

# Action plan for Tunnels

## Plan for period 1<sup>st</sup> July 2024 - 30<sup>th</sup> June 2028

Chairperson: Freyr Pálsson, [freyr.palsson@vegagerdin.is](mailto:freyr.palsson@vegagerdin.is)

Vice-Chairperson: Atli Karl Ingimarsson, [atli@voluberg.is](mailto:atli@voluberg.is)

### Terms of reference

A working group will be established to exchange experience in road tunnels. The working group should address the following matters:

a) Tunnel Technologies

- For new and old tunnels, Technical equipment for tunnels develops very quickly. There's a need to constantly be aware of the purpose of the technical installations, what safety level there should be.
- Condition and lifetime of the technology to carry out predictable maintenance  
Predict degradation and detect errors in the technical installations
- Simulation in virtual reality (digital twilling)

b) Co-operation from installation to maintenance

In order to ensure operational newly built tunnels, it is essential that operations are included in the planning of new tunnels right from the start-up phase (MKV). Experience shows that tunnels built where operations have not entered into dialogue at an early stage often require major adaptations and changes when the tunnel is handed over for operation. This is costly and time-consuming.

c) Innovation and renewal of methods and materials in tunnel construction and maintenance

- New materials and new, innovative methods and their economic and environmental consequences

d) Safety in tunnels

- Cyber security, knowledge sharing and ongoing discussions are essential to ensure a high common level of security
- Safety challenges, e.g. automated driving, alternative fuels e.g. batteries, hydrogen and gas

### 2025 deadlines:

**Focus areas and Planned Actions: 15<sup>th</sup> October 2024**  
**Reporting and follow-up on the action plan: 1<sup>st</sup> November 2025**

Focus Areas	Planned Actions	Short Report on the Completed Plans
-------------	-----------------	-------------------------------------

<p>We intend to reflect NVF’s role by exchanging information, knowledge experience and best practices between the countries and among the members of the working group.</p> <p>The Tunnel working group has four focus areas (topics) to work on this period,</p> <ul style="list-style-type: none"> <li>a) Tunnel technologies,</li> <li>b) Co-operation from installation to maintenance,</li> <li>c) Innovation and renewal of methods and materials in Tunnel construction and maintenance</li> <li>d) Safety in tunnels.</li> </ul> <p>In addition, we have the common theme with the other WGs, <b>Climate and environment</b>.</p> <p>We aim at linking those topics together throughout the period but have focus on one (or two) topic each year.</p> <p>For the first year (2025) we will have focus on the topics Tunnel technologies and Co-operation from installation to maintenance.</p> <p>This will involve the interaction between tunnel design, installation and maintenance.</p> <p>The working groups SDGs</p>	<p>Even though the focus of each year’s work is one (or two) of the four topics it is intended that the working group considers the four topics in parallel throughout the 4 years period, together with the Climate and Environment theme.</p> <p>For 2025 we aim to hold one live working meeting and one online working meeting where each country’s status and vision in the topics <b>Tunnel technologies</b> and <b>Co-operation from installation to maintenance</b> is discussed, i.e., where are we, and where are we going in design and construction of new tunnels as well as operation and maintenance of existing tunnels.</p> <p>Nominate one or two contact persons from each of the countries that will help finding consideration matters within the topics and people to hold presentations.</p> <p>We will aim at holding one physical meeting each year of the period (2025, 2026 and 2027), and one seminar that will take place either 2026 or 2027.</p>	
--	---	--

are:

- nr. 9 Industry, Innovation and Infrastructure
- Nr.12 Responsible consumption and production.