

Request for Information (RFI)

Market assessment for lifecycle management upgrades of the Flirt fleet.

1. Background

1.1 About Norske tog

Norske tog AS (“NT”) is a limited liability company established in 2017, as part of the reformation of the Norwegian railway sector. The company is fully owned by the Norwegian Ministry of Transport.

The mandate of NT is to procure, own and manage passenger train vehicles in Norway, and thereby provide access to rolling stock by leasing out vehicles to passenger train traffic operators. The company’s rolling stock shall be offered on competition-neutral terms. NT has, with a few exceptions, the ownership of all passenger vehicles and locomotives in Norway. The company currently owns and manages nearly all Norwegian passenger trains operating on the Norwegian rail network, with a fleet currently amounting to over 250 trainsets.

To ensure that we have up-to-date knowledge of the solutions available in the market, Norske tog is conducting a market survey through this request for information. This provides us with a solid foundation for assessing future needs and adaptations, and helps us to meet possible changes in capacity requirements and ensure flexibility in the train fleet.

The Norwegian railway system faces increasing passenger volumes and evolving requirements for comfort, sustainability, and digitalization. At the same time, infrastructure investments and modernization programs create opportunities for improved performance and efficiency. Against this backdrop, Norske tog seeks to understand the market’s capabilities and innovative approaches for delivering lifecycle management upgrades of the Flirt fleet.

1.2 About the Flirt fleet

The FLIRT fleet (Type 74, 75 and 76) is a key part of Norwegian passenger rail traffic. The fleet consists of approximately 150 trainsets delivered in the period 2012–2022 and is used in both local and regional train traffic. The trains are designed for a technical lifespan of approximately 30 years, and several of the oldest trains are now approaching the midpoint of their lifespan. This triggers the need for strategic assessments related to upgrades, handling obsolescence and long-term value preservation. Historically, lifespan management has been based on a combination of corrective modifications and mid-life upgrades (MLU). Experience shows that this approach does not sufficiently ensure

operation throughout the entire lifespan, the correct timing of measures or the management of technological development.

Parameter	Type 74	Type 75	Type 75-2	Type 76
Type of train	EMU (Electrical Multiple Units)	EMU (Electrical Multiple Units)	EMU (Electrical Multiple Units)	BMU (Bi-mode Multiple Units)
Maximum speed	200 km/t	200 km/t	200 km/t	200 km/t (electrical power) / 160 km/t (diesel)
Number of cars	5	5	5	6
Length	105.5 m	105.5 m	105.5m	112.7 m
Hight	4.380 m	4.380 m	4,380 m	4,380 m
Seats	240	295	277	241
Catenary Voltage	15 kV AC, 16.7 Hz	15 kV AC, 16.7 Hz	15 kV AC, 16.7 Hz	15 kV AC, 16.7 Hz
Engine power	~4500 kW	~4500 kW	4500 kW	3000 kW (electric) 1550 kW (diesel) 1800 kW (diesel + traction battery)
Number of trainsets	53	63	20	14

For more information about the three train types see:

- Class 74: <https://www.norsketog.no/en/trains/motor-vehicles/class-74>
- Class 75: <https://www.norsketog.no/en/trains/motor-vehicles/class-75>
- Class 75-2: <https://www.norsketog.no/en/trains/motor-vehicles/class-75-2>
- Class 76: <https://www.norsketog.no/en/trains/motor-vehicles/class-76>

1.3 New approach – work packages instead of complete MLU

Norske tog is working to establish a new model for lifetime management based on a package approach. This model involves upgrades being carried out in several modification packages distributed over the train's lifetime, rather than one overall mid-life upgrade. The purpose is to ensure continuous improvement of operational stability, availability and customer experience through targeted measures adapted to the actual needs of the trains.

Norske tog plan to start the work on the packages in 2028. This means that the procurement processes will be in 2027, at the earliest start at the end of 2026.

1.4 Market dialogue (RFI) 2025

A market dialogue was conducted in the fall of 2025 to obtain input from the supplier market related to the proposed management model. Key findings from the dialogue include:

- Generally positive feedback on a modular and packaged approach
- Potential for increased competition and flexibility
- Need for clear handling of interfaces between deliveries
- Preference for functional requirements over detailed specifications

The dialogue also revealed risks related to coordination, integration and certification across suppliers.

2. Purpose and scope of the RFI

The purpose of this RFI is to obtain information from the supplier market as a basis for further development and operationalization of the life cycle management for the FLIRT fleet. The RFI process will contribute to:

- Obtain cost information for components, spare parts and services
- Improve estimates for cost per package and total life cycle costs
- Validate technical scope and possible solution alternatives
- Structuring modification packages
- Identify relevant suppliers and market opportunities
- Support development of procurement strategy and contract structure

Norske tog asks the market to provide input in the following areas:

- Prices of components and systems relevant to life cycle management
- Prices of critical spare parts and services
- Input on technical solutions and standardization
- Information on delivery models and implementation capabilities
- Information on labour rates and estimated hours

The estimated prices listed in the responses to the RFI are estimates and not binding for the respondent. The information will be used to further develop cost models and ensure a realistic basis for future procurements.

3. Introduction to the scope of work in the packages

For more information about the scope of work in the different packages see Appendix 1 Questionnaire. In addition to the two main packages there are need for corrosion-related repair work. These are also described in Appendix 1.

3.1 Package 1 Scope of Work

Package 1 of the lifetime management upgrades of the FLIRT fleet has the following scope of work:

- Installation of a cyber-secured gateway for train-to-land communications, including upgrading the fleet to a gigabit ethernet network with compatible switches.
- Upgrade of the IDU (Integrated Diagnostic Unit) screen for the driver.
- Dedicated screens for the rear-view cameras for the driver in the driver's cab.
- New Juridical Recording Unit (JRU).
- New Passenger Information System and Passenger Announcement System.
- Upgrade the fleet with new CCTV and video recorders.
- Modification of the compressors.

3.2 Package 2 Scope of Work

Package 2 of the lifetime management upgrades of the FLIRT fleet is currently understood as the following combination of scope of works:

- Modification of the HVAC system.
- Painting of the trainset.
- Anti-slide coating on the roof.
- Refurbishment of seats.
- SIFA.
- Vehicle Control Unit (VCU).
- Floor Covering Refurbishment
- Traction batteries

4. Structure of response

In Appendix 1, Norske tog has included a detailed questionnaire, which we kindly ask respondents to fill out.

Norske tog asks that the participants structure their response to this RFI as follows:

- Signed letter confirming the participants response to this RFI
- Filled out Appendix 1 – Questionnaire

Responses to this RFI are to be submitted **through the EU Supply portal before the deadline August 21st 2026.**

5. Confidentiality

Norske tog AS is subject to the Norwegian Freedom of Information Act (*Offentleglova*), which means that documents and information submitted in response to this RFI may be subject to public disclosure upon request. However, trade secrets and other information that qualifies for exemption under applicable law will not be disclosed.

Suppliers are therefore encouraged to provide a copy of the full RFI-response, where information that is considered to be trade secrets has been redacted. Upon reception of a request for public disclosure Norske tog must perform an independent assessment of whether the information in question qualifies as being exempt from disclosure, however so that the suppliers views will serve as input to Norske tog in this assessment.

6. General

Please note that this is a request for information, solely intended for informational purposes. It does not constitute a tendering process and shall not be understood as committing Norske tog to undertake any subsequent tendering process.

7. Appendices

Appendix 1 – Questionnaire