

The EU Framework Programme for Research and Innovation HORIZON 2020

Smart, green and integrated Transport

Transport Work Programme 2018-2020

EC-DG RTD Directorate D - Clean Planet Unit D3 – Low Emission Future Industries

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Research and Innovation



H2020 Work Programme 2018-2020

H2020 Policy Priorities	Transport Policy Goals
 Increased investment in sustainable development and climate related R&I > 35% climate actions > 60% sustainable development 	Resource efficient transport that respects the environment
Integrating digitisation in all industrial technologies and societal challenges ➤ Digital Single Market Strategy	Better mobility, less congestion, more safety and security
Strengthening international R&I cooperation: Flagships to ensure scope and scale in targeted areas	Global leadership for the European transport industry
Addressing societal concerns : security and migration	Socio-economic and behavioural
Market creating innovation: EU Innovation Council pilot	research & forward looking activities



Transport Work Programme 2018-2020 What's new?

- > **3 year** coverage: 2018-2019 and 2020
- 2 key Focus Areas (FA)* (out of 4) addressing global challenges cutting across sectors and programmes:
 - 1. Building a low-carbon, climate resilient future
 - 2. Digitising and transforming European industry and services
- Improved coordination to address technologial challenges: EUR 90 mio indicative budget to R&I activities in Call 2020 on **batteries**
- Reduced number of topics and broader scope, new structure
- Reinforced International Cooperation InCo: 5 flagship initiatives of large scale and scope addressing global challenges (on Aviation called "Safer and Greener Aviation in a Smaller World", on air quality, on urban mobility, on Automation, and on freight logistics) and 10 more topics encouraging InCo
- Two-stage procedure for MG call only (except the Aviation topics) and singlestage procedure for GV and ART

***<u>Focus Areas</u>**: The other two FA aim at "Connecting economic and environmental gains – the Circular Economy" and at "Boosting the effectiveness of the Security Union"



Continued emphasis on EU priorities (e.g. climate change, safety, automation)

Examples: Topics linked to low-carbon transport, impact of connected and automated mobility, batteries for waterborne sector

Complementarity (Complement the overall coverage of the WP 2018-2020)

Examples: New topics on long distance shipping decarbonisation, safety related to commercial drivers' fitness, urban air-mobility

Increased impact of R&I actions

<u>Examples</u>: Topics focusing on cities and the replication of innovative urban mobility solutions, support to 'first-of-a-kind' solutions for sustainable transport



WP2020 – Overview of Transport related topics

> **25** topics split among three calls:

- a) the Mobility for Growth Call (MG) → 19 topics (including the Blue Growth topic) 191 m. euros
- b) The Automated Road Transport Call (ART) →2 topics 50 m.euros
- c) The Green Vehicles (GV) call \rightarrow 4 topics 55 m. euros
- ➤ 3 topics to be funded by the transport WP part following the creation of the cross-cutting call on batteries → LC-BAT call 2020 - 60 m Euros
- Contribution to part 10 of the WP (SC3-Energy) with 13
 m. euros (Smart Cities and Elena facility)



The majority of topics in the MG call is RIA (12 topics). There are 5 CSA topics and 2 IA. ART and GV calls will be implemented almost exclusively through IA topics (there is only 1 CSA topic in the GV call).

Some topics include sub-topics with different implementation instruments (RIA, IA, CSA) and requirements. Check the conditions for call at the end of each call (e.g. eligibility and admissibility conditions, evaluation criteria and scoring, etc.)

Topic MG-4-9-2020 will be implemented as a lump sum topic as part of a pilot application across the whole H2020 Work Programme



Transport Work Programme 2020 Budget Overview



Calendar of the calls

2020 activities	Budget	Opening	Deadline		
Mobility for Growth two-stage topics	€92 M	03/09/2019	09 Jan 2020 (1st stage) 08 Sept 2020 (2nd stage)		
Mobility for Growth single-stage topics	€99 M				
Green Vehicles single-stage topics	€55 M	€55 M 03/12/2019			
Automated Road Transport single-stage topics	€50 M				
Batteries Single stage topics	€90 M	03/12/2019	21/04/2020		



Submission of

proposals

Funding & Tender Opportunities portal

https://ec.europa.eu/info/funding-tenders/opportunities/portal/

European Commission Single Electronic Data Interchange Area (SEDIA)	unities	English 💷 Register Login
SEARCH FUNDING & TENDERS V HOW TO PARTICIPATE V PROJECTS & RESULTS	WORK AS AN EXPERT SUPPORT 🔻	select programme
The Funding & Tenders Portal is the single entry point (t procurements managed by the European Commission.	he Single Electronic Data Interchange Area) for applicat "Search	nts, contractors and experts in funding programmes and
Find calls for proposals and tenders	funding & tenders"	<u>()</u>
Search calls for proposals and tenders by keywords, programmes	Q Search	
What are calls for proposals?	What are calls for tenders?	How to participate in 5 steps
Calls for proposals by EU Programme		>
News	>	Other funding and data

• Covering all EU funding programmes



Admissibility & eligibility check

Admissibility & eligibility check 2

Specificity for the MG 2-10-2020 topic (CSA subtopic):

In order to ensure appropriate coverage, proposals must include National Authorities from at least 10 EU Member/Associated countries.

• Specificity for the MG-4-9-2020 topic:

This topic is under the lump sum funding pilot scheme and specific application forms apply. More info in the topic site on the F&TP, under the "Topic conditions and documents" section.

Check out this video: "<u>All I need to know about Lump Sum</u> <u>Pilots</u>" and this <u>Guidance note</u>.



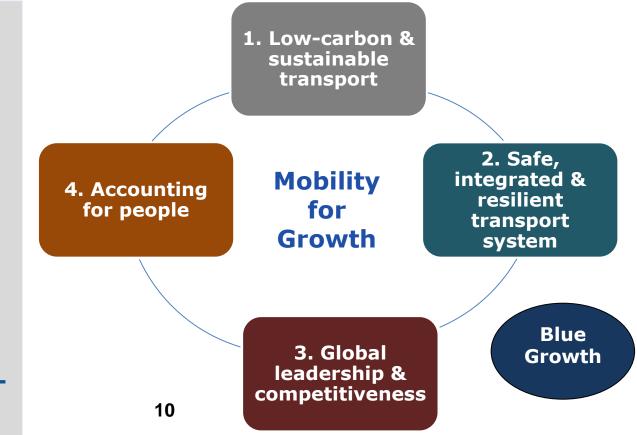
MOBILITY FOR GROWTH – MG call



Overall objectives:

- Reconcile sustainability and competitiveness
- Ensure better and safer mobility for all

 Address socioeconomic aspects and provide evidence for policymaking





Transport Work Programme 2018-2020



MOBILITY FOR GROWTH – MG call

- 1. Low-carbon and sustainable transport
- Focus on:
- > The transition towards zero-emission and quieter mobility for all modes, for people and goods
- > Tools and mechanisms for monitoring and detection of emissions & noise
- Scientific evidence for decision making process and planning
- Cross-modal/transport integration solutions in urban areas



Low-carbon & sustainable transport: topics and budget *Total EU contribution: EUR 65 m in 2020*

Торіс	Title		Stages	Budget (m€) 2020
LC-MG-1-12	Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions	IA/CSA	2/1	18/4
LC-MG-1-13	Decarbonising long distance shipping	IA	2	20
LC-MG-1-14	Understanding and mitigating the effects on public health of emerging non-regulated nanoparticle emissions issues and noise	RIA	2	10
LC-MG-1-15 InCo flagship Aviation	Towards global environmental regulation of supersonic aviation	RIA	1	13



MOBILITY FOR GROWTH – MG call

2. Safe, integrated and resilient transport systems

Focus on:

- > Transport safety: contribution to the "zero road fatalities" goal in a changing environment
- Innovative solutions to reduce congestion and ensure seamless, safe and sustainable mobility for people and freight
- > More resilient transport system and support network capacity

Safe, integrated and resilient transport system: topics and budget

Total EU contribution: EUR 50.5 Mio in 2020

European Commission

Торіс	Title	Action type	ages	Budget (m€)
		type	Sta	2020
MG-2-10	Enhancing coordination between Member States' actions in the area of infrastructure research with a particular focus on biodiversity and ameliorating environmental impacts and full automated infrastructure upgrade and maintenance	CSA/RIA	1/2	3/17
MG-2-11	Network and traffic management for future mobility	RIA	2	20
MG-2-12	Improving road safety by effectively monitoring working patterns and overall fitness of drivers	RIA	2	7
MG-2-13	Coordination and support for an integrated freight transport and logistics system	CSA	1	1
MG-2-14	The effects of automation on the transport labour force, future working conditions and skills requirements	CSA	1	2,5



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MOBILITY FOR GROWTH – MG call

3. Global Leadership & Competitiveness

Focus on:

- > Vehicle/vessel design and manufacturing and life-cycle approaches
- Rapid integration of ICT and IoT
- > Human component of CAT technologies

Global Leadership & Competitiveness: topics and budget

Total EU contribution: EUR 56,5 Moi in 2020

European Commission

Торіс	Title	Action type	Stages	Budget (m€) 2020
MG-3-4	Innovative electric network architectures and systems, optimising global energy, electrical power, data and communication for aviation	RIA	1	10
MG-3-5	Next generation multifunctional and intelligent airframe and engine parts, with emphasis on manufacturing, maintenance and recycling	RIA	1	15
MG-3-6	Towards sustainable urban air mobility	RIA	1	15
MG-3-7	Improved Production and Maintenance Processes in Shipyards	IA	2	15
MG-3-8 16	'First of a Kind' solutions for sustainable transport and mobility: EU initiative for accelerating EU-wide market access, scale up and derisking	CSA	1	1,5



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MOBILITY FOR GROWTH – MG call

- **4. Accounting for the People**
- Focus on:
- > Innovative solutions for an accessible & inclusive transport system
- > Behavioural issues and user needs
- > Appropriate regulatory frameworks and policies to support innovation and deployment
- > Dissemination and exploitation of sustainable mobility solutions

Accounting for the People: topics and budget

Total EU contribution: EUR 11 m in 2020

European Commission

Торіс	Title Action type		Stages	Budget (m€) 2020
				2020
MG-4-7	Digitalisation of the transport system: data sharing	RIA	1	3
MG-4-8	Advanced research methods and tools in support of transport/mobility researchers, planners and policy makers	RIA	1	3
MG-4-9	The European mobility culture of tomorrow: Reinventing the wheel?	RIA + LUMP SUM	1	1
MG-4-10	Improving impact and broadening stakeholder engagement in support of transport research and innovation	CSA	1	4





MOBILITY FOR GROWTH – MG call

- One 'Blue Growth' topic in 2020 aiming at:
- > Noise mitigation

European Commission

> Reducing the environmental impact



Blue Growth: topics and budget Total EU contribution: EUR 8 m in 2020

Торіс	Title	Action type	Stages	Budget (m€)
				2020
MG-BG-03	Under water noise mitigation and environmental impact	RIA	1	8

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Automated Road Transport – ART call

Focus on:

European Commission

- Large-scale/cross-border demos to promote market introduction of highly automated driving systems
- > Trials on sustainable automated functions in real driving conditions various traffic scenarious and urban areas
- > Regulatory framework, certification procedures and standards
- New concepts for shared, connected and automated mobility
- > ART-related cross-cutting issues: safety, users' needs, business models,...

Luropean Commission

Automated Road Transport: topics and budget

Total EU contribution: EUR 50 m in 2020

Торіс	Title	Action type	Stages	Budget (m€) 2020
DT-ART-05	Efficient and safe connected and automated heavy-duty vehicles in real logistics operations	IA	1	20
DT-ART-06	Large-scale, cross-border demonstration of connected and highly automated driving functions for passenger cars	IA	1	30





GREEN VEHICLES – GV call

Bring forward the activities of the **EU Green Vehicle Initiative**: prepare the ground for a **potential massive introduction of electrified vehicles**

- Support design and manufacturing of 3rd generation of electrified vehicles, components and new generation of batteries
- Improve the charging solutions to meet end-users needs (access, time, cost, payment systems, etc.)
- Develop new concepts to reduce energy consumption and emissions of long-distance vehicles
- Cooperate with developing and emerging economies for demonstration activities and pilots in large urban areas

Green vehicles: topics and budget

Total EU contribution: EUR 55 m in 2020

* * * European Commission

Торіс	Title	Action type	Stages	Budget (m€)
				2020
LC-GV-06	Advanced light materials and their production processes for automotive applications	IA	1	24
LC-GV-07	Reducing the environmental impact of hybrid light duty vehicles	IA	1	5
LC-GV-08	Next generation electrified vehicles for urban and suburban use	IA	1	25
LC-GV-09	Setting up a common European research and innovation strategy for the future of road transport	CSA	1	1



Excellence

Evaluation criteria

Clarity and pertinence of the objectives

Soundness of the concept, including trans-disciplinary considerations, where relevant

Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground-breaking objectives, novel concepts and approaches)

Credibility of the proposed approach

The expected impacts listed in the work programme under the relevant topic
Enhancing innovation capacity and integration of new knowledge
Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets; and, where relevant, by delivering such innovations to the markets
Any other environmental and socially important impacts (not already covered above)
Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant

Impact

Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

Complementarity of the participants within the consortium (when relevant)

Appropriateness of the management structures and procedures, including risk and innovation management

Stage-1 proposals: only the aspects of the criteria in red are evaluated



Thank you



Find out more:

Participant Portal <u>http://ec.europa.eu/research/participants/portal/desktop/en/home.html</u> Expert evaluators needed! <u>http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html</u> Learn more about the Transport Challenge and the WP <u>http://ec.europa.eu/programmes/horizon2020/en/h2020-section/smart-green-and-integrated-transport</u>

Tip 1: Have a strong concept

1 Calls are very competitive

2 Success rate for a first stage call is around 30% and 30% for a second stage call

3 Success rate for a single stage call is around 15%

- **4** Have a strong concept:
 - Be clear on what do you want to achieve
 - Explain well how will you meet the requirements of the topic



Tip 2: Understand call conditions and text



Tip 3: Impact

Identify and substantiate the impacts

Dissemination and exploitation plan





Tip 4: Sound budget construction & good project team*

Budget is reasonable	Resource allocation is balanced
All partners have	All partners are
a clear and	commited to
justified role in	implement the
the project	results

The team should share a common vision/ambition



*Only for single stage and second stage calls

Tip 5: Simple to digest

SIMPLE LANGUAGE (MAJORITY OF EXPERTS ARE NON-NATIVE SPEAKERS)

MAKE INFORMATION EASY TO FIND

RELEVANT SUMMARY TABLES, GRAPHS & IMAGES

RESPECT PAGE LIMIT





