5. KLASZTER: ÉGHAJLAT, ENERGIA ÉS MOBILITÁS NYITOTT FELHÍVÁSAI

2024. május 7-én megnyíltak az 5. klaszter mobilitás témaköréhez kapcsolódó felhívások

Időpont: 2024. május 17., 10:00-11:00
Regisztráció: https://nkfih.gov.hu/horizontpentek10/CL5

HORIZONT PÉNTEK 10 webináriumsorozat

Szemere Dorottya, NCP
5. Klaszter: Éghajlat, energia és mobilitás
e-mail: dorottya.szemere@nkfih.gov.hu

Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal

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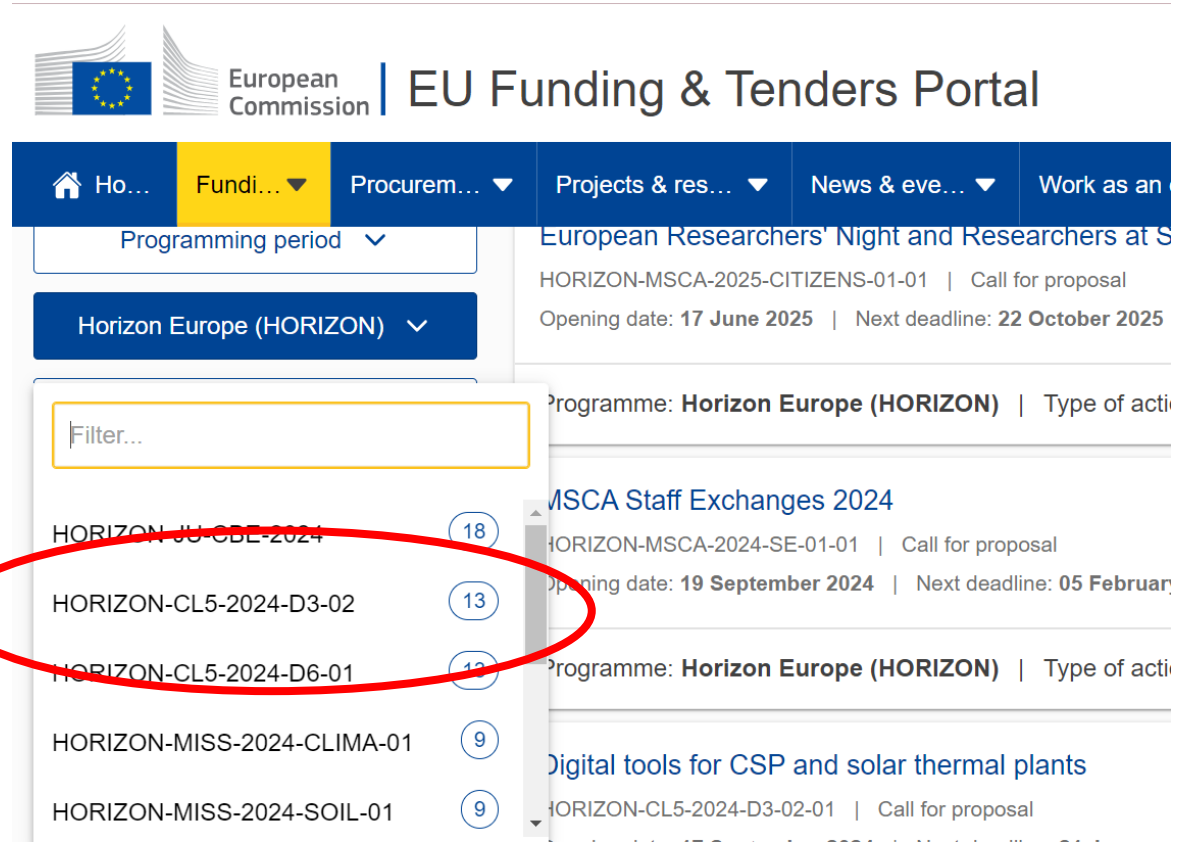
NCP Hungary – Horizon Europe

MINDEN PÉNTEKEN 10–11 ÓRA KÖZÖTT
az NKFIH Horizont Európa NCP csapat szervezésében

Hol találom meg a nyitott felhívásokat?

- Funding & Tenders Portal
- Call for proposals
- Programming period: 2021-2027
- Horizon Europe
- Call: HORIZON – CL5---
- Submission status: OPEN



Általános információk

Topic	Type of action	Budgets	Expected EU contributions per project	Indicative number of projects expected to be funded
HORIZON-CL5-2024-D6-01-01	RIA	12.00	6.00	2
HORIZON-CL5-2024-D6-01-02	RIA	14.00	14.00	1
HORIZON-CL5-2024-D6-01-03	IA	12.00	6.00	2
HORIZON-CL5-2024-D6-01-04	RIA	10.00	5.00	2
HORIZON-CL5-2024-D6-01-05	CSA	4.5	4.5	1

Általános információk II.

Topic	Type of action	Budgets	Expected EU contributions per project	Indicative number of projects expected to be funded
HORIZON-CL5-2024-D6-01-06	RIA	10.00	4.00 to 5.00	2
HORIZON-CL5-2024-D6-01-07	IA	20.00	10.00	2
HORIZON-CL5-2024-D6-01-08	IA	15.00	5.00	3
HORIZON-CL5-2024-D6-01-09	RIA	3.00	3.00	1
HORIZON-CL5-2024-D6-01-010	RIA	8.5	4.0	2

Általános információk III.

Topic	Type of action	Budgets	Expected EU contributions per project	Indicative number of projects expected to be funded
HORIZON-CL5-2024-D6-01-11	RIA	7.00	3.00 to 3.5	2
HORIZON-CL5-2024-D6-01-12	RIA	7.00	3.5	2
HORIZON-CL5-2024-D6-01-13	CSA	1.5	1.5	1

HORIZON-CL5-2024-D6-01-01: Centralised, reliable, cyber-secure & upgradable invehicle electronic control architectures for CCAM connected to the cloud-edge continuum

Research Innovation Action | TRL 5 | 12M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 21 Sept 2024
Link to the topic: Click here

Important building blocks for the in-vehicle control architecture include sensors and sensor data fusion for environment perception with AI "at the edge", using on-board high-performance computers and generic hard- and software including cyber secure components. At the same time, the new control architecture and its context aware building blocks are expected to enable the following:

- reliable, low-latency and high-bandwidth data communication for automated driving systems control to safeguard against cyber-attacks, malfunctions and malicious interactions.
- systemic functionality gains in upgradability, efficiency, modularity, compatibility, scalability, fail-operation, reliability and redundancy.
- definition of safety and security targets, open-source standard layouts and harmonised validation methods.
- easier development and integration of connected and automated driving functions.
- In order to achieve the expected outcomes, **international cooperation** is encouraged, in particular with **Japan** and the **United States** but also with other relevant strategic partners in **third countries**.

HORIZON-CL5-2024-D6-01-02: Scenario-based safety assurance of CCAM and related HMI in a dynamically evolving transport system

Research Innovation Action | TRL 5 | 14M EUR/project | 1 to be funded | Opening: 07 May 2024|Deadline: 21 Sept 2024
Link to the topic: Click here

- Developing a **validation methodology for scenario-based safety assurance of AI-based CCAM functions**. Trustworthiness of the AI-algorithms depends on how well the system responds to scenarios in its Operational Design Domain (ODD) – specificity and how it responds in case it ends-up outside its ODD – robustness. Consequently, methods need to be developed on the use of scenarios to describe the ODD of AI-based systems.

- **Connectivity**. Developing validation procedures for CCAM systems that rely on V2X for safety-critical functions i.e., the inclusion of the connectivity context. Ensuring aspects of reliability, trustworthiness and cyber-security with respect to V2X is essential. The approach to V2X connectivity is technology neutral.

- **Continuous Safety Assurance approach**. Developing an approach for a continuous safety validation methodology, to monitor the safety state of deployed CCAM systems in operation (real traffic) during its service life, following type approval. Performance metrics for the reliability of the monitored data, including cyber-security aspects, and indicators for the safety state should be proposed.

- Also needed is the development of requirements for the monitoring system for use in future standardisation, regarding the exchange of data and safety performance indicators with service organisations and authorities.

HORIZON-CL5-2024-D6-01-02: Scenario-based safety assurance of CCAM and related HMI in a dynamically evolving transport system

Research Innovation Action | TRL 5 | 14M EUR/project | 1 to be funded | Opening: 07 May 2024|Deadline: 21 Sept 2024
Link to the topic: Click here

- **Validating the virtual approach**. Developing tools that ensure the **relevant degree of detail and the appropriate representation of other road users' behaviour** (incl. **Vulnerable Road Users** such as pedestrians and/or bicyclists) in virtual scenario-based testing. This includes methods to deal with perception, localisation, and world modelling errors in the validation procedures.

- **Human Machine Interaction**. Developing a safety assurance methodology that incorporates the assessment of Human Machine Interaction (both **driver-vehicle and vehicle-road user**) concepts for higher levels of automation (conformity checks as well as test set-ups with suitable metrics) **ensuring safe communication between driver and vehicle and between vehicle and other road users**, making Human Machine Interaction inclusive (i.e. in terms of age, mental and physical ability, cultural aspects, etc.).

- Proposed actions are expected to develop recommendations for **harmonisation and standardisation** and to feed into on-going discussions **regarding EU type vehicle approval rules** as well as in the framework of the UNECE. Actions should be based on the outcomes of **previous methodologies developed in HEADSTART, as well as research funded under HORIZON-CL5-2021-D6-01-02**

- Upcoming CCAM projects, in particular in the area of large-scale demonstrations, validation, digital infrastructure and key enabling technologies should be taken into account to **ensure compatibility.**

HORIZON-CL5-2024-D6-01-03: Orchestration of heterogeneous actors in mixed traffic within the CCAM ecosystem

Innovation Action | TRL 6-7 | 6M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 21 Sept 2024
Link to the topic: Click here

- Defining the comprehensive requirements (including data exchange) for the **orchestration schemes** with regards to the **heterogeneous actors in mixed traffic** (automated and non-automated traffic, people and goods and different modes).

- Developing **traffic management tools that are essential for the coordination of mixed automated and non-automated mobility**. These management tools should be robust **and able to address uncertainty due to uncertain technological developments, performances, services and business cases** that go beyond what is available through current research results. Tools should **support orchestration by, among others, integration of ad-hoc and maneuver coordination** (SAE cooperation classes), **efficient route guidance and capacity aware demand management.**

- Defining and demonstrating **business and governance models** (including for public actors) **for the orchestration of traffic management in real-time CCAM traffic conditions in urban and motorway environment**, allowing actors to address their needs on a win-win basis

- **Developing measures and KPIs** to demonstrate the benefits and added value of orchestration for traffic management actions (in terms of traffic efficiency, energy efficiency, safety etc.). **Demonstrating a process that ensures trust in the traffic orchestration scheme** proposed as well as sufficient accessibility to quality data for all traffic actors involved and readiness for large-scale demonstration actions. In order to achieve the expected outcomes, **international cooperation** is encouraged, in particular with Japan and the United States but also with other relevant strategic partners in third countries.

HORIZON-CL5-2024-D6-01-04: AI for advanced and collective perception and decision making for CCAM applications

Research Innovation Action | TRL 6-7 | 5M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- Methods to establish collective awareness of CCAM applications that are **resilient to faulty sources**, thereby ensuring safe operations. Guidance for failsafe designs should be developed.

- Methods to embed an HI approach in the entire action chain towards collective awareness (from basic perception to driving functions) to allow for seamless operation and real-time decision-making while enabling human-like control of CCAM applications by combining system and domain knowledge (of the vehicle and its technologies on one hand and of the transport environment including all the human interactions on the other, thereby understanding of potential risks and capabilities and needs of other road users). Tooling will be required to deliver situational awareness information in a structured way, based on multiple sources and in real-time. In addition, the development and integration of **ethical goal functions** to support collective awareness should be included.

- Proposals should **monitor and align relevant developments under this topic** with on-going discussions regarding EU type vehicle approval rules as well as in the framework of the UNECE.

- This topic requires the effective **contribution of SSH disciplines including ethics and the involvement of SSH experts**, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities. In order to achieve the expected outcomes, **international cooperation** is encouraged in particular with Japan and the United States but also with other relevant strategic partners in third countries.

HORIZON-CL5-2024-D6-01-05: Robust Knowledge and Know-How transfer for Key-Deployment Pathways and implementation of the EU-CEM

Coordination and Support Action | TRL -| 4.5M EUR/project | 1 to be funded |Lump Sum I
Opening: 07 May 2024|Deadline: 05 Sept 2024 I Link to the topic: Click here

- Ensure the maintenance and expansion of the **Knowledge Base to support the CCAM stakeholder community and CCAM Partnership for the identification of future needs for R&I, testing and demonstration initiatives** and for moving into operations (minimum block requirements, standards and common definitions to run pilot services across Europe). The content of the Knowledge Base should support the monitoring of the progress made on the targets and impacts set by the CCAM Partnership. More specifically, the proposed action should regularly collect from the CCAM Partnership projects the data and information needed to track the KPIs set out in the CCAM SRIA, using a survey developed and maintained in agreement with the Partnership.

- Identify further needs for targeted content for specific stakeholder categories and in particular, develop content that is accessible to non-experts, thereby **supporting capacity building of the general public**. The proposed action should define the above-mentioned stakeholder categories, and develop a subsequent communication strategy (content, material, media, etc.) using realistic and accessible terms to address different target groups (including non-experts).

- Provide effective **dissemination and concertation mechanisms and means for the stakeholder community** (e.g., workshops, symposia, international cooperation, capacity building content for non-experts) and **organise the EUCAD2027 event** (as a conference with a side exhibition and demonstration site) together with the European Commission and the CCAM Partnership**, to enable the exchange of experiences and practices, stimulate collaboration and cooperation between all CCAM stakeholders** (including at international level) and reach consensus on challenges and future R&I needs within the thematic clusters of the Partnership.

HORIZON-CL5-2024-D6-01-05: Robust Knowledge and Know-How transfer for Key-Deployment Pathways and implementation of the EU-CEM

Coordination and Support Action | TRL -| 4.5M EUR/project | 1 to be funded |Lump Sum I
Opening: 07 May 2024|Deadline: 05 Sept 2024 I Link to the topic: Click here

- Facilitate the work of the CCAM SRG and stimulate the cooperation between EU Member States/Associated Countries for improved coordination of activities in the areas identified as priorities by the SRG. Provide an **analysis of initiatives in EU Member States/Associated countries and support the SRG in identifying areas for R&I cooperation**.

- Ensure **representation of European stakeholders in international cooperation**, information exchange and harmonisation initiatives on CCAM. Provide a global output on CCAM activities to support the development of European agendas by exploring potential opportunities and R&I domains for international cooperation.

- Continue to evaluate and update the EU-CEM through targeted discussions with EU Member States/Associated countries in order to align the CEM with national mobility strategies and regulations, also looking at both national and regional transport and mobility data to ensure compatibility. **Support the practical implementation of the EU-CEM (for existing and innovative use-cases) and provide training programmes for CCAM projects to integrate the methodology**.

- **Assess the level of awareness and attitudes of European citizens, decision- and policy makers about CCAM** as well as their intention to use through regular surveys and workshops. Results should be published in the Knowledge Base and mechanisms should be provided to integrate findings into the EU-CEM. **A link should be established with existing survey initiatives in place at EU and Member States'/Associated countries' levels**.

HORIZON-CL5-2024-D6-01-06: Optimising multimodal network and traffic management, harnessing data from infrastructures, mobility of passengers and freight transport

Research and Innovation Action | TRL 5 | 5M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- **Developing and testing** new generation multimodal, flexible, agile and adaptable, secure and resilient transport network and traffic management systems, leveraging state of the art technologies (e.g. artificial intelligence, big data, edge computing, internet of things, blockchain).

- **Assessing and simulating the effects on multimodal network and traffic management of new forms of mobility** (e.g. zero-emission, connected and automated vehicles and vessels, car sharing/pooling, active-/micro-mobility, sustainable land/air transport modes and drones), as well as of innovative services (e.g. Mobility/Logistics as a Service), in different **urban and rural environments**, considering the **socio-economic acceptability and different user needs** (including vulnerable and gender groups).

- Performing simulations for network-wide optimisation of traffic models, aiming towards **a "social optimum" and an evaluation of mobility options for multimodal mobility and freight flows** (including last-mile), enabling a modal shift to more sustainable modes (leveraging public transport), while addressing planned and unplanned events of mobility and freight systems under disruption.

- **Demonstrating the collection**, aggregation, analysis and use of network-wide data from infrastructures, vehicles/vessels and users (using ICT and EU satellite-based systems), **from across transport modes** (modal and intermodal data), **stakeholders and national borders**, while preserving **data privacy, security and confidentiality to data providers**, thereby enabling effective and intelligent multimodal network and traffic management, and even further data exchanges with other sectors (e.g. energy and telecoms).

HORIZON-CL5-2024-D6-01-06: Optimising multimodal network and traffic management, harnessing data from infrastructures, mobility of passengers and freight transport

Research and Innovation Action | TRL 5 | 5M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- Performing early **pilot activities** on multimodal network and traffic management of limited scale in mobility hubs (e.g. rail nodes, maritime or inland ports), where cross-modal or hinterland inter-connections are present for passenger and freight traffic flows.

- **Designing and testing innovative multimodal network and traffic management services, offered by public and/or private stakeholder**s, which can be operated at **network centres (e.g. at cities or hubs)** and/or at decentralised level (e.g. by users or vehicles/vessels themselves).

- Developing and showcasing workable governance and dynamic incentive models, for the effective engagement of **public and private stakeholders** in interoperable data exchange, in the optimisation of transport network and traffic management and in promoting a better use of (public) transport systems.

- Evaluating the **qualitative and quantitative impact of the proposed measures and project results**, including on reducing travel delay, transport emissions and energy consumption, with a clear baseline for each use case.

HORIZON-CL5-2024-D6-01-07: Scaling up logistics innovations supporting freight transport decarbonisation in an affordable way

Innovation Action | TRL 7 | 10M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- Demonstrate **at least 10 working open standard processes**, procedures and services across several logistics nodes providing seamless access to users. Processes, procedures, and services **are expected to have an open access definition** and **scalability aspects** need to be addressed.

- Develop and demonstrate further **compatibility and interoperability** of the full range of standardised **multimodal transport units** (from containers to boxes), also **across transport modes**.

- To achieve scalable multimodal logistics networks connectivity, demonstrate models and processes, supported by Artificial Intelligence, Internet of Things, etc., which can **increase utilisation of assets and resources in actual logistics service providers' networks** dynamically. These models should also consider how to **increase the adoption of automated and zero-emission vehicles/vessels** and the use of **rail and inland waterways through multimodal solutions**.

- Demonstrate tools, technologies and processes **to achieve different types of flows compatibility** (e.g. through shared standard boxes) and **synchro-modal solutions over the logistics service providers' networks, involving shippers and retailers** to that purpose. Demonstrate the **benefit** (e.g. GHG reductions vs increased operational costs) **of decentralised inventory positions in the pooled logistics network** allowing **low speed multimodal transport** for (re-)positioning stock levels and **answering short term lead times with closer to consumer inventory positions** (e.g. full visibility of inventory positions in retail networks extended to suppliers and logistics service providers).

HORIZON-CL5-2024-D6-01-07: Scaling up logistics innovations supporting freight transport decarbonisation in an affordable way

Innovation Action | TRL 7 | 10M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- **Test and demonstrate sound business and governance models and rules** (including organisational change requirements) for resource-sharing across logistics networks, to ensure operational efficiency of freight movements irrespective of mode, nodal operations and freight characteristics.

- **Test and demonstrate the functionalities and relevance of the data sharing framework**, serving for **optimisation of the logistic system**, including through the establishment of an appropriate semantic model and its components, such as for instance **Digital Twin**s with specific algorithms allowing for predictive planning of logistic related events. **Synergies for rail** will need to be sought with the **EU-Rail Programme projects implementing the Transversal Topic on Digital enablers and Flagship Area 5**.

- **Develop and demonstrate scalability** of the proposed solutions providing **open access mechanisms** and low thresholds to the system of logistics networks. Consider **realising visualisation and simulation models and tools to show the practical use of collaborative models for the various types of stakeholders and the potential benefits** based on actual cases. Develop specific actions to encourage, facilitate and ensure the access of SMEs and smaller players.

- **Measure and demonstrate** the benefits in terms of **use of resources**, **affordability** of proposed solutions, throughput **capacity and environmental impact of the scaled up horizontal collaboration among logistics networks** (system of logistics networks).

HORIZON-CL5-2024-D6-01-08: Improved transport infrastructure performance – Innovative digital tools and solutions to monitor and improve the management and operation of transport infrastructure

Innovation Action | TRL 7 | 5M EUR/project | 3 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- **Improve performance of transport infrastructure** and **increase multimodality with the use of digital tools** in view of its potential to facilitate real-time decision-making, improve safety and to save bandwidth and energy. **Develop solutions for self-monitoring, self-reporting, non-intrusive/non-destructive inspection** and testing methods, including advanced predictive modelling and structural safety assessment.

- **Demonstrate ability to process internal and external raw data**, such as sensor data, into smart data and related cloud architecture that can be deployed to optimize infrastructure management processes

- **Building on the common European mobility data space and the Digital Transport and Logistics Forum** (DTLF), facilitate the seamless use and provision of data and information **to the end user across the transport infrastructure network and logistic chain**, with a view to progress advancing towards **smart mobility concepts for passengers and freight**.

- **Enhance prediction of demand from individual behaviour**s, enabling appropriate modal capacity and demand management. Propose **digital solutions** contributing to a more inclusive, comfortable, accessible and flexible infrastructures and multi-modal services.

- **Include at least three pilot demonstrations of the proposed solutions in operational environment (minimum at TRL7)** on land and inland waterways transport infrastructure.

HORIZON-CL5-2024-D6-01-09: Policies and governance shaping the future transport and mobility systems

Research Innovation Action | TRL - | 3M EUR/project | 1 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- **Analyse the influence of politicians on the making of sustainable and non-sustainable transport policies**, as well as the impact of their design on accessibility in peripheral areas, identifying synergies with the reform of governance instruments of the European Union (e.g. Trans-European Transport Network, Urban Mobility Framework) to enhance the gradual phase-out policy effect for private car ownership.

- Propose **approaches that better integrate mobility policies with policies from other sectors** (e.g. energy efficiency, renewables, gender mainstreaming, healthcare, retail and poverty and low income population reduction).

- Consider the **benefits of public/private partnerships towards future transport and mobility system**, as to secure local adjustment and solutions that are effective and economic for private stakeholders, with a long-term sustainable horizon for the society.

- Identify and assess the **potential of (shared) mobility hubs at neighbourhood-level** and define the role of organisational innovations in supporting them.

- Explore how **small, medium cities and metropolitan areas manage the emergence of micro-mobility** and how driverless vehicles are likely to affect urban areas and land use (e.g. mixed use of urban space, dynamic parking). Identify the major flaws on **national transport and mobility regulations in EU countries and provide recommendations on how to better harmonize them trans-nationally** (e.g. incentives for putting bicycles on trains etc.).

HORIZON-CL5-2024-D6-01-09: Policies and governance shaping the future transport and mobility systems

Research Innovation Action | TRL - | 3M EUR/project | 1 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- **Identify regulations and accountability measures to ensure that mobility data are best utilised for the common good**, for example, harnessing the potential of data to stimulate innovation for more sustainable mobility behaviour patterns and guide urban planning, while also protecting citizen privacy. **Analyse the drivers for public acceptability of** stringent and mandatory **transport policies** (e.g. carbon taxes, urban traffic bans).

- Examine the **most effective strategies in promoting the transition to more sustainable freight transport in Europe** following the recent and ongoing changes in consumer culture, such as the increase in e-commerce and online.

- A **'social optimum'** balance should be included to developing research knowledge within new governance models from several perspectives (e.g. socio-economic, environmental, health, accessibility, gender and inclusion, safety and security aspects). **Synergies with the projects GECKO, ACCTING and SHARED GREEN DEAL should be explore**d, given that **mobility behaviours** and the **role of cities as agent of change** will influence **policy makers** in **enabling adaptive and anticipatory regulatory schemes** and **governance with novel policies** contributing to sustainable mobility goals.

- Actions are expected to **involve citizens from different backgrounds** and origins in the **policy analysis** to gather and study their **understanding, perceptions, opinions and positions**, thus contributing to **co-designing and co-assessing** the most appropriate policies' recommendations. **Citizen platforms** if existing, can be used for this purpose. This topic requires the **effective contribution of SSH disciplines!**

HORIZON-CL5-2024-D6-01-10: Ensuring the safety, resilience and security of waterborne digital systems

Research Innovation Action | TRL 5-6 | 4M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- Activities will address the development of a **HAZOP methodology** for whole system assessment of highly digitised, connected complex vessels.
- The methodology should **include system, system of systems designed for specific function** or sets of functions and/or a methodology for the entire vessel, including when application of artificial intelligence algorithms is foreseen.
- The methodology will be **developed with relevant stakeholders** including shipbuilders, system designers and equipment providers, IT professionals, operators, class societies, regulators.
- **The acceptability of the methodology to all stakeholders will be assessed** and an implementation roadmap will be developed to account for any identified barriers. Work will draw upon the expertise of other sectors with more developed procedures for the assessment and assurance of digital safety.
- **On-board systems and functions integration by design, for safe and secure operation** should be used to test and demonstrate the safety and security of the applications.

HORIZON-CL5-2024-D6-01-10: Ensuring the safety, resilience and security of waterborne digital systems

Research Innovation Action | TRL 5-6 | 4M EUR/project | 2 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- The developed methodology will be applied to a representative complex **highly digitised vessel, safety critical systems** and functions will be identified, and appropriate reliability regimes and mitigation measures will be established with consideration of both malicious intervention and system failure. **Cost effective methodologies** for validating the safety, resilience and correct functioning of digital and connected safety critical ship systems, including system of systems, will be developed and demonstrated.

- **Cost effective methodologies for validating the safety, resilience and correct functioning of digital and connected safety critical ship systems**, including system of systems, will be developed and demonstrated: 1, In case of validation on the basis of a **theoretical digital models and/or digital twinning** (e.g. hardware in the loop) then the validity of the model should be proven as well as its flexibility to be applied towards a range of vessel designs. 2, In case of validation on the basis of **physical testing of the responses** of the final system to a range of fault conditions and malicious interventions during the final trials, there should be assurance that **test conditions are representative of the identified risks**.

- Guidance **should be produced and disseminated concerning the recommended methodology** for assuring the safety and resilience of complex digitalised and connected shipping.

- The safety assessment should be **developed by using methodologies suitable for being assessed in international fora** such as the International Maritime Organisation.

HORIZON-CL5-2024-D6-01-11: Ensuring the safety, resilience and security of waterborne digital systems

Research Innovation Action | TRL | 3,5M EUR/project | 2 to be funded | Lump Sum I
Opening: 07 May 2024|Deadline: 05 Sept 2024 Link to the topic: Click here

- **Scenarios of disruptive changes that can make a transport system unstable should be identified**, the consequences on transport safety be analysed, and solutions to tackle them developed. This includes safety implications of rapid changes / new incentives (sometimes contradictory to previous ones, e.g. regarding the use of public transport in a pandemic situation).

- Analysis of how **socio-economic differences may affect the safety of individuals** in case of disruptive changes (e.g. individual mobility options are determined by the socio-economic status).Study of **how the concept of resilience at the system level** can be applied and used for the improvement of transport safety.

- Evaluation of the **potential and development of recommendations on how to improve transport safety and resilience** through suburban planning and future housing developments with their effects on the demand for transport and through the design of transport infrastructure networks.

- A **definition of resilience in the context of transport systems should be provided**, and factors of **transport safety and energy efficiency** that are essential to take into account should be determined. Moreover, **scenarios for disruptive changes should be identified that can make a transport system instable**, the consequences on transport safety be analysed, and solutions to tackle them be developed. Hence, a structured method to secure safety as an integrated part in resilient transport systems should be provided. It requires **the inclusion of relevant expertise in social sciences and humanities (SSH**) and will benefit from international cooperation.

HORIZON-CL5-2024-D6-01-12: A new framework to improve traffic safety culture in the EU

Research Innovation Action | TRL 5-6 | 4M EUR/project | 2 to be funded | Lump sum I
Opening: 07 May 2024|Deadline: 05 Sept 2024 Link to the topic: Click here

- Better understanding of the **link between road safety outcomes and safety culture** and the ways how these factors can be sustainably transformed.
- Consideration in particular - but not exclusively - of **traffic behaviour with high safety** impacts
- Assessment of **safety cultures and respective activities from other transport modes** such as aviation and rail and their potential for road safety.
- Assessment of the **interplay between shifting to more energy efficient mobility solutions and traffic safety**.
- Consideration of **safety impacts of new technologies** (including better understanding and use of Advanced Driver Assistance Systems (ADAS)) and emerging transport means and services.
- Consideration of the **safety impact of the increasing penetration of urban micro-mobility systems in mixed traffic scenarios** and evaluation of potential **safety improvements for the protection of micro-mobility users**.

HORIZON-CL5-2024-D6-01-12: A new framework to improve traffic safety culture in the EU

Research Innovation Action | TRL 5-6 | 4M EUR/project | 2 to be funded | Lump sum I
Opening: 07 May 2024|Deadline: 05 Sept 2024 Link to the topic: Click here

- Stocktaking of **good practices from countries and companies worldwide already successfully applying cultural approaches to (road) safety** work, including countries outside of the EU such as the US and Australia.

- Targeting **all levels of the socio-economic systems** of societies in the EU

- **Clear guidance & hands-on advice on the design and evaluation** of interventions **to define, measure, transform and institutionalise traffic safety culture across all areas affecting road safety** – for decision-makers and practitioners, with a good geographic coverage across EU institutions, EU Member States/Associated countries (at the level of individual road users, at the level of enterprises and authorities, at the level of EU Member States/Associated countries and the EU). At least **three different pilot tests of selected interventions at various levels in different EU Member States/Associated countries**.

- Actions should be **based on the results of previous research projects in this domain, such as the TraSaCu project**, and make advances by completing and updating their theoretical foundations, **teaming up with EU stakeholders** and bringing their findings to life by **establishing a framework** for **true cultural transformation** in road safety both **among stakeholders and road users**. Making **use of data that is already being collected in EU Member States/Associated countries about traffic safety culture such as the ESRA initiative** (which already involves 60 countries, including over 20 European ones) and **Baseline project** is strongly encouraged.

HORIZON-CL5-2024-D6-01-13: EU Member States/Associated countries research policy cooperation network to accelerate zero-emission road mobility

Coordination and Support Action | TRL - | 1.5M EUR/project | 1 to be funded | Opening: 07 May 2024|Deadline: 05 Sept 2024
Link to the topic: Click here

- Address **zero-emission road mobility for people and goods**. The programme support all phases of the innovation: technology development, demonstration, deployment and implementation will be considered.

- Support **EU Member States/Associated countries in fostering synergies with the national and regional funding and implementing and accelerating priority actions identified in the 2ZERO Strategic Research and Innovation Agenda (SRIA)** in coordination with the 2ZERO States Representatives Group.

- **Collect and share, up-to-date and targeted information on European and national R&I funding programmes**, demonstration projects and testing activities, test sites, living labs with their features and capabilities, standards, testing and assessment methodologies as well as programmes **in the field of zero emission mobility** in Europe and beyond.

- **Exchange knowledge and experiences on zero emission road transport programmes in Europe**, building on and **connecting existing database platforms**, such as TRIMIS, 2ZERO events and conferences, including the H2020RTR series, Member State's and stakeholder's information sharing portals.

- Proposals should consider the **involvement of the European Commission's Joint Research Centre (JRC)**, whose contribution could consist of supporting the establishment of harmonized and shared national data on projects.

Köszönöm a figyelmet!

dorottya.szemere@nkfih.gov.hu