the planning of operating facilities.

The continuation of the regulatory requirement of looking at the infrastructure from the functional perspective involves also considering the purpose of use as part of the coordination and conflict resolution procedure. Infrastructure managers must describe a **priority purpose of use** for each track that is taken into account during the coordination process and at the very latest when a **decision is taken to resolve a conflict**. In this way, tracks can, in principle, be used freely. In the area of congestion management, the requirements of railway undertakings can be weighed up more effectively on the basis of objective criteria and, oriented to railway undertakings' needs, can accommodate as many different business models as possible by providing a range of suitable offers. This means it is possible for one or several railway undertakings to make optimum use of the infrastructure.

For example, in shunting manoeuvres in individual railcar traffic, the temporary stabling of wagons in the classification yard is also to be deemed part of the shunting manoeuvres. As such, it needs to be ensured that the stabling and waiting time required for shunting manoeuvres is oriented to demand (e.g. 4 or even 24 hours).

The use that corresponds to the purpose of use of a track should be given priority over any other use as this use most closely approximates the railway undertaking's demand and corresponds to the track parameters. This can ultimately also lead to a contractually agreed use being superseded. This consequence was intended by the regulator and has been provided for in Section 10 subsection 6 no. 1 of the Rail Infrastructure Usage Regulations.

If the already agreed use is not the "necessary sequence of an agreed train path" but the usage request is, the contractually agreed use has to rank second. If applications are filed for usages of a track that are not compatible with the purpose of use, infrastructure managers must point out that in the event that the track is used, there is a possibility of that use being superseded by subsequent usage that is more compatible with the purpose of use. If, by contrast, the use is compatible with the purpose of use, it is also protected from being superseded.

In practice, it will be crucial for railway undertakings to conclude an agreement on subordinate use, aware of what subordination involves. The more precisely infrastructure managers orient the purposes of use on the tracks of their infrastructure to the demand of railway undertakings and allocate tracks accordingly, the less likely it is that there will be a collision between an existing subordinate use and a new priority use.

3.2. Formulation of the obligation to examine and monitor

Infrastructure managers are first of all responsible for assessing whether two usage requests filed by railway undertakings are genuinely incompatible for temporal and objective reasons. At the very latest after negotiations with the parties with the right of access who have applied for incompatible use of the infrastructure have failed, infrastructure managers must decide which usage request to grant. In doing so, they must begin by examining whether a use is the <u>necessary sequence</u> of an agreed train path. In order to be in a position to make these assessments and decisions, infrastructure managers must not rely solely on the information provided by the railway undertakings but must **assess the necessity itself**.

Infrastructure managers need to ask the railway undertakings not just about the intended use but also for what length of time and how much infrastructure capacity they need a track or several tracks for and ask them to submit this information in writing. At the very latest when disputes arise, infrastructure managers must conduct their own assessments on the basis of transparent consideration criteria and take a decision between the parties involved in the conflict. As such, infrastructure managers must examine the information provided by the railway undertakings based on objective criteria (see above under 2.2.3).

As usage requests and usage approvals become more complex and more railway undertakings placing different demands on the infrastructure need to be coordinated in operational terms, so too are the requirements facing infrastructure managers in relation to this obligation to examine and monitor becoming more and more demanding.

For example, the interim buffering of wagons on shunting tracks for splitting and forming trains can certainly be part of the purpose of use. If, by contrast, wagons are stabled on

shunting tracks for longer than it takes to split and form trains, infrastructure managers can only approve this type of use so long as no other usage request is filed that corresponds to the purpose of use, in this case shunting with interim buffering of wagons. If and when any such usage request is filed, infrastructure managers are also obliged to carry out their own examination in order to obtain an overview of actual usages.

However, this does not mean that there needs to be continuous monitoring and inspection at all locations at all times. Notwithstanding this, in certain types of service facilities (e.g. trainformation facilities and marshalling yards) that are considered to be very busy owing to the scope of leasing or the share of requests as a percentage of the total capacity, it needs to be examined what potential for optimisation can be leveraged. A review of use is a necessary prerequisite in this regard. Infrastructure managers need to manage resources efficiently, particularly in these congestion-ridden areas, in order to be able to grant as many usage requests as possible. Otherwise, they will not meet the requirements set forth in Section 10 subsection 3 of the Rail Infrastructure Usage Regulations.

The Bundesnetzagentur reserves the right to carry out random checks in order to establish whether decisions taken were based on proven and verified information provided by a railway undertaking.

3.3. Organising the contingents for flexible use

Leasing of pre-determined tracks for long periods of time may not be applied to all of the tracks in a given location. Infrastructure managers must reserve some of the tracks on their infrastructure for flexible and short-term use.

Infrastructure managers have a high level of entrepreneurial freedom in defining and organising the contingents for flexible use. However, in order to fulfil the regulatory requirement to optimise the services they provide (Section 10 subsection 3 sentence 1 of the Rail Infrastructure Usage Regulations), infrastructure managers must above all take the **demand of all customers** into account given that they implement different business models. This demand should also be reviewed at regular intervals.

Following the maximum limit for the long-term allocation of railway infrastructure capacity determined by the legislator (cf. Section 13 subsection 2 of the Rail Infrastructure Usage Regulations), the Bundesnetzagentur generally deems **a percentage of at least 25 percent** to be adequate. By defining these ratios (75 percent to 25 percent), the legislator expressed that it considers this to be an adequate distribution to ensure that third party use of the railway infrastructure is not ruled out owing to the long-term allocation of capacity (cf. Bundesrat printed paper 249/05, page 50). Infrastructure managers should also ensure that at least 25 percent of the tracks in service facilities are available for short-term use that is as flexible as possible. The percentage of 25 percent creates a **guideline**, as demonstrated by the reasons for defining quotas pursuant to Section 13 subsection 2 of the Rail Infrastructure Usage Regulations for the railway infrastructure, that all infrastructure managers can adjust upwards to the actual demand of their customers and also downwards in individual cases where this can be justified. When determining the percentage of the contingent to be reserved for flexible use, infrastructure managers must ensure it is based on the actual demand of their customers. As such, they must take into account both the purpose of use and the facilities on the tracks subject to the contingent, such as the length of the tracks, technical/peripheral facilities, overhead power lines, geographic location and other unique features.

If it is justified in individual cases, it is also possible to reserve less than 25 percent of the railway infrastructure for short-term use. It may also be possible in **justified individual cases** to subject several service facilities that have similar spatial and functional features to a combined analysis, especially if they have similar facilities and similar accessibility in the transport network. Offering compensation to a service facility that has been fully removed from the consideration is also conceivable. It would actually be necessary to offer them compensation if fewer than two tracks in a service facility are included in the contingent for flexible use in the calculations as in this case this falls short of the minimum number of tracks required for shunting movements.

When **organising** the contingent for flexible use, infrastructure managers should also take into account that the contingent is also intended to make access more flexible for all railway undertakings. This explains why railway infrastructure operators need to ensure when allocating usage capacities within the contingent that they always offer a very high level of elasticity regarding use of their railway infrastructure. The traditional slot system offers a maximum level of flexible use but other types of short-term use can also be suitable for fulfilling the requirements of flexible allocation. On the one hand, the possibilities of using track(s) for a short period only (which the Bundesnetzagentur refers to as short-term use) and of filing usage requests at short notice (which the Bundesnetzagentur refers to as use at short notice) offer a high level of flexibility in planning. On the other hand, the possibility of using just part of the length of a track also offers a degree of economic flexibility for railway undertakings.

As such, the varying and sometimes even conflicting usage requirements, for instance, of passenger rail services and freight traffic must be taken into account.

If, for example, a passenger transport company is using a service facility for "overnight stabling within the framework of scheduling", there is a strong likelihood that the demand is oriented to repetitive overnight use involving long-term planning security, although it is possible that the passenger transport company may not use the full length of the tracks. If, by contrast, the service facility is in the vicinity of manufacturing companies, usage requests are more likely for short-term use to facilitate shunting movements, usually at short notice, for spot traffic in the area of just-in-time delivery. In order to ensure all railway undertakings have the same opportunities when they file usage requests, infrastructure managers should ensure that some scope is left within the contingent for usage requests filed at short notice. The tracks in a contingent reserved for flexible use should not be allocated to a single railway undertaking only by expanding the time windows for use or by way of repeated allocation especially where customer demand highlights bottleneck areas because this would be equivalent to the tracks being leased permanently to this railway undertaking.

How the Bundesnetzagentur plans to proceed

After completing the consultation process, the Bundesnetzagentur drew up explanatory supplements on the basis of comments submitted by market players in the **final position paper** and then published them.

In the next step, the Bundesnetzagentur will conduct a **review** to confirm that infrastructure managers are incorporating the findings gained during the consultation process into their **terms of use and practices** and will take regulatory action if it is required to do so.

The Bundesnetzagentur will approach the individual infrastructure managers, particularly within the framework of ex-post reviews. As such, infrastructures about which complaints have been submitted or those that are accorded priority because of their market relevance will be dealt with first.

The Bundesnetzagentur will also take implementation periods deemed reasonable in individual cases into account.