Standard Access Contract Rail Net Denmark

Access Contract

between

Rail Net Denmark ("Banedanmark") Amerika Plads 15 DK-2100 Copenhagen Ø DENMARK CVR registration number: 18 63 22 76 (Hereinafter referred to as ``Rail Net Denmark")

and

XX YY ZZ CVR registration number: XX (Hereinafter referred to as "RU" – Railway Undertaking)

regarding working relations, mutual rights and obligations etc. in relation to access of allocated paths to the RU (hereinafter referred to as "the contract").

Table of contents	Tab	le of	f con	tents
-------------------	-----	-------	-------	-------

Definitions 4
1 Purpose
2 Minimum access package.62.1 Capacity allocation.62.2 Timetable72.3 Traffic operation.72.4 Traffic information82.5 Information on traffic flow - the regularity package92.6 Use of power supply equipment.102.7 Technical and traffic specifications102.8 Data exchange102.9 Lending of onboard equipment to RUs carrying out passenger transportation on the basis of an agreement with the State/regions (PSO)10
3 Track access to service facilities and delivery of services 11 3.1 Allocation 11 3.2 Maintenance, cleaning and de-icing/snow removal on Rail Net Denmark's stations and areas 11
4 Additional services114.1 Traction current114.2 Preheating of train units, independent trains and locomotives, as well other electricityvia mains socket124.3 Water for preparation of trains124.4 Permit for exceptional transports12
5 Ancillary services
6 Safety and permits126.1. Permit and safety certificate etc.126.2 Safety failure136.3 Dangerous goods13
7 Infrastructure works137.1 Priority in planning of track possessions for infrastructure works137.2 Notification time periods137.3 Performance management16
8 Environmental issues168.1. Environmental standards168.2 Oil spill168.3 Noise17
9 Charges179.1 Infrastructure charges179.2 Additional services179.3 Ancillary services189.4 Rail Net Denmark's payment terms189.5 The RU's billing address18
10 Insurance
11 Indemnity 18 11.1 Liability 18 11.2 Recourse 18 11.3 Statement of damages 18
12 Breach of contract
13 Force majeure
14 Performance scheme (fine/bonus)19
15 Conditions for transfer

16 Co-operation	20
16.2 Confidentiality 16.3 Access	20
17 Disputes 17.1 Negotiation and mediation 17.2 Arbitration	21
18 Entry into force and termination	22
Annex 1 on conditions relating to infrastructure and equipment - tracks and wheels	23
Annex 2 on conditions relating to infrastructure and rolling stock – train control and tradio	

The structure of the contract

The contract consists of the following:

- I. Standard access contract
- II. Annex to the standard access contract
- III. Amendment to the standard access contract on specific conditions for the RU, if any
- IV. Annex to the amendment on specific conditions for the RU, if any.

Definitions

Optional path: a pre-planned path that can only be guaranteed for use by the RU once a final application has been submitted by the RU within a specified date. The optional path may become void if another application is submitted regarding the same path, which in terms of transport work exceeds the optional path. Executive order no. 15 includes a formula to calculate transport work in regards to the allocation of railway infrastructure capacity (paths). Rail Denmark is not obliged to take into account optional paths, to the extent an already allocated capacity will be disadvantaged when planning work on the infrastructure.

Infrastructure work: work which may affect the traffic flow or even decrease the available capacity of the RU.

Infrastructure data: data which are necessary in order for the RU to prepare a preferred access timetable for submission to Rail Net Denmark who plans such capacity.

Interval track possession: temporary possession of tracks in the time between the passing of two trains. The track possession does not affect the validity of the timetable nor does it substantiate a correction of the timetable. The objective of the interval track possession is to ensure access to the track for a short period of time with minimal planning prior to the track possession.

Train path: the infrastructure capacity of the railway network defined in time and geography by a sequence of arrival and departure times for the train between the departure station, the intermediate stations, the arrival station and the capacity inbetween all the aforementioned.

Capacity: infrastructure such as paths, stations, service and preparation facilities, stabling tracks etc.

Timetable: composition of paths that Rail Net Denmark produces for a given period.

La letter: an overview of all infrastructure work with consequences for traffic in relation to the timetable.

Rolling stock data: data necessary to include in Rail Net Denmark's timetable data base, in respect to the calculation of travel time.

Production data: data necessary to calculate the work schedules for the stations.

Regularity statement: statement on train movements calculated using methods described in the applicable executive order on infrastructure charges etc. for the State's rail network.

Maintenance driving: driving in tracks and points that are not used for transport during normal operation to ensure the track circuits remain working and useable.

Track possessions (excluding interval track possessions): a track possession that reduces the capacity of the infrastructure in order to ensure track access for infrastructure works. Rescheduling and cancellation of trains may occur, requiring a correction of the timetable. Track possessions leading to minor delays will not typically require correction of the timetable. Track possessions can be carried out during periods where trains are not operating or in areas that will have no impact on traffic.

1 Purpose

This contract is governed in accordance with the applicable Danish laws and EU law.

This contract stipulates co-operation, mutual rights and obligations, conditions for the use of infrastructure and requirements for insurance under the applicable executive order on the allocation of railway infrastructure capacity (train paths) etc.

2 Minimum access package

Rail Net Denmark provides a minimum access package to the RU as stipulated in EU and Council Directive 2012/34.

Rights and duties associated with the minimum access package are stipulated in 2.1 - 2.9 of the contract.

2.1 Capacity allocation

The RU is allocated the capacity to carry out train operation. Allocation is granted annually on the basis of a specific application from the RU and Rail Net Denmark provides a written confirmation on the awarded capacity allocation. Additional capacity for occasional transport may also be allocated. The allocation principles are set forth in the applicable executive order on allocation of railway infrastructure capacity (paths) etc. Deadlines for application and allocation of capacity are provided on Rail Net Denmark's website.

As part of the capacity allocation process the parties must exchange data. Rail Net Denmark continually makes infrastructure data available for the RU. The RU submits rolling stock data and production data to Rail Net Denmark.

To preserve the right to allocated paths, the RU must utilize these. If the RU partly or totally ceases to utilize allocated paths, the RU is obliged to inform Rail Net Denmark immediately and without any undue delay.

If the RU does not wish to utilize the allocated path, the path must be cancelled. Such cancellation is subject to a charge. The determination of such charge is governed by the applicable executive order on infrastructure charges etc. for the State's rail network.

The first day of every month, Rail Net Denmark quantifies the utilized capacity compared to the volume of allocated capacity. In order to ensure optimal utilization of the capacity, Rail Net Denmark may revoke one or more paths, if less than 75 % is used within at least a month of the allocated capacity.

Rail Net Denmark's right to revoke does not apply if the decreased utilization of the capacity is due to circumstances outside the influence of the RU.

In case of congested infrastructure the Danish Transport and Construction Agency will, according to the applicable executive order on allocation of railway infrastructure capacity (paths) etc., determine the threshold for when Rail Net Denmark may revoke utilization of one or more paths.

Passenger and freight traffic not carried out as a public service obligation is subject to applicable law on allocation of rail way infrastructure capacity (paths) etc. stating that the RU reserves the right to 90 % of the paths from previous capacity allocated on all tracks from one allocation period to the next, if an application is submitted. Optional paths may be revoked by Rail Net Denmark on prior agreement between the RU and Rail Net Denmark. Rail Net Denmark reserves the right to revoke a given path without prior agreement with the RU, if an appropriate application is not submitted for the relevant path at least five days before the actual operation of the path.

In connection with specific sales projects/research studies, an agreed timetable can be determined for up to thirty days.

2.2 Timetable

Rail Net Denmark will provide a timetable that will consist partly of a service timetable and partly of on-going notifications. The service timetable is announced annually after the allocation period has expired and may be updated during the allocation period.

The train numbers will appear from the final capacity allocation. The number series for occasional transfers can be obtained from Rail Net Denmark.

The service timetable(s) will be sent to the RU electronically.

2.3 Traffic operation

<u>Traffic operation on the main line during irregularities with or without reduced capacity</u> Rail Net Denmark has the coordinating role and final decision-making power in regard to resolving traffic irregularities with or without decreased capacity. Traffic operation is established based on 'Principles for operation' published annually by Rail Net Denmark prior to the beginning of the timetable period.

The drafting of the 'Principles for operation' is carried out in close collaboration between Rail Net Denmark and the RUs and follow the procedure for capacity allocation according to applicable law on allocation of railway infrastructure capacity (paths) etc. The 'Principles for operation' are subject to continuous revision during the timetable period and the RU is obliged to participate in its preparation and implementation.

The 'Principles for operation' do not overrule the obligations of Rail Net Denmark to give notice on infrastructure work under section 7 of the contract.

Rail Net Denmark and the RU are bound by the 'Principles for operation'. However, Rail Net Denmark reserves the right to make other allocations where deemed necessary. The RU will ensure that staff and rolling stock plans support the general allocation plans.

The use of the 'Principles for operation' may be initiated by Rail Net Denmark or by the RU for RU's own trains.

The 'Principles for operation' include appendixes with recommendations on maintenance driving. Rail Net Denmark ensures that all RUs participate equally in the maintenance driving.

Traffic operation on the S-line during irregularities

The parties are under obligation to participate in preparing and implementing the restoration agenda (which includes layout of allocation principles and allocation plans) and emergency timetables. The emergency timetables are registered in the applicable service timetable for S-trains.

The parties are bound by the restoration agenda and/or emergency timetables if irregularities occur. However, Rail net Denmark reserves the right to carry out other allocations where deemed necessary.

Rail Net Denmark's allocation authorities

According to the applicable executive order on allocation of railway infrastructure capacity (paths) etc., Rail Net Denmark can, in connection with traffic disturbances, demand the RU to make drivers and rolling stock available for removal of equipment belonging to other parties or other forms of clearance. The RU will be remunerated by those who are responsible for the obstruction in the traffic flow.

Tool car standby

Rail Net Denmark may request tool car standby for clearing the infrastructure where RU equipment interferes with the traffic flow. The RU will pay such expenses according to section 9 of this contract.

2.4 Traffic information

Rail Net Denmark supplies traffic information to train passengers on main line train stations and regional stations, where the RU has been allocated capacity, according to the executive order.

The delivery of Rail Net Denmark's traffic information is subject to Rail Net Denmark's access to the necessary data on RU's traffic operation.

The traffic information is submitted on Rail Net Denmark's visual and auditory media on main line and regional stations to the extent it is possible and the equipment is available on the stations.

Rail Net Denmark will update Rejseplanen (the journey planner) with information about the actual arrival and departure times of the trains, track occupation, cancellations and updated information regarding the main lines.

Moreover, Rail Net Denmark provides a nationwide telephone service to supply information about arrival and departure times where it is possible to read out departure and arrival information for the blind and visually impaired.

The parties shall exchange data and information to follow up on the service provided and the perceived quality of traffic information.

The scope of delivery and content, as well as duties related to traffic assignment including mutual guidelines are set out in Appendix 5 under the title 'Traffic Information to Passengers'. It states duties, liabilities and rights agreed by the parties.

This provision only applies where the RU carries passengers.

2.5 Information on traffic flow – the regularity package

Rail Net Denmark provides a regularity package every fourth working day of the month. The statements are in compliance with definitions as stated in the applicable executive order on infrastructure charges etc. for the State's rail network. The regularity package consists of:

- Inventory of performance
- Status on fines/bonuses (fines/bonuses are calculated according to the above mentioned executive order).

The conditions for the provision of the regularity package are based on the compliance of the following process:

Operational reports must be submitted as stipulated in the RDS guidelines and RDS instructions. Details regarding collaboration and deadlines for regularity follow-up are described in the RDS manual along with the list of causative codes.

The RU may, through an independent entity (such as an engineering consultancy, which is appointed and approved by both parties) conduct an assessment (auditing) of the procedure employed by Rail Net Denmark in calculating the regularity. This is to ensure that the regularity package is prepared correctly. The RU bears the cost of such assessment.

2.6 Use of power supply equipment

The RU ensures that the pantographs comply with applicable standards at all times in order for the interacting pantograph/traction lines to minimize abrasion and operational disruptions.

Rail Net Denmark ensures that the traction current system complies with the technical specifications for the system while ensuring the necessary maintenance of the system.

A collaboration forum has been established regarding the interaction between pantograph and traction line. If using electrical equipment the RU is obliged to attend the collaboration forum by participation of a qualified person.

2.7 Technical and traffic specifications

Rail Net Denmark provides the technical and operational specifications in addition to railway safety requirements, which are necessary for the RU's traffic operation. The provisions will be made available in electronic format on Rail Net Denmark's website.

The parties are bound to comply with these specifications and the railway safety requirements.

Moreover, annexes 1 and 2 give specifications and obligations established in regards to the relation between the infrastructure and the rolling stock.

2.8 Data exchange

If the parties deem it necessary to enter into an agreement on data exchange, the mutual rights and obligations are determined in annex 3.

2.9 Lending of onboard equipment to RUs carrying out passenger transportation on the basis of an agreement with the State/regions

In connection with Rail Net Denmark's replacement of the current signalling system, Rail Net Denmark acquires and lends to the RU, on behalf of the Danish Ministry of Transportation and Building, the onboard equipment to be installed in the trains. The equipment is a prerequisite to drive on the distances with the new signalling system (ERTMS on the main line and CBTC on the S-line).

Similarly, Rail Net Denmark will acquire and lend to the RU, on behalf of the Danish Ministry of Transportation, Housing and Building, the onboard equipment for the GMS-R talk radio, which will be installed in the trains. The onboard equipment is lent to the RU only to the extent that it is for the purpose of passenger transportation included in the contract on the basis of agreement with the State/regions on public service, and only in respect to trains where it has been agreed in relation to the implementation of the new signalling system.

Rail Net Denmark will exclusively finance the acquisition of the equipment in regards to implementation of the new signalling system. If the RU acquires new rolling stock including trains, the RU will be responsible for the purchase and installation of the required equipment. The RU covers all costs in regard to maintaining the onboard equipment. The terms and conditions of the lending of the equipment will be given in an agreement between Rail Net Denmark and the RU, and will be an integral part of the access contract.

This requirement only applies if the RU is carrying passengers on the basis of an agreement with the State/regions.

3 Track access to service facilities and delivery of services

3.1 Allocation

Rail Net Denmark allocates capacity to service facilities as defined in the European Parliament and Council Directive 2012/34/EU to the extent that these facilities are located on or adjacent to Rail Net Denmark's infrastructure. The allocation of the capacity follows the provisions of section 2, 2.1.

Applications for capacity for shunting must be made to Rail Net Denmark. This does not apply to shunting activities on intermodal terminals managed by another operator.

3.2 Maintenance, cleaning and de-icing/snow removal on Rail Net Denmark's stations and areas

Rail net Denmark carries out cleaning, maintenance and de-icing/snow removal on Rail Net Denmark's stations and areas. De-icing and snow removal is carried out according to 'winter measures' issued by Rail Net Denmark. All cleaning, land care and maintenance are carried out in compliance with the applicable executive order, including the Work Environment Act.

The RU agrees, to the extent possible, to help limit the amount of waste on platforms and other Rail Net Denmark areas as well as in the track.

The parties shall agree as necessary the form of co-operation on the above mentioned in accordance with Annex 4.

4 Additional services

At the request of the RU, Rail Net Denmark supplies extra services for the RU as defined in European Parliament and Council Directive 2012/34/EU.

4.1 Traction current

At the request of the RU, Rail Net Denmark supplies energy to propel the electric traction units according to the applicable executive order on Rail Net Denmark's electricity supply company (ESC). The RU has the right to purchase power from another supplier through

Rail Net Denmark's distribution network, see section 3, 2.2 of the executive order no. 543 of 16 June 2004 on Rail Net Denmark's electricity supply.

The main line is equipped with 25 kV 50 Hz and the S-line is supplied with 1650 V DC.

The RU must have an independent traction contract for the operation of electric traction devices.

4.2 Preheating of train units, independent trains and locomotives, as well other electricity via mains socket

On agreement with the RU, Rail Net Denmark provides electricity to trains via facilities owned by Rail Net Denmark.

Rail Net Denmark operates with three system voltages for this purpose: 1,500 V and 1,000 V (both single-phase) and 400 V three-phase.

Please see section 9 for information on charges.

4.3 Water for preparation of trains

On agreement, Rail Net Denmark provides water for preparation of trains. Please see section 9 for information on charges.

4.4 Permit for exceptional transports

If the RU wishes to carry out transport that does not meet the applicable standards, the RU must apply for a permit for exceptional transports. If the transport is feasible, Rail Net Denmark issues a permit. Details relating to exceptional transports and issuing of permits are found in the UT instructions, published by Rail Net Denmark and available on Rail Net Denmark's website.

Please see section 9 for information on charges.

5 Ancillary services

Mutual rights and obligations related to ancillary services as defined by the European Parliament and Council Directive 2012/34/EU.

5.1 Provision of additional information including data, reports and evaluations Upon request, Rail Net Denmark can provide data, reports or evaluations on the RU's traffic flow.

Please see section 9 for information on charges.

6 Safety and permits

6.1. Permit and safety certificate etc.

It is the responsibility of the RU to possess a valid permit to perform train operations and a safety certificate issued by the Danish Transport and Construction Agency.

Rail Net Denmark warrants that it has the required permission and safety approval as infrastructure manager.

6.2 Accidents and antecedents to accidents

In case of accidents and antecedents to accidents as defined in the applicable execute order on reporting data for analyses and planning etc. in the railway sector, the provisions of Rail Net Denmark's Traffic Instructions (OR, OR-S and OR-F) shall apply. The RU and Rail Net Denmark are obliged to co-operate and exchange data when examining accidents and antecedents to accidents.

6.3 Dangerous goods

In case the RU wishes to transport or place dangerous goods on Rail Net Denmark's infrastructure and/or areas, the RU must disclose all necessary information to Rail Net Denmark, in order to meet the requirements of RID 1.4.3.6 and the applicable risk legislation OR, OR-S, OR-F and SIN.

This duty of disclosure toward Rail Net Denmark does not apply if the placing of the dangerous goods takes place on intermodal terminal areas administered by another terminal operator by agreement with Rail Net Denmark.

7 Infrastructure works

7.1 Priority in planning of track possessions for infrastructure works

When planning track possessions a variety of scenarios can be selected in order to balance reliability/robustness against available capacity. Rail Net Denmark and the RU have agreed that reliability in track possessions and their planning in general shall be given highest priority. Reliability includes respecting the notification notice during the planning process, (in order for passengers and freight clients to receive reliable information on train operation), and that the actual track possessions are planned robustly in terms of performance (for high punctuality and cancellation of track possessions in due time).

7.2 Notification time periods

Rail Net Denmark announces track possessions to the RU.

The following notification time periods apply for the planning of track possessions excluding interval track possessions and track possessions with no impact on traffic. Interval possessions and possessions without traffic impact require no warning to the RU. For further definitions of the types of track possessions see section "Definitions".

Rail Net Denmark is not obliged to announce infrastructure work to remedy defects. Defects in this context are defined as situations where incidents originated from technical breakdown, accidents or vandalism as well as weather or natural conditions cause (or may cause) operational disruptions and/or safety incidents. The notification time periods are described in the table below:

	Notification X-12 months. *	Notification N-4 months. **
Media	Network Statement	LA Letter
Possessions with duration >= 56 consecutive hours, which require a correction of the timetable	 For all possessions the following is specified: 1. TIB number 2. Delimitation at outer stations and buffer stations and buffer stations ***) 3. Approximate duration (number of days) 4. Is the possession 	 For all possessions the following is specified: 1. Exact geographical location 2. Exact date for start and finish 3. Exact time of start and finish 4. Final traffic impact (driving pattern) in connection with
	 during a holiday period, see holiday and vacation list ****) 5. Start early/mid/end if during the summer holiday 6. Overall possession pattern (blocked single/multiple tracks/total possession) 	the track possessions
Possessions with duration <= 56 consecutive hours, which require a correction of the timetable	No information specified	 For all possessions the following is specified: 1. Exact geographical location 2. Exact date for start and finish 3. Exact time of start and finish 4. Final traffic impact (driving pattern) in connection with the track possessions
Interval possessions and possessions	No information specified	No information specified

without impact on	
the traffic	

All dates are counted from the first day of the week in which the possession takes effect. A week starts on Monday at 00.01 a.m.

*) X denotes the date of the beginning of the timetable (Sunday after the second Saturday in December)

**) N denotes the date of the first day of the week in which the possession enters into force (Monday 00.01 a.m. continuously)

***) Basically, a project that requires track possession(s) is specified as located between 2 defined stations, possibly incl. one or both stations or parts of the stations. To meet the project's potential need for supplementary work within the project, which is located outside the station boundary, a buffer is added to the work on an extra station at both ends. The buffer station limits of the project are determined from time to time.

****) The holiday and vacation list is defined in co-operation between Rail Net Denmark and the RUs.

Warnings or changes to submitted warnings, if any, issued later than the indicated deadlines stated in the table above will require negotiation between the parties.

Rail Net Denmark will at a directors' board meeting with the RU, or in another way, inform about the status of the portfolio of major infrastructure projects covered by the X - 12 months' notice.

It is the responsibility of Rail Net Denmark to ensure that the track possessions prompted by a third party (such as municipalities and the Road Directorate) are notified as set out in the table above.

When a track possession is announced to the RU, as set out in the table above, the RU does not have access to the tracks included in the scheduled work for the duration of the work, even though the RU has been awarded the train paths associated with the train path assignment for the concerned timetable period.

Rail Net Denmark will generally be accommodating towards potential requests from the RU that leads to implementation of infrastructure works within the current timetable. The planning will be made in close co-operation between the RU and Rail Net Denmark, taking into consideration the impact on traffic flow. Rail Net Denmark is obliged to notify such

infrastructural works requested by the RU to other railway companies affected by such work. The notification is made according to the time frames set out in the table above or by agreement between the RU and Rail Net Denmark. A separate agreement is made for each individual infrastructural work.

Availability principle

In order to optimize planning and use of track possessions, the notified track possessions at X-12 months are available up until N-4 months. Hence, Rail Net Denmark can exchange a notified track possession with an alternative track possession. This is only possible under the following circumstances:

- The calculated service towards the end client (passenger or freight company), in terms of number of channels (infrastructure capacity) is not reduced at the end of the X-12 month period,
- The RU's total financial implications of the track possessions are not increased at the end of the X-12 month period. Expenses concerning planning are not included in the total financial amount.

When the availability principle is used, the RU is obliged to present a business case comparing the originally forecasted track possession with the requested change.

The availability principle is not a general planning tool, but can be used in cases where reprioritization of projects is necessary.

7.3 Performance management

The parties agree, as needed, how to measure compliance of the track possession process.

8 Environmental issues

8.1. Environmental standards

The parties guarantee that existing environmental legislation is respected and each party is responsible for pollution or environmental damages that can be related to the involved company.

8.2 Oil spill

If the RU spills oil products at Rail Net Denmark's areas or from a train in service, the RU must immediately inform Rail Net Denmark's environmental department as well as the local authority's environmental department.

The RU is obliged to inform where the spill has occurred (nearest stations) as well as the amount of oil spilled. When the spill is detected, the RU must stop the spill and begin collecting the oil. An agreement is then made between the local authorities, Rail Net Denmark and the RU regarding which form of inspection and preventive measures are necessary or practically possible and the RU must cover all cost.

8.3 Noise

The parties must attempt to minimize noise. Environmental legislation employs two different definitions of noise from the railway; noise from passing trains (section noise) and noise from other activities (terminal noise). These definitions are defined in guideline no. 1/1997 "Noise and vibrations from railways" and amendment from July 2007.

The environmental legislation does not contain limit values for section noise from existing railways. Running to and from depot (to and from operation) and reversing loops are covered by the regulations for section noise.

The RU is obliged to take any measure necessary in order to comply with the specific instructions from the relevant authorities concerning noise reduction related to the terminal noise caused by the RU.

The parties are obliged to mutually involve each other in any contact with relevant authorities, if such contact may lead to any of the parties being subject to an enforcement notice according to the Environmental Act and present network statement.

9 Charges

9.1 Infrastructure charges

In order for the RU to use the railway infrastructure (excluding the S-train), the RU is obliged to pay infrastructure charges to Rail Net Denmark, in accordance with the executive order in force at any time, regarding payment for use of the State railway and regarding environmental subsidies for freight transportation on the rail network, as well as the executive order on infrastructure charges etc. for the State's rail network.

Rail Net Denmark sends an invoice for infrastructure charges before the 20th of each month.

9.2 Additional services

Traction current

Electricity for traction current is supplied by Rail Net Denmark according to a separate contract (traction current contract) between the RU and Rail Net Denmark. Details regarding payment for traction current appear from the traction current contract. The above mentioned services are carried out according to finance act section 28.63.01 item 5, with reference to regulation on Rail Net Denmark's electricity supply undertaking. <u>Pre-heating of train, train sets and locomotives and other electricity via mains socket</u> Charges are by agreement.

Water for preparation of trains Charges are by agreement.

Permission for exceptional transports

The charge is DKK 2.500 per issued transport permit. Invoice will be sent monthly in arrears. Invoicing address must be stated in the application.

<u>9.3 Ancillary services</u> <u>Supply of additional information</u> Data, reports and analysis on train movement

The price is agreed between Rail Net Denmark and the RU in each individual case.

<u>9.4 Rail Net Denmark's payment terms</u> 30 days net.

9.5 The RU's billing address

[Name] [Address] [Postal code] [Country]

10 Insurance

The RU is required to have legally required liability insurance. Rail Net Denmark is covered by the State self-insurance scheme.

11 Indemnity

11.1 Liability

A party is only liable to the other party to the extent that an injury is caused by negligence or wilful misconduct by the tortfeasor. Moreover, Danish laws apply.

11.2 Recourse

If one party is liable for damages to third parties, the party has recourse against the other party to the extent that the party intentionally or by negligence has been liable or jointly liable for the damage. As regards the RU's right of recourse, see section 16 of the Railway Law.

11.3 Statement of damages

Danish law applies when calculating compensation for personal injury and property damage. Indirect loss, operating loss, including among others, but not exclusively, loss of use or profit is not recoverable. This also applies when Rail Net Denmark, in accordance with the rules in force, closes parts of the infrastructure in order to maintain the required safety level. Cost of replacement transport is covered by the RU, regardless of the causative factor.

- Loss of income claimable from the tortfeasor:
 - Compensation for personal injury or loss of a provider
 - Property damage, including repair costs, including repairs made by the injured, injurer's own employees or third party repair shop. In case of total loss the compensation is calculated according to the principle provided in section 37 of the Insurance Contract Act
 - Internal additional costs for i.e. overtime, extra staff, equipment etc.

- Lost of income that cannot be recovered from the tortfeasor:
 - Indirect loss, including lost profits and costs for replacement transport.
 - Costs for assessment and establishment of the injury.
 - Salvage expenses not covered by the State.

12 Breach of contract

The contract can be terminated in the event of a substantial breach.

If a party wishes to invoke a breach, the aggrieved party must without undue delay inform the other party of the breach. If the party responsible for the breach does not remedy the situation within reasonable time, the aggrieved party may immediately terminate the contract. Each party is liable under Danish law for failure to contribute to proper fulfilment of the contract. An agreed penalty does not preclude the parties to claim compensation for any further loss. This does not apply if the function of the penalty is to replace compensation. Moreover, Danish laws apply.

13 Force majeure

Neither Rail Net Denmark nor the RU shall under this contract be deemed liable to the other party, to the extent that the liability is caused by circumstances beyond the party's control and which the party, when signing the contract, could not have taken into account, avoided or overcome.

The party seeking to invoke force majeure shall without undue delay notify the other party of the onset and termination of the event.

The parties shall seek to mitigate or prevent the event, damage or delay in accordance with Danish laws on the duty of mitigation.

14 Performance scheme (fine/bonus)

To the extent prescribed by the applicable order on infrastructure charges, etc. for the State's rail network, the parties are subject to a mandatory performance scheme. The performance scheme is managed as described in the executive order.

15 Conditions for transfer

The RU cannot without written consent by Rail Net Denmark assign any rights and obligations under the contract to a third party.

In cases where an agreement is made with other railway companies after the capacity allocation deadline has passed, the RU must prove that no trade or transfer of capacity has taken place, for example by providing a copy of an agreement. The RU is entitled to use subcontractors. A prerequisite is that subcontractors have or can obtain the necessary approvals. The RU is obliged to announce such arrangements to Rail Net Denmark before capacity allocation is made, and inform to what extent other railway companies are used as subcontractors for the RU's train operation.

The parties are liable for the work and services carried out by their subcontractors in relation to any claims by the other party, under the same conditions as when undertaking the work themselves.

16 Co-operation

16.1 Co-operation and duty to disclose

The parties agree, as appropriate, to attend meetings between the parties to ensure the necessary co-operation.

To the extent that Rail Net Denmark, for the sake of the overall co-ordination of the railway network, calls for meetings with the participation of several railway companies, the RU cannot insist on separate meetings with Rail Net Denmark.

The parties are obliged to notify each other without delay on matters of importance to the rights and obligations referred to in the contract.

16.2 Confidentiality

The parties and their employees are obliged to maintain the confidentiality of any knowledge and information which may come into their possession, regarding the other party's commercial and technical relations and expertise, clients, collaboration partners, sub-contractors etc.

This confidentiality between the parties continues after the termination of the contract, whatever the cause.

Notwithstanding the above-mentioned, a party is entitled to disclose confidential information, if, and to the extent that:

- the information is required by legislation or a decision by a court or public authority, including the Ministry of Transport, Building and Housing, the Danish Transport and Construction Agency, and the Danish competition authorities or EU authorities
- the parties deem necessary and appropriate that the party passes the information to its advisers, provided that these advisers are or will be subject to a similar confidentiality obligation
- the information is publicly available or rightfully received by third parties

• the information is made anonymous and used for general sector statistics, annual reports or similar.

Any disclosure of information in addition to those listed above requires prior written consent from the non-disclosing party.

16.3 Access

The parties shall encourage mutual access to equipment, facilities, etc. whenever required for the performance of the parties' activities. This access is subject to compliance with applicable regulations.

17 Disputes

17.1 Negotiation and mediation

The contract is subject to Danish laws. If a dispute arises in connection with the contract, the parties must seek this solved through mediation.

If the dispute is not solved through mediation the parties may jointly appoint an independent expert mediator to make non-binding proposals for a resolution of the dispute.

17.2 Arbitration

Any question of interpretation of or compliance with the contract, which cannot be arranged amicably between the parties in accordance with section 17.1 of the contract is referred to arbitration.

The party seeking arbitration shall appoint an arbitrator and invite the other party within 14 days to appoint its arbitrator; failing this, the arbitrator will be appointed by the President of the Danish Eastern High Court.

The appointed arbitrators shall jointly appoint a chairman for the arbitration tribunal. If the arbitrators cannot agree on the choice of a chairman, the President of the High Court will make the appointment.

The arbitration tribunal shall adopt rules for the processing of the case in accordance with the customary procedural principles.

The arbitration tribunal shall be located in Copenhagen.

The arbitration tribunal shall decide on the basis of Danish laws.

18 Entry into force and termination

The contract shall enter into force on xx December 2017 and will expire without notice on

xx December 2019. The contract is valid for the timetable period K18.

Two copies of the contract are signed by the parties, each having received a copy.

Rail Net Denmark: Date The RU: Date

Name Title Name Title

Annex 1 on conditions relating to infrastructure and equipment - tracks and wheels

1. Tracks and wheels

1.1 Rail Net Denmark's obligations

Track guality

The track must be maintained in accordance with the applicable rules for the track and rail standards (Banenormer). For the overall track quality the requirements of Banenorm BN1-38 applies for 'point defects', while for standard deviations at least 50 % of all track sections of 200 m shall meet the requirements concerning standard deviations in both the medial and lateral direction 1 in Banenorm BN1-38.

The condition of the track is assessed once a year and is reported to the RU in the second quarter of the year.

Rail cant 1:40

The rail cant of Rail Net Denmark's track network, in case of new construction, renewal and maintenance, must be abraded to an inclination of 1:40 atop the rail, as stated in Banenorm BN2-47.

Physical condition of the track

Questions related to the physical condition of the track in connection with requests for changes in TIB-speed and/or its impact on the environment and comfort can be directed to Rail Net Denmark, who will ensure that the appropriate section of Rail Net Denmark handles such request.

1.2 The railway company's obligations

The RU's rolling stock must comply with the requirements described in the applicable order on vehicles' technical compatibility with the rail network.

Maintenance standard of rolling stock (dynamic influence of the track)

The RU's rolling stock must at all times be maintained in accordance with international standards, the requirements in the applicable order on the vehicles' technical compatibility with the rail network and the supplier's maintenance instructions. However, at the same time taking into account that standards and rules have changed since several of the railway company's vehicles are put into operation. Therefore the vehicles may not necessarily comply with these regulations (e.g. changed requirements for track forces etc.).

The RU must provide relevant sections of equipment standards and maintenance manuals to Rail Net Denmark on request.

Wheel profiles

The RU's rolling stock must use the wheel profiles adapted to a rail cant of 1:40. Wheel profiles must comply with the requirements in EN13715, unless otherwise agreed between the parties.

<u>Flat wheel surfaces</u> The RU's rolling stock must as a minimum meet the requirements provided in EN15313. The RU is obliged to monitor the condition with regard to flat wheel surfaces and remedy them as soon as they are discovered. Major cases of flat wheel surfaces, ovality or other forms of non-circular wheels must be reported immediately to Rail Net Denmark.

The RU is obliged annually to assess the condition of the flat wheel surfaces according to the requirements in EN15313 and report back to Rail Net Denmark in the second quarter of the year.

Annex 2 on conditions relating to infrastructure and rolling stock – train control and train radio

1. Train control system

ATC/HKT/STM software

Rail Net Denmark usually pays for the development and approval of new ATC/HKT/STM software but in certain cases, for instance if the RU requests major changes, Rail Net Denmark will require compensation for all or part of these costs. If such compensation is required, Rail Net Denmark is obliged to inform the RU prior to the initiation of the development project.

In connection with supervised test operation of the new ATC/HKT/STM software, the RU participates free of charge with staff (for read-out of event log) and rolling stock.

ATC/HKT/STM mobile

The RU must guarantee that the mobile ATC/HKT/STM-systems have been installed with the valid software at any time. In connection with the introduction of new ATC/HKT/STM software Rail Net Denmark provides the approved version available for free for the RU in 2 sets. From these EPROM the RU programmes the remaining number of EPROM for the RU's vehicles. The RU installs – at its own expense - this software in its rolling stock. Rail Net Denmark gives notice about changes in the valid software for mobile ATC/HKT/STM-systems no later than six months prior to commencement.

When using equipment with mobile ATC, the RU is obliged to maintain the Danish Transport and Construction Agency approved safety organisation with an ATC vehicle responsible person, as described in the Rail Net Denmark regulations IN656V1660 and IN656V1708. This vehicle responsible person is the overall responsible for maintaining a proper level of maintenance of the mobile ATC system at the RU in compliance with the security clearance for ATC. The ATC vehicle responsible person is obliged to participate in Rail Net Denmark's ATC service experience forum.

In cases where Rail Net Denmark is obliged to instruct the RU to modify the component composition, component versions, or installation principles, the RU must carry out such modification at their own expense and within a reasonable period set by Rail Net Denmark. If the RU demands to execute a specific interface adaptation between vehicle and the ATC equipment, it is the RU's responsibility to bear the expenses and carry out a project resulting either in a vehicle related adaptation or a request to adapt the SW of the ATC equipment.

ATC/HKT/STM fixed

Rail Net Denmark is the service provider for the ATC/HKT/STM system. Rail Net Denmark hosts a service experience forum with the participation of Rail Net Denmark's maintenance organization, operating organization and railway undertakings with ATC/HKT/STM. The

service experience forum meets four times a year, discussing matters on service experience and fault patterns.

Internal quality control

Rail Net Denmark continuously follows up on the operating stability of the fixed systems and eliminates faults in order to avoid repeated incidents. The RU continuously follows up on the operating stability of the mobile installations and remedies errors in order to avoid, as far as possible, repeated incidents and disconnection of the ATC/HKT/STM.

Rail Net Denmark and the RU explain any repeated incidents at the next service experience meeting.

<u>Other</u>

At Rail Net Denmark's ATC and ATC train stop sections there is a minimum requirement for brake power percentage in order to avoid that the train drivers experience disruption in the trains' conveyance. For instance on the ATC sections all danger points (e.g. crossings) are announced at projection distance at a minimum. This restrictive deceleration towards the danger point is accommodated by laying out track transponders in the traffic disturbance zone, able to remove unnecessary deceleration towards the danger point. For these sections, a type train is used that sets the traffic disturbance zone. In cases where one of the RU's trains does not fulfil the type train's set braking capacity, a disturbance will be noticed.

At ATC train stop sections the track transponders are designed and laid out to accommodate a type train with a brake percentage of 120. Trains with a lower percentage of brake power may experience disturbance from the ATC train stop system.

In order to locate and address errors in the infrastructure the RU is obliged to print and forward breakdown logs as requested by Rail Net Denmark, at their own expense.

The RU reports all observed ATC/HKT/STM fault incidents to Rail Net Denmark by stating:

- ATC/HKT/STM error code
- Location, as far as possible, incl. signal number or other unique identification
- Fault consequence
- Equipment number.

2. Train radio

Rail Net Denmark's total expenses in connection with the RU's request for approval of new types of train radio (versions), is to be paid by the RU, regardless of success of approval. A permit for traffic operations on a given section/station is equivalent to a permit for, and a requirement to, use the corresponding frequencies assigned to the route/station. The frequencies may be used only in connection with the time slots agreed with Rail Net Denmark.

If Rail Net Denmark due to external factors such as for instance new technology, expiration of maintenance warranties or legislative changes requires updating of the RU's existing train radios with new software or hardware, the expense must be paid by the RU. However, if Rail Net Denmark demands updating of the RU's existing train radios with new software or hardware, the expense is paid by Rail Net Denmark.

New train control systems

As a result of Rail Net Denmark's Signalling Programme, the RU's rolling stock operating on the main line will need to be equipped according to the common European standard for train control systems ERTMS/ETCS and on the S-line with CBTC. Mobile ATC systems will gradually be replaced by ERTMS systems with Danish STM, and mobile HKT systems by CBTC systems. According to section 2.9, Rail Net Denmark will be the owner of the equipment and Rail Net Denmark's system responsibilities as well as the RU's obligations will follow the same principles as for ATC and HKT.

For ERTMS/ETCS onboard equipment not purchased via Rail Net Denmark's Signalling Programme, the RU is itself responsible for the onboard equipment. The Danish Transport and Construction Agency sets out requirements for documentation of the ERTMS/ETCS onboard equipment's correct integration with the ERTMS/ETCS infrastructure and Rail Net Denmark may in this context offer the RU to help testing new onboard equipment types in Rail Net Denmark's "Joint Test Lab" in Valby, Denmark.

IT security in ERTMS/ETCS

Rail Net Denmark administers an ERTMS "Online Key Management System" which ensures that the ETCS onboard equipment purchased via the Signalling programme's contract with Alstom is provided with valid encryption keys to protect the ERTMS system's data communication against IT security threats. The RU shall use this system in accordance with Rail Net Denmark's instructions. Rail Net Denmark's ERTMS "Online Key Management System" is basically established only with direct connection to ETCS onboard equipment purchased at the Signalling programme's contract with Alstom. If the RU itself purchases new types of onboard equipment not connected directly to Rail Net Denmark's KMS domain, the RU must create its own KMS domain and agree to connect this with Rail Net Denmark's KMS domain.