

## Exhibit A05-3 Technical support, spare supply and Maintenance

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## 1. Framework and conditions

Norske tog is about to purchase a specified capacity of seats and beds for four lines, as detailed in Exhibit A1. To uphold the service operation more than one configuration is needed as well as bi-modal operation.

The maintenance is currently performed at 4 different workshops, see summary in “Maintenance depots” section.

The purpose of this document is to describe NT’s approach to extended support from the Contractor during the Lifetime of the Trainsets to the Operators, with focus on the “Base Order”. The scope defined in the Base Order may be extended with the mutually exclusive Option 1 or Option 2.

The description of the Base Order and the two options is based on NT’s understanding of the respective scopes.

For this hearing, Norske tog invites the reviewers to confirm that the scope descriptions are sufficiently detailed for a possible tender and, as appropriate, to propose changes or additions of the scope descriptions. It is important that such returning information shall not only be advantageous to one party alone, but optimizes the benefits for all parties, Norske tog, the Operators, the Contractor and other stakeholders.

## 2. Current situation

The existing fleet of Fjerntog consists of Loco hauled coaches and Type 73 EMU’s and are fully maintained by the Operator. Norske tog has the responsibility of special tools, test equipment and HCC’s including the maintenance of HCC’s. As the fleet is ageing there are limited activities in the areas of obsolescence management, technical support, documentation, training etc., which usually are key areas when securing the full support of fleets.

## 3. Base Order (TSSSA)

The Base Order is the main scope of supply. The basic set-up is that the Operators conducts all maintenance on the Trainsets, except specified activities which are conducted by the Contractor. The main task for the Contractor is to ensure that all the correct support in conducting maintenance by the Operators are at place when needed during the entire Lifetime.

## 4. Base Order (TSSSA)

The Base Order is the main scope of supply. The basic set-up is that the Operators conducts all maintenance on the Trainsets, except specified activities which are conducted by the Contractor. The main task for the Contractor is to ensure that all the correct support in conducting maintenance by the Operators are at place when needed during the entire Lifetime.

### 4.1 Scope

A more detailed breakdown of the scope for the TSSSA is as follows;

1. Technical support, help desk and IT Support;
2. Supply and storage of all Spare Parts including HCC’s and Critical Spare Parts and related Materials;
3. Transportation to / from the depots used by the Operators;
4. Maintenance of HCC’s and Critical Spare Parts except where stated that maintenance can be conducted by the Operator’s personnel;
5. All Special tools and Test Equipment necessary to conduct all stated maintenance;
6. Updates of all Documentation & Training;
7. Configuration management including design authority;
8. Obsolescence management;
9. Availability commitments of Spare Parts and other resources. The commitments may differ between Spare Parts and other resources affecting the service operation of the Trainsets and not affecting the same.
10. Based on information in the Contractor’s LCC model, as specified in Exhibit A05-2 (SoW LCC).

#### 4.2 Conditions

- Maintenance performed by Operator except where it is clearly stated that the maintenance shall be performed by the Contractor. The scope for the Contractor shall be as low as possible.
- The duration of the agreement is the Lifetime.

#### 4.3 Input requested from the Tenderer

To ensure that the TSSSA is specified the best way possible for the three main stakeholders, Norske tog, the Operators and the Contractor, the following input is needed from the Tenderer;

1. The organization to operate the TSSSA, including locations of Stores, where maintenance of HCC's and Critical Spare Parts are to be conducted, the regime to ensure that the Operators have the necessary resources in time for the maintenance etc. See the most probable locations for maintenance in the section below and present different scenarios for the maintenance operation.
2. The challenges, risk and opportunities as well as solutions of how to optimize the logistic flow and minimize the LCC. The description shall ideally be complemented with quantifiable substantiations from other similar contracts.
3. The different cost elements with specific focus on major cost drivers in the TSSSA as well as potential savings for the stakeholders. In relation to this, propose measures to optimize cost during the different phases of the life cycle.
4. The payment model, including start-up costs, operating costs of the facilities and organization, varying costs over the course of the contract, IT related costs etc.

### 5. Option 1 (TSSSA+)

Option 1 is based on all the requirements in the Base Order with additional requirements, mainly related to long term commitments on reliability and availability performance of the Trainset.

#### 5.1 Scope

The following scope is on top of the scope for the Base Order.

- Performance commitments for the Lifetime, mainly related to Reliability and Availability;
- Extended scope for the help desk and extended condition monitoring activities;
- Changes in the balance of which party performs certain maintenance activities. This can include, but is not limited to, fault finding, repairs and overhauls of specific equipment;

#### 5.2 Conditions

- The Contractor will be evaluated on the scope for the Operator with respect to conducting maintenance, where larger scope is valued higher.

#### 5.3 Tenderer input

The Tenderer is asked to describe pre-conditions for such option with specific focus on;

1. The changes in the organizational set-up for Option 1 compared with the Base Order;
2. The advantages and disadvantages, risk and opportunities for the three stakeholders;
3. Major cost drivers and propose measures to optimize the cost during the different phases of the life cycle;
4. Changes in the cost model for the Base Order;
5. An estimate of the additional costs for Option 1 compared with the Base Order;

### 6. Option 2 (FSA)

With a Full-Service Agreement, the Contractor is responsible to conduct all maintenance including sourcing of all resources for all Trainsets as well as commit to the performance requirements stated in the Contract.

## 6.1 Scope

The following scope is on top of the scope for the Base Order;

- All maintenance conducted by the Contractor;
- The Contractor must ensure access to the necessary workshops, by e.g. hiring them from BaneNOR.
- The Contractor will be responsible for all performance commitments during the Lifetime, including the performance commitments for which the Operator is responsible for related to the maintenance of the Trainsets, e.g. that a specific number of Trainset shall be available at a specific time point.

## 6.2 Conditions

- The Operators are responsible for all maintenance, except warranty related, until the end of the current operating agreements. These expires in the interval 2028 – 2031, a few years after the planned delivery of the Trainsets.
- In case of an FSA, the FSA shall be fully implemented when the operating contracts are out for competition again. The Contractor is responsible to ensure a seam-less transition from the current Operator to the Contractor.
- To safeguard employee's rights; Personnel currently working for the Operators shall be transferred to the FSA, in accordance with the Norwegian Working Environmental Act when the Contractor is hiring maintenance personnel for the FSA. One focus area is to ensure that a high percentage of the maintenance is conducted in Norway by Norwegian staff.

## 6.3 Tenderer input

The Tenderer is asked to describe pre-conditions for such option with specific focus on;

1. The changes in the organizational set-up for Option 2 (the FSA) compared with the Base Order including transition of scope of work from Operators to the Contractor;
2. The advantages and disadvantages, risk and opportunities for all identified stakeholders;
3. Major cost drivers and propose measures to optimize the cost during the different phases of the Lifetime;
4. Changes in the cost model for the Base Order;
5. An estimate of the additional costs for Option 2 (the FSA) compared with the Base Order.

## 7. Maintenance depots

In this section the most probable depots for the Type 79 units are described. Most of these are used by the current Operators. The working assumption is that there will be no new depots built for the Type 79 units but some depot areas will be adapted for the winning concept. The description below is based on the status of June 2021 and the description may be updated during the course of the tender and contract.

### 7.1 Oslo-Lodalen

<https://banenoreiendom.no/lodalen-verksted>

The main workshop which has

- four tracks in Vognhallen, 375 metres of length of which 363 metres with pit.
- five tracks in Toghallen, 210 metres of length of which 200 metres with pit.

There are wheel turning opportunities within the area.

### 7.2 Stavanger - Kvaleberg

<https://banenoreiendom.no/kvaleberg-verksted-stavanger>

Two tracks which are more than 110 metres of length. It was inaugurated in 2019 and maintenance on e.g. Type 73 units are conducted here.

### 7.3 Bergen

<https://banenoreiendom.no/bergen-verksted-nytt-bygg>

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New workshop inaugurated in July 2021. It has two tracks of length exceeding 105 metres and is designed to conduct maintenance on e.g. Type 74 and Type 75.

#### **7.4 Trondheim – Marienborg**

<https://banenoreiendom.no/marienborg-verksted>

The main workshop for the diesel locomotives and coaches operating on Nordlandsbanen, as well as the Type 92 and Type 93 DMU's. The tracks are very short and possibly units with a length of 55 metres cannot be maintained on the existing tracks.

#### **7.5 Trondheim – Støren**

<https://banenoreiendom.no/storen-verksted>

Planned inauguration in second quarter of 2022 and mainly designed for Type 76, which is a bi-modal unit. It is situated about 50 kilometres from the centre of Trondheim on the main line to Oslo. It can handle Trainsets of up to 120 metres of length on two tracks. This depot may only be available during nights.