

Republika
Slovenija



Ministrstvo za
infrastrukturo in
prostor – Služba
za mednarodne
zadeve

OBZORJE 2020

»Smart, Green and Integrated Transport«

dr. Fedor Černe, sekretar
NKT za področje prometa

INFORMATIVNI DAN

Gospodarska zbornica Slovenije, Ljubljana, 14.1.2014

Nekaj uvodnih misli

- Kdor je začel danes je prepozen
- Kaj je mogoče povedati in česa ne?
- Česa NKT zanesljivo ne ve?
- Kje je lahko NKT koristen?
- Vsebina predstavitve
 - Kje so na voljo informacije
 - Glavne značilnosti H2020
 - Kje vse je še mogoče iskati priložnosti?
 - Kako brati razpise

Promet v EU

- 1.9 mio. direktnih zaposlitev
- 10 mio. indirektnih zaposlitev
- 3% EU GDP

<http://www.transport-ncps.net/>

The image shows a screenshot of the ETNA Project website, viewed in a Mozilla Firefox browser window. The browser's address bar displays the URL www.transport-ncps.net/index.php. The website's header features a navigation menu with the following items: Home, News, Calls, Events, Services, EU Networks, Horizon 2020, Library, and ETNA Plus. The ETNA logo, which includes the text "ETNA plus" and "EUROPEAN TRANSPORT NETWORK ALLIANCE", is prominently displayed. Below the navigation menu, there is a search bar with the placeholder text "Search...". The main content area is dominated by a large photograph of a white Airbus A380-800 aircraft on a runway. Below the photograph, the website is organized into several sections:

- SERVICES FOR NCP'S**: Prepare NCP network for Horizon 2020; Train NCPs with the tools developed, through specific training sessions, forums and specialised twinning; Identify European and non-European transport innovation strategies, as well as the way they are implemented; [read more](#)
- SERVICES TO APPLICANTS**: Prepare European research stakeholders for Horizon 2020, Provide partner search facility with advanced searching functionality with potential participants in Transport related projects, Map sources of public sector funding as well as debt and equity finance; [read more](#)
- FUNDING MAP**: During Horizon 2020, it is likely that NCPs will be responsible for providing a much wider range of information on the whole Transport Research and Innovation landscape, including private sector finance; [read more](#)
- 2014 & 2015 CALLS PUBLISHED**: Published in: News | December 11th 2013 marked the date for publication of first Horizon 2020 programme calls for proposals. Eight calls for proposals covering 2014-2015 Work programme were published for the *Smart, green and integrated transport* Challenge. [read more](#)
- UPCOMING EVENTS**: Transport Research Arena 2014 (14.04.2014 09:30)

In the bottom left corner, there is a "MENU" section with links to Home, News, Calls, and Events. The browser's taskbar at the bottom shows the Windows Start button and several application icons, including Internet Explorer, Firefox, and the ETNA Project application.



New Horizon 2020 web site

<https://ec.europa.eu/programmes/horizon2020>

European Commission

Home | What is Horizon 2020? | Find Your area | How to Get funding? | News & Events | Multimedia & Publications | Project Stories

European Commission > Horizon 2020 > What is Horizon 2020? > Horizon 2020 programme sections > Smart, Green and Integrated Transport

HORIZON 2020

The EU Framework Programme for Research and Innovation

Smart, Green and Integrated Transport

This Challenge aims to boost the competitiveness of the European transport industries and achieve a European transport system that is resource-efficient, climate-and-environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society.

The Transport Challenge is allocated a budget of €6 339 million for the period 2014-2020 and will contribute to four key objectives, each supported by specific activities.

Horizon 2020 will provide funding for a **resource efficient transport that respects the environment** by making aircraft, vehicles and vessels cleaner and quieter to minimise transport's systems' impact on climate and the environment, by developing smart equipment, infrastructures and services and by improving transport and mobility in urban areas.

Horizon 2020 also aims at a **better mobility, less congestion, more safety and security** with a substantial reduction of traffic congestion; with a substantial improvement in the mobility of people and freight; by developing **new concepts of freight transport and logistics** and by reducing accident rates, fatalities and casualties and improving security.

Horizon 2020 supports a **global leadership for the European transport industry** by reinforcing the competitiveness and performance of European transport manufacturing industries and related services including logistic processes and retain areas of European leadership (e.g. such as aeronautics).

Get funding

- ▶ Green vehicles 2014
From 11/12/2013 to **28/08/2014**
- ▶ Mobility for Growth 2014-2015
From 11/12/2013 to **18/03/2014**
- ▶ Green vehicles 2015
From 11/12/2013 to **27/08/2015**
- ▶ Mobility for growth 2014-2015
From 11/12/2013 to **31/03/2015**
- ▶ Mobility for growth 2014-2015
From 11/12/2013 to **27/03/2014**

YOUR FEEDBACK

Horizon 2020
Programme

Find your area

- ▶ [Agriculture & Forestry](#)
- ▶ [Aquatic Resources](#)
- ▶ [Bio-based Industries](#)
- ▶ [Biotechnology](#)
- ▶ [Energy](#)
- ▶ [Environment & Climate Action](#)
- ▶ [Food & Healthy Diet](#)
- ▶ [Funding Researchers](#)
- ▶ [Health](#)
- ▶ [ICT Research & Innovation](#)
- ▶ [Industrial Technologies](#)
- ▶ [Innovation](#)
- ▶ [Partnerships with Industry and Member States](#)
- ▶ [Raw Materials](#)
- ▶ [Research Infrastructures](#)
- ▶ [Security](#)
- ▶ [SMEs](#)
- ▶ [Social Sciences & Humanities](#)
- ▶ [Society](#)
- ▶ [Transport](#)



HORIZON 2020

The EU Framework Programme for Research and Innovation

European Commission > Horizon 2020 > Areas > Transport

- Home
- What is Horizon 2020?
- Find Your area
- How to Get funding?
- News & Events
- Multimedia & Publications
- Project Stories

Related Horizon 2020 sections

- Smart, Green and Integrated Transport

Horizon 2020 Programme

Transport

European Transport research contributes to finding solutions to the increasing mobility of people, with low-carbon technologies, clean vehicles, smart mobility systems and integrated services for passengers and freight.



Efficient transport is a fundamental condition for sustainable prosperity in Europe. Transport provides citizens with essential means of mobility and contributes to employment, growth and global exports. The European transport industry represents 6.3% of the Union's GDP and employs nearly 13 million people.

However, our transport systems and habits are too dependent on oil, which will become scarcer and is a serious polluter of our planet. Transport accounts for about 63% of oil consumption and 29% of all CO2 emissions.

Unless the present trends are corrected, the economic costs of traffic congestion will increase by about 50% by 2050, the accessibility gap between central and peripheral areas will widen and the social costs of accidents and pollution will continue to rise.

European research aims to strengthen the competitiveness of our transport industries and to develop a better European transport system for the benefit of all.

In the transport sector, research is at the core of developing new technologies for greener, smarter, more efficient transport means and innovative solutions for safer, more sustainable and inclusive mobility.

- ### Links:
- Transport Research and innovation portal
 - Digital Agenda for Europe - Mobility
 - Research and innovation - Transport
 - Mobility and Transport



Get funding

- Green vehicles 2014
From 11/12/2013 to **28/08/2014**
- Mobility for Growth 2014-2015
From 11/12/2013 to **18/03/2014**
- Green vehicles 2015
From 11/12/2013 to **27/08/2015**
- Mobility for growth 2014-2015
From 11/12/2013 to **31/03/2015**
- Mobility for growth 2014-2015
From 11/12/2013 to **27/03/2014**

[all calls in Transport](#)

#H2020

Horizon 2020 @EU_H2020

YOUR FEEDBACK

- Country Profiles
- Programmes
- Projects
- Publications
- Events
- Newsroom
- News archive**
- Press releases
- Newsletters
- Flash reports
- About TRIP



Home > Newsroom > News Archive
News archive

HORIZON 2020: First Transport Calls for Proposals Published

24 Dec 2013:
Horizon 2020, the world's biggest ever Research and Innovation framework programme, has officially launched the first round of calls for proposals. Eight calls under the "Smart, Green and Integrated Transport" societal challenge have now been published:

- For 2014:
- [Green Vehicles 2014](#)
 - [Mobility for Growth 2014 - Two Stages](#)
 - [Mobility for Growth 2014 - Single Stage A](#)
 - [Mobility for Growth 2014 - Single Stage B](#)

- For 2015:
- [Green Vehicles 2015](#)
 - [Mobility for Growth 2015 - Two Stages](#)
 - [Mobility for Growth 2015 - Single Stage A](#)
 - [Mobility for Growth 2015 - Single Stage B](#)

More details on the calls can be found via the [Participant Portal](#) and overall information on Horizon 2020 can also be consulted on a [new website](#) entirely dedicated to the programme.

TRIP in 2013: a Year of Success!

24 Dec 2013:
With a steady pace in terms of audience's increase during 2013, TRIP established itself as the reference portal for communicating transport research and innovation in Europe. TRIP is regularly followed by about 2500 newsletter subscribers and the website has an average of 8000 visits a month. Within only a few months, TRIP also reached an impressive number of connections on [LinkedIn](#). A special thanks to over 1200 LinkedIn Members for this great success!

- Explore the portal and find out what's in it for you:
- A [Project Database](#) of over 7500 transport research related projects
 - [Country Profiles](#), presenting national institutions and organisations responsible for funding, promoting and supporting transport research
 - [Programmes](#) for research and innovation in transport at European and national

Full-text search...

[Project Search >>](#)

[Newsletters](#)

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[Submit Event](#)

[Submit News](#)

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RESEARCH & INNOVATION

Participant Portal

European Commission > Research & Innovation > Participant Portal > Opportunities

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FP7 & CIP Programmes

Calls

Call Updates

COSME

Other Funding Opportunities

MOBILITY FOR GROWTH 2014-2015

H2020-MG-2014_SingleStage_A

Sub call of: [H2020-MG-2014-2015](#)

Publication date	2013-12-11	Deadline Date	2014-03-27 +17:00:00 (Brussels local time)
Budget	€23,500,000	Main Pillar	Societal Challenges
Status	Open	OJ reference	OJ C 361/9 of 11 December 2013

Call description

Call documents

Get support

Subscribe to Notifications

Topics and submission service

- [MG-1.4-2014: Coordinated research and innovation actions targeting the highest levels of safety for European aviation](#)
- [MG-1.6-2014: Improving skills and knowledge base in European Aviation](#)
- [MG-1.7-2014: Support to European Aviation Research and Innovation Policy](#)
- [MG-1.8-2014: International cooperation in aeronautics](#)
- [MG-9.2-2014: User behaviour and mobility patterns in the context of major societal trends](#)
- [MG-9.3-2014: Analysis of funding schemes for transport infrastructure](#)
- [MG-9.4-2014: Research, technology development and market prospects for the European transport industries](#)
- [MG-9.7-2014: Innovation awards for students and researchers in the context of the Transport Research Arena conference - TRA 2016](#)



RESEARCH & INNOVATION

Participant Portal

European Commission > Research & Innovation > Participant Portal > Opportunities

HOME FUNDING OPPORTUNITIES HOW TO PARTICIPATE EXPERTS SUPPORT LOGIN REGISTER

Horizon 2020

- Calls
- Search Topics
- Call Updates

FP7 & CIP Programmes

- Calls
- Call Updates

COSME

Other Funding Opportunities

MOBILITY for GROWTH 2014-2015

H2020-MG-2014_SingleStage_A Sub call of: H2020-MG-2014-2015

Publication date	2013-12-11	Deadline Date	2014-03-27 17:00:00 (Brussels local time)
Total Call Budget	€23,500,000	Main Pillar	Societal Challenges
Status	Open	OJ reference	OJ C 361/9 of 11 December 2013

Topic: Coordinated research and innovation actions targeting the highest levels of safety for European aviation **MG-1.4-2014**

Topic Description Topic Conditions & Documents Submission Service

Specific challenge: Safety is embedded in aircraft design and operations making air transport the safest transport mode. In Europe, accident rates involving passenger fatalities are of the order of 1.6 accidents per million flights (EASA[1], 2011). Nevertheless, existing risks (e.g. cabin air quality) and new risks (e.g. arising from the integration of new technologies, new operations or emerging potential hazards) must be actively monitored and mitigated; continuous efforts are necessary to maintain the excellent records Europe has achieved over the last 60 years. Furthermore, the aviation community pursues a further decrease of accident rates by one order of magnitude and further significant progress will be achieved only if safety is addressed at system level. Therefore actions are needed using an integrated approach to safety.

Scope: Proposals will encompass research and innovation actions in targeted areas of aviation safety. The proposed research and innovation actions should be part of a broader safety roadmap established at system level, identifying and prioritising practical actions to be undertaken in the next seven years. It should be consistent with other roadmaps (e.g. European Aviation Research Partnership Group thematic programme, Strategic Research and Innovation Agenda (SRIA) of the Advisory Council for Aviation Research and Innovation in Europe (ACARE). Coordination with key European organisations which have a mandate in aviation safety (e.g. EASA, EUROCONTROL) and key European Initiatives (e.g. ACARE Working Group 4 on 'Safety and Security', OPTICS Coordination Action on safety research) should be ensured.

Proposals should also demonstrate that the research and innovation actions for which EU-funding is requested will be complemented by other research and innovation actions on safety carried out by the proposal partners with at least an equivalent magnitude in terms of estimated resources (e.g. cumulated effort in person-months) in a time frame which matches that of the project. A work plan should be put forward to evaluate this leverage effect during the

new technologies, new operations or emerging potential hazards) must be actively monitored and mitigated; continuous efforts are necessary to maintain the excellent records Europe has achieved over the last 60 years. Furthermore, the aviation community pursues a further decrease of accident rates by one order of magnitude and further significant progress will be achieved only if safety is addressed at system level. Therefore actions are needed using an integrated approach to safety.

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The composition of the consortium should reflect openness and the fact that the partners have been selected in the light of the nature of the proposed actions. The overall management of the initiative could be designed for a longer term than the duration of the project with a potential to be extended to other activities after a first review of the concept. Where relevant, actions could include networking with projects from leading entities from third countries, to leverage resources and global impact (e.g. with US and Canada).

Proposals should demonstrate in a quantified manner their potential to mature the Technology Readiness Level (TRL; please see part G of the General Annexes) of technologies and concepts in the range 1-6. Proposals should also provide ad-hoc indicators to measure the expected progress in terms of reduction of the number of accidents when comparing the situation before the start of the project and after the implementation of results. Also an indicator assessing the magnitude of the leverage effect resulting from the coordination of the research based on both the EU-funded part and the part of the work relying on partners in-house resources should be provided.

Expected impact: Actions will contribute to reach by 2050 less than one accident per 10 million commercial aircraft flight departures and an 80% reduction of the accident rate compared to 2000 for specific operations, where weather hazards are evaluated and mitigated, in a system which includes all types of air vehicles, manned and unmanned, while preserving cost and time efficiency. It is also expected that the proposal will gather critical mass on a pan-European scale, overcoming gaps, duplication and fragmentation, create a leverage effect, enhance coherence and efficiency of aviation safety research in Europe and underpin the development of future safety regulations, operations and technology.

Type of action: Research and Innovation Actions

[1] European Aviation Safety Agency.

➤ **6339 M € for 7 years 2014-2020**

➤ **50/50 JTIs/collaborative calls**

- Clean Sky
- SESAR
- Fuel Cells & Hydrogen (contribution)
- [Shift2Rail]

➤ **867 M € for WP 2014-15**





WP 2014-15 Transport calls

Calls (publication 11 December 2014)	Budget (€ Mio) 2014	Budget (€ Mio) 2015
Call 'Mobility for Growth'	374,5 (+2)	184 (+10)
1. Aviation	70 (+2)	36
2. Rail	52	-
3. Road	66	23 (+5)
4. Waterborne	56	18
5. Urban	40	66,5
6. Logistics	32	18
7. ITS	31	-
8. Infrastructure	19	17,5
9. Socio-economic and behavioural research	8,5	5 (+5)
Call 'Green Vehicles'	129	30
Call Small business and Fast Track	35,87	38,69
Contribution to Smart Cities, Blue Growth	33.5	25.5



Work Programme: new features

- **challenge-based approach: broad latitude for applicants to devise innovative solutions**
- **broader topics, less prescription, focus on impact**
- **biennial WP, annual calls (in most cases)**
- **1 topic = various projects (in most cases)**
- **no 'ringfencing' of topic budget/ranking (in most cases)**
- **simplified types of actions/funding rates**
(research and innovation actions: 100%; innovation actions: 70%/100%;...)
- **2-stage evaluation for most topics**
- **keywords and tags for easy access to information**



Call 'Mobility for Growth'

SURFACE TRANSPORT

Areas addressing mode specific challenges:

- Rail, Road, Waterborne
- Call "Green Vehicles" H2020-GV-2014/2015

Areas addressing transport integration specific challenges:

- Urban, Logistics, Intelligent Transport Systems, Infrastructure

Areas addressing cross-cutting issues:

- Socio-economic and behavioural research and forward looking activities for policy making
-

EGVI PPP: 'EUROPEAN GREEN VEHICLES INITIATIVE'

159 M €



The call on Green Vehicles is an essential component of road transport R&I, it supports:

- Improvement of energy efficiency of road transport vehicles
- Use of new types of non-conventional energies in road transport, such as electricity, CNG and LNG, bio-based fuels

Demonstration is essential to ensure timely deployment of the new technologies

Call 'Green Vehicles'

TOPICS:

They are all single stage



- Next generation of competitive Li-ion batteries to meet customer expectations – **GV1** - 2014
- Optimised and systematic energy management in electric vehicles – **GV2** - 2014
- Future natural gas powertrains and components for cars and vans – **GV3** - 2014
- Hybrid light and heavy duty vehicles – **GV4** - 2014
- Electric two-wheelers and new new light vehicle concepts – **GV5** - 2014
- Powertrain control for heavy-duty vehicles with optimised emissions – **GV6** - 2015
- Future natural gas powertrains and components for heavy duty vehicles – **GV7** - 2014
- Electric vehicles' enhanced performance and integration into the transport system and the grid – **GV8** - 2015

in red: topics open in 2014



GV.1-2014. Next generation of competitive lithium ion batteries to meet customer expectations

Single stage: deadline 28/08/2014

SPECIFIC CHALLENGE:

Made in Europe Li ion batteries that are competitive and deliver better performance electrified vehicles (complementary to topic pursuing longer terms solutions in the Advanced Materials 2014 Work Programme)

SCOPE (1 or more issues):

Optimisation of cost, safety, resistance to high-power charging, durability, recyclability, hybridisation with other types of storage, scale-up
Better knowledge on the ageing mechanism and its modelling to support test procedures and the development of standards (open for international cooperation)

EXPECTED IMPACT:

Facilitate the launch of production in Europe by demonstrating industrial scale prototypes showing cell-level energy densities at least 20%, and costs by 20% better than the best cell chemistries on the market

TYPE OF ACTION: Research and Innovation Actions



Horizon 2020: Smart, green and integrated transport

**Topics of interest for the transport sector in other challenges of
the 2014-15 work programme**

Programme Committee Meeting 11 November 2013

The items listed after are topics or areas from the 17 work programmes (2014-2015) that either mention transport as a field of research or are relevant for transport applications.

Transport theme mentioned in thematic work programmes (1) :

Health

Topic Understanding common mechanisms of diseases and their relevance in co-morbidities. Transport sector mentioned as an area to investigate.

Food

Call for Blue Growth: Unlocking the potential of Seas and Oceans.

Transport challenges present in the 3 following topics :

- Innovative offshore economy,*
- Sub-sea technologies,*
- Response capacities to oil spills and maritime pollutions.*

Transport theme mentioned in thematic work programmes (2):

Energy

Transport challenge is widely spread through the WP and mostly under the following entries:

- Sustainable biofuels and alternative fuels for the European transport sector*
- Call for smart cities and communities: Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse*
- Energy storage*
- Bioenergy: engine tests with new types of biofuels*

Climate action

Transport issues are found mostly under 2 entries:

- Improving the air quality and reducing the carbon footprint of European cities*
- Ensuring the sustainable supply of non-energy and non-agricultural raw materials (transport as a component of the production chain).*

Transport theme mentioned in transversal work programmes (1) :

European research infrastructures (including e-Infrastructures)

Call 2 - Integrating and opening research infrastructures of pan-European interest mentions "Smart, green and integrated transport" research infrastructures.

Leadership in enabling and industrial technologies

- *Information and Communication Technologies: Smart Cyber Systems and internet of things for transport applications*
- *Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing. Several entries for transport application of new materials. Detailed under the impact section as a field of possible deployment.*
 - **Materials for severe operating conditions, including added-value functionalities. Transport mentioned as field of application**
 - **Fibre-based materials for non-clothing applications. Transport as field of deployment.**
- *Battery work in NMP work programme, topic 17: Post-lithium ion batteries for electric automotive applications.*

Transport mentioned in transversal work programmes (2) :

Access to Risk Finance

Transport is not mentioned but the transport related companies represent roughly 15% of RSFF funding under the FP7 period. This trend could be continued.

Innovation in small and medium-sized enterprises

Transport is a potential field of applications.

Security

Numerous references to transport issues through the WP.

- Crisis management: Demonstration activity on large scale disasters' governance and resilience of EU external assets against major identified threats or causes of crisis*
- Crisis management: Crises and disaster resilience – operationalizing resilience concepts*
- Critical Infrastructure Protection: Demonstration activity on tools for adapting building and infrastructure standards and design methodologies in vulnerable locations in the case of natural catastrophes*
- Supply Chain Security: Technologies for inspections of large volume freight.*



TRA 2014: 14-17 April 2014, Paris

- **TRA, European Conference on Transport Research**, is an event that intends to be both:
 - A scientific conference with a full review process.
 - A networking event for the whole innovation chain: researchers, academia, practitioners, industries, users...
- Location: **CNIT, Paris- La Défense, April 14-17, 2014**
- Hosted by the French Ministry of Ecology, Sustainable Development, and Energy (**MEDDE**) - Organisation delegated to **IFSTTAR**
- Theme and slogan: "**Transport Solutions: From Research to Deployment**", "**Innovate Mobility, Mobilise Innovation**".
- About **3,000 participants** are expected, **1800 m2 of exhibition space**.
- **Web site:** <http://www.traconference.eu>



HVALA ZA VAŠO
POZORNOST

