The EU Framework Programme for Research and Innovation

HORIZON 2020

Smart, green and integrated Transport Work Programme 2018-2020

Maria Cristina Marolda
European Commission
DG MOVE
THE POLICY CONTEXT

COP 21

Energy Union and Climate

Digital Single Market

Jobs, Growth & Investments

Stronger Global Actor

2011 White Paper on transport

European Strategy for Low-Emission Mobility

Accelerating Clean Energy Innovation

Objective

Smart, green and integrated transport system

a European transport system beneficial for all citizens, the economy and the society
Recommendations of the Transport Advisory Group to the Commission on Horizon 2020
June 2014

Transport system integration for efficiency, sustainability, competitiveness, resilience, safety, accessibility and inclusiveness

Dimensions of integration: *cross-modal, passenger-freight, urban-interurban, transport –land use*

Technology
- hardware
- software / ICT
- vehicles
- infrastructure

Behaviour
- individual
- corporate
- governmental

integration of Programmes
Technology

transport-specific

- hardware
  - vehicles
    - low emission tech.
    - aerodynamics
    - composite materials
    - recycled materials
    - autonomous vehicles
    - ship ‘scrubbers’
    - platooning of trucks
  - infrastructure
    - climate proofing methods
    - new intermodal systems
    - self-regulating infrastructure
    - maintenance systems
    - highway electrification
    - cold-ironing at ports
    - green concrete
    - fast charging systems for e-vehicles
  - other
    - sensors
    - modular packaging
    - robotics
    - ‘physical internet’
    - new design of logistics buildings
    - unattended delivery systems
- software / ICT
  - new vehicle-base monitoring systems
  - cloud computing
  - data management incl. Big Data
  - aircraft tracking systems
  - supply chain visibility
  - next generation telematics
  - new simulation tools
  - geolocalisation technologies
  - alerting systems for minimising collision risk

impact of external technologies

- Augmented reality
- Unattended delivery
- Decarbonisation of electricity generation
- Internet of things
- 3D printing (additive manufacturing)
- Nano-technology
- Biometrics
- 2nd/3rd generation biofuels
Mobility and Transport

Behaviour

transport-specific

individual

- switch from ownership to sharing
- new patterns of trip chaining
- teleworking
- adaptation to smart charging
- longer distance commuting
- education / awareness campaigns
- acceptance of autonomous vehicles
- changing value of travel time
- crowd-sourced delivery (crowd-shipping)

business travel

- virtual conferencing
- modal shift to rail
- advanced travel planning / budgets
- mobile offices

logistics

- night-time delivery
- relaxation of JIT
- horizontal collaboration
- slow-steaming
- cross-functional management
- omni-channel logistics
- crowd-sourced delivery (crowd-shipping)
- rising skill levels
- logistics land use planning

governmental

- 'joined-up' approaches
- evidence-based decision-making
- re-ordered priorities
- emphasis on corridors
- standardisation initiatives

impact of external developments

- 'greying' of the population
- economic austerity
- growing environmental awareness
- social networking
- new governance & financing models
- new life-styles
- health trends
- geopolitical crises
- increased interest in collaborative / communal solutions

Mobility and Transport
What’s new in 2018-2020

- **Focus Areas (FA)** addressing global challenges and cutting across sectors and programmes
  1. Building a low-carbon, climate resilient future
  2. Digitising and transforming European industry and services

- **Reinforced International Cooperation**
  5 flagship initiatives
  10 specific topics encouraging InCo

- **Reduced number of topics** and broader scope

- **New structure** highlighting integration

*Focus Areas: The other two FA aim at "Connecting economic and environmental gains – the Circular Economy" and at "Boosting the effectiveness of the Security Union"*
Mobility for Growth

Overall objectives

- Targeted efforts to develop and validate solutions that can be rapidly deployed
- Address in a systemic way transport means, infrastructure and operation models
- Integrate them in a user-friendly system of smart and connected mobility
- Reduce impact on climate and environment
- Strong user-centred approach
1. LC - Low-carbon and sustainable transport
(contribution to the Focus Area Building a low-carbon, climate resilient future)

- Long-term transition towards zero-emission and quieter mobility across all transport modes

- Emphasis on socio-economic and regulatory aspects (public awareness, people's perspective, spatial planning)

- Tools and mechanisms for monitoring and detection of emissions & noise

- Provide evidence of long term impact of current developments in technologies and business models
**Low-carbon & sustainable transport: topics and budget**

**Total EU contribution: EUR 61 M in 2018**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC-MG-1-1</td>
<td>Reduction of transport impact on air quality</td>
<td>RIA</td>
<td>2</td>
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<tr>
<td><strong>InCo flagship</strong></td>
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<tr>
<td>LC-MG-1-2</td>
<td>Sustainable <em>multi-modal inter-urban transport</em>, regional mobility &amp; spatial planning</td>
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<tr>
<td>LC-MG-1-3</td>
<td>Harnessing and understanding the impacts of changes in urban mobility on policy making by city-led innovation for sustainable urban mobility</td>
<td>CSA, RIA</td>
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<td>LC-MG-1-4</td>
<td>Hardening <em>vehicle environmental protection</em> systems against tampering</td>
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</table>

**Total EU contribution: EUR 61 M in 2018**
Low-carbon & sustainable transport: topics and budget

**Total EU contribution: EUR 80 M in 2019**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
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</thead>
<tbody>
<tr>
<td>LC-MG-1-5</td>
<td>Advancements in aerodynamics &amp; innovative propulsion systems for <strong>quieter &amp; greener aircrafts</strong></td>
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<tr>
<td>LC-MG-1-6</td>
<td><strong>Aviation</strong> operations impact on climate change</td>
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<tr>
<td><strong>InCo flagship</strong></td>
<td><strong>Future propulsion &amp; integration: towards a hybrid/electric aircraft</strong></td>
<td>RIA</td>
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<td>LC-MG-1-7</td>
<td>Retrofit Solutions and Next generation propulsion for <strong>Waterborne Transport</strong></td>
<td>IA</td>
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<tr>
<td>LC-MG-1-8</td>
<td>Upgrading <strong>transport infrastructure</strong> in order to monitor noise and emissions</td>
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<tr>
<td>LC-MG-1-9</td>
<td><strong>Logistics</strong> solutions that deal with requirements of the 'on demand economy' and for shared-connected and low-emission logistics operations</td>
<td>RIA</td>
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</table>
2. Safe, integrated and resilient transport systems

- Performance of infrastructure, means of transport, traffic management systems and users behaviour
- Transport safety in a changing environment
- Innovative solutions to reduce congestion and ensure seamless, safe and sustainable mobility for people and freight
- More resilient and robust transport system and increased network capacity
### Safe, integrated and resilient transport system: topics and budget

**Total EU contribution:** EUR 73 M in 2018

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stage</th>
<th>Budget 2018</th>
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</thead>
<tbody>
<tr>
<td>MG-2-1</td>
<td>Human Factors in Transport Safety</td>
<td>RIA</td>
<td>2</td>
<td>18.00</td>
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<tr>
<td>MG-2-2</td>
<td>Marine Accident Response</td>
<td>IA/RIA</td>
<td>2</td>
<td>35.00</td>
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<tr>
<td>MG-2-3</td>
<td>Airworthiness of <strong>mass-market drones</strong></td>
<td>CSA</td>
<td>1</td>
<td>3.00</td>
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<tr>
<td>MG-2-4</td>
<td>Coordinating national efforts in modernizing <strong>transport infrastructure</strong> and provide innovative mobility services</td>
<td>CSA</td>
<td>1</td>
<td>1.00</td>
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<tr>
<td>MG-2-5</td>
<td><strong>InCo flagship</strong>&lt;br&gt;Innovative technologies for improving aviation safety and certification in icing conditions</td>
<td>RIA</td>
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</table>
Safe, integrated and resilient transport system: topics and budget

## Total EU contribution: EUR 67 M in 2019

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget</th>
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<tbody>
<tr>
<td>MG-2-6</td>
<td>Moving freight by Water: <strong>Sustainable Infrastructure</strong> and <strong>Innovative Vessels</strong></td>
<td>RIA</td>
<td>2</td>
<td>30.00</td>
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<tr>
<td>MG-2-7</td>
<td><strong>Safety</strong> in an evolving <strong>road mobility</strong> environment</td>
<td>RIA</td>
<td>2</td>
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<tr>
<td>MG-2-8</td>
<td>Innovative applications of <strong>drones</strong> for ensuring <strong>safety transport</strong></td>
<td>RIA</td>
<td>2</td>
<td>15.00</td>
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<tr>
<td>MG-2-9</td>
<td><strong>InCo flagship</strong> Integrated multimodal, <strong>low-emission freight transport</strong> systems and <strong>logistics</strong></td>
<td>RIA</td>
<td>2</td>
<td>14.00</td>
</tr>
</tbody>
</table>
3. Global Leadership & Competitiveness

- Advanced technological capabilities exploiting both evolutionary and disruptive technologies
- Rapid integration of digital technologies in all transport sectors
- Strengthened global leadership, environmental protection, enhanced travel comfort and safety
- Multidisciplinary and collaborative capabilities
- New transport (passenger-centric) business models
# Global Leadership & Competitiveness: topics and budget

**Total EU contribution: EUR 44 M in 2018**

<table>
<thead>
<tr>
<th>Topic</th>
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<th>Action type</th>
<th>Stages</th>
<th>Budget</th>
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<tbody>
<tr>
<td>MG-3-1</td>
<td>Multidisciplinary and collaborative aircraft <strong>design tools and processes</strong></td>
<td>RIA</td>
<td>2</td>
<td>12.00</td>
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<tr>
<td>MG-3-2</td>
<td>The Autonomous <strong>Ship</strong></td>
<td>IA</td>
<td>2</td>
<td>20.00</td>
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<tr>
<td>MG-3-3</td>
<td>&quot;Driver&quot; <strong>behaviour and acceptance</strong> of connected, cooperative and automated transport</td>
<td>RIA</td>
<td>2</td>
<td>12.00</td>
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</tbody>
</table>
MOBILITY FOR GROWTH – MG call

4. Accounting for the People

- Innovative digital travel environment to improve accessibility and social inclusion
- Socially acceptable mobility solutions
- Appropriate regulatory frameworks and policies to accommodate innovative solutions for the benefit of society and economy
- UN's Sustainable Development Goals
## Accounting for the People:
### topics and budget

**Total EU contribution: EUR 11.4 M in 2018**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stage</th>
<th>Budget 2018</th>
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<tbody>
<tr>
<td>MG-4-1</td>
<td>New regulatory frameworks to enable effective deployment of <em>emerging technologies</em> &amp; business/operating models for all transport modes</td>
<td>CSA</td>
<td>1</td>
<td>2.00</td>
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<tr>
<td>MG-4-2</td>
<td>Building <em>Open Science</em> platforms in transport research</td>
<td>CSA</td>
<td>1</td>
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<tr>
<td>MG-4-3</td>
<td>Demographic change and participation of women in transport</td>
<td>CSA</td>
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<tr>
<td>MG-4-4</td>
<td>Support for <em>dissemination events</em> in the field of Transport Research</td>
<td>CSA</td>
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# Accounting for the People: topics and budget

**Total EU contribution: EUR 13.7 M in 2019**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stage $</th>
<th>Budget</th>
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<tbody>
<tr>
<td>MG-4-2</td>
<td>Building <strong>Open Science</strong> platforms in transport research</td>
<td>CSA</td>
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<tr>
<td>MG-4-3</td>
<td>Demographic change and participation of <strong>women in transport</strong></td>
<td>CSA</td>
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<tr>
<td>MG-4-4</td>
<td>Support for <strong>dissemination events</strong> in the field of Transport Research</td>
<td>CSA</td>
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<tr>
<td>MG-4-5</td>
<td>An inclusive <strong>digitally interconnected transport</strong> system meeting citizens' needs</td>
<td>RIA</td>
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<tr>
<td>MG-4-6</td>
<td>Supporting <strong>Joint Actions on sustainable urban accessibility</strong> and connectivity</td>
<td>ERA-NET-Cofund</td>
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<td>6.00</td>
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</tbody>
</table>

**Total EU contribution: EUR 13.7 M in 2019**
MOBILITY FOR GROWTH – MG call

Blue Growth Focus Area

- Reduce the costs of deep sea exploration
- Explore several possible scenarios for the wide scale adoption of different emission control technologies
**Total MG contribution: EUR 8 M in 2018 and EUR 8 M in 2019**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>MG-BG-01</td>
<td><strong>Unmanned and autonomous survey activities</strong> at sea</td>
<td>RIA</td>
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<tr>
<td>MG-BG-02</td>
<td><strong>Ship emission control scenarios</strong>, marine environmental impact and mitigation</td>
<td>RIA</td>
<td>1</td>
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</tr>
</tbody>
</table>
Automated Road Transport – ART call
(contributing to the Focus Area Digitising and Transforming European Industry and Services)

- 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 scenarios 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,...
## Total EU contribution: EUR 15 m in 2018

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget 2018</th>
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<tbody>
<tr>
<td>DT-ART-01</td>
<td>Testing, validation and certification procedures for highly automated</td>
<td>RIA</td>
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<tr>
<td>InCo flagship</td>
<td>driving functions under various traffic scenarios based on pilot test data</td>
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<tr>
<td>DT-ART-02</td>
<td>Support for networking activities and impact assessment for road automation</td>
<td>RIA</td>
<td>1</td>
<td>6.00</td>
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<tr>
<td>InCo flagship</td>
<td></td>
<td>CSA</td>
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</table>
## Automated Road Transport: topics and budget

**Total EU contribution EUR 38 M in 2019**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget</th>
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</thead>
<tbody>
<tr>
<td>DT-ART-03</td>
<td><strong>InCo flagship</strong> Human centred design for the new driver role in highly automated vehicles</td>
<td>RIA</td>
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<tr>
<td>DT-ART-04</td>
<td><strong>InCo flagship</strong> Developing and testing shared, connected and cooperative automated vehicles fleets in urban areas for the mobility of all</td>
<td>IA</td>
<td>1</td>
<td>30.00</td>
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<tr>
<td>DT-ART-05</td>
<td>Efficient and safe connected and automated heavy-duty vehicles in real logistics operations</td>
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<tr>
<td>DT-ART-06</td>
<td>Large-scale, cross-border demonstration of highly automated driving functions for passenger cars</td>
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</tbody>
</table>
GREEN VEHICLES – GV call
(contributing to the Focus Area Building low-carbon, climate resilient future)

- 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
## Total EU contribution: EUR 56 M in 2018

<table>
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<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget</th>
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<tbody>
<tr>
<td>LC-GV-01</td>
<td>Integrated, brand-independent architectures, components and systems for <strong>next generation electrified vehicles</strong> optimised for the infrastructure</td>
<td>IA</td>
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<tr>
<td>LC-GV-02</td>
<td>Virtual <strong>product development</strong> and production of <strong>all types of electrified vehicles</strong> and components</td>
<td>RIA</td>
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# Green vehicles: topics and budget

**Total EU contribution: EUR 78 M in 2019**

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td>LC-GV-03</td>
<td>User centric <a href="#">charging infrastructure</a></td>
<td>IA</td>
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<tr>
<td>LC-GV-04</td>
<td>Low-emissions propulsion for long-distance trucks and coaches</td>
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<td>LC-GV-05</td>
<td>Urban mobility and sustainable electrification in large urban areas in developing and emerging economies</td>
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<td><strong>InCo flagship</strong></td>
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<tr>
<td>LC-GV-06</td>
<td>Next generation and realisation of <a href="#">battery packs BEV &amp; HEV</a></td>
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<td>LC-GV-07</td>
<td>Advanced light materials and their production processes for automotive applications</td>
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<td>LC-GV-08</td>
<td>Reducing the environmental impact of <a href="#">hybrid light duty vehicles</a></td>
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<td>LC-GV-09</td>
<td>Next generation <a href="#">electrified vehicles for urban use</a></td>
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</table>
Other actions

- **Prize** on the "Cleanest engine of the future" open till 20/08/2019 - EUR 3.5 mio
- **ELENA Facility & Smart Cities** (in the Energy WP)

➢ **Public Procurements & Expert Contracts for studies, monitoring/evaluation exercises and forward-looking activities**

  - New mobility patterns in EU cities
  - Employment implications of connected and automated driving
  - EU-US Transport research symposia
  - Dissemination and exploitation of results
  - Cooperation with ITF on decarbonisation of transport and with JRC on transport modelling
  - Ex-post analysis of transport JUs
# Transport Work Programme 2018-2020

## Budget (in million €)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>MG Call</td>
<td>197.4</td>
<td>168.7</td>
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<tr>
<td>ART Call</td>
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<tr>
<td>GV Call</td>
<td>56</td>
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<tr>
<td>Other Actions</td>
<td>7.4</td>
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<td>1.6</td>
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</table>
Schemes to promote close-to-market innovation
«Towards the next EU FP for R&I: European Innovation Council (EIC) Pilot »

1. **SME Instrument** – EUR 480 m in 2018
   ✓ Open to SMEs only

2. **Fast track to innovation (FTI)** - EUR 100 m per year
   ✓ Open to all types of participants – industry involvement mandatory

- **Bottom-up logic:** all areas covered by all H2020 programmes
  → all technologies and innovative solutions for transport and mobility

- **Open call:** several cut-off dates per year
H2020 open to the world

H2020 is fully open to researchers from public and private organisations from across the world.

- Participants in **low-medium income countries** enjoy automatic funding.
- **Industrialized economies** may bring own funds to the projects or may, exceptionally, be granted if
  - such funding is provided for in a bilateral scientific and technological agreement
  - funding for entities established in these countries are included in the call text
  - the Commission deems the participation of the entity essential for carrying out the project
International Cooperation

• Key **cross-cutting priority** of Horizon 2020, in particular to:
  ✓ Strengthen the Union's excellence, as well as its economic competitiveness
  ✓ Tackle global societal challenges
  ✓ Support the Union's external policies

• **Basic approach provided by** Horizon 2020 Regulation and Rules for Participation

• **Strategy** for international cooperation (COM(2012) 497): enhancing and focusing international cooperation activities (in terms of areas and partners)
International Cooperation

• **Crucial** to address many Horizon 2020 objectives

• Open to the **association** of acceding countries, candidate countries and potential candidates and selected international partner countries

• **Targeted actions** to be implemented taking **a strategic approach to international cooperation**
<table>
<thead>
<tr>
<th>Area</th>
<th>Topic</th>
<th>Title</th>
<th>Targeted opening</th>
</tr>
</thead>
</table>
| **International Cooperation on particles in relation to health and climate change**
MG - Low-carbon and sustainable transport | LC-MG-1-1-2018 | InCo flagship on reduction of transport impact on air quality | Asia (e.g. China), CELAC and the US |

**Aviation International Cooperation Flagship – Safer and Greener in a Smaller World**
MG - Low-carbon and sustainable transport | LC-MG-1-6-2019 | Aviation operations impact on climate change | China (bilateral) |
MG - Low-carbon and sustainable transport | LC-MG-1-7-2019 | Future propulsion and integration – Towards a hybrid/electric aircraft | Canada and Japan |
MG - Safe, integrated and resilient transport systems | MG-2-5-2018 | Innovative technologies for improving aviation safety and certification in icing conditions | Australia, Brazil, Canada, Japan, Russia and the US |

**Integrated multimodal freight transport systems and (the last mile) logistics**
MG - Safe, integrated and resilient transport systems | MG-2-9-2019 | Integrated multimodal, low-emission freight transport systems and logistics * | Canada, China, Japan, Latin America and the US |
<table>
<thead>
<tr>
<th>Area</th>
<th>Topic</th>
<th>Title</th>
<th>Targeted opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-US Road vehicle automation and safety</td>
<td>Automated road transport</td>
<td>DT-ART-01-2018</td>
<td>Testing, validation and certification procedures for highly automated driving functions under various traffic scenarios based on pilot test data *</td>
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<td></td>
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<td>DT-ART-02-2018</td>
<td>Support for networking activities and impact assessment for road automation *</td>
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<td>DT-ART-03-2019</td>
<td>Human centred design for the new driver role in highly automated vehicles *</td>
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<td>DT-ART-04-2019</td>
<td>Developing and testing shared, connected and cooperative automated vehicle fleets in urban areas for the mobility of all *</td>
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<td><strong>Notes:</strong> * Proposals should foresee twinning with projects funded by US DOT</td>
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<tr>
<td>Clean urban transport in medium/mega sized cities in developing and emerging economies</td>
<td>Green vehicles</td>
<td>LC-GV-05-2019</td>
<td>InCo flagship on &quot;Urban mobility and sustainable electrification in large urban areas in developing and emerging economies</td>
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<tr>
<td>MG - Low-carbon and sustainable transport</td>
<td>LC-MG-1-2-2018</td>
<td>Sustainable multi-modal inter-urban transport, regional mobility and spatial planning *</td>
<td>US</td>
</tr>
<tr>
<td></td>
<td>LC-MG-1-3-2018</td>
<td>Harnessing and understanding the impacts of changes in urban mobility on policy making by city-led innovation for sustainable urban mobility</td>
<td>China, India and the US</td>
</tr>
<tr>
<td></td>
<td>LC-MG-1-9-2019</td>
<td>Upgrading transport infrastructure in order to monitor noise and emissions *</td>
<td>US</td>
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<tr>
<td></td>
<td>LC-MG-1-10-2019</td>
<td>Logistics solutions that deal with requirements of the 'on demand economy' and for shared-connected and low-emission logistics operations</td>
<td></td>
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<tr>
<td>MG - Safe, integrated and resilient transport systems</td>
<td>MG-2-1-2018</td>
<td>Human Factors in Transport safety</td>
<td>Any Third Countries</td>
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<tr>
<td></td>
<td>MG-2-2-2018</td>
<td>Marine Accident Response</td>
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<td></td>
<td>MG-2-7-2019</td>
<td>Safety in an evolving road mobility environment</td>
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<tr>
<td>MG - Accounting for the people</td>
<td>MG-4-1-2018</td>
<td>New regulatory frameworks to enable effective deployment of emerging technologies and business/operating models for all transport modes</td>
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<td></td>
<td>MG-4-2-2018</td>
<td>Building Open Science platforms in transport research</td>
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<tr>
<td>Blue Growth</td>
<td>MG-BG-02-2019</td>
<td>Ship emission control scenarios, marine environmental impact and mitigation</td>
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</tr>
</tbody>
</table>

* Proposals should foresee twinning with projects funded by US DOT
EU-US Twinning activities
Programme-level coordination

Funding Agencies share and agree priorities for implementing through their own programmes (e.g. twinning and symposia) via the EU-US Implementing Arrangement
<table>
<thead>
<tr>
<th>Work Programme 2018-2020</th>
<th>2018</th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Opening</td>
<td>Closing</td>
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<tr>
<td>Single Stage (MG, ART and GV calls)</td>
<td>31/10/2017</td>
<td><strong>4/4/2018</strong></td>
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<tr>
<td>First Stage of 2-Stages (MG call only)</td>
<td>31/10/2017</td>
<td><strong>30/1/2018</strong></td>
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<tr>
<td>Second Stage of 2-Stages (MG call only)</td>
<td>-</td>
<td>19/9/2018</td>
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<tr>
<td>Evaluation criteria</td>
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<td>---------------------</td>
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<tr>
<td><strong>Excellence</strong></td>
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<tr>
<td>Clarity and pertinence of the objectives</td>
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<tr>
<td>Soundness of the concept, including trans-disciplinary considerations, where relevant</td>
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<tr>
<td>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)</td>
<td></td>
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<tr>
<td>Credibility of the proposed approach</td>
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</tbody>
</table>

| **Impact** |
| 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 |

| **Implementation** |
| 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*
Main features

- **Budget 2018**: EUR 298.6 mio – EUR 945 mio in 2018-2020

- **3 calls for proposals** and 21 topics in 2018
  1. Mobility for Growth (MG)
  2. Automated Road Transport (ART)
  3. Green Vehicles (GV)

- **Opening of calls**: 31 October 2017 - WP pre-published on H2020 web-site

- **3 types of actions**: RIA, IA, CSA/EraNet + Other actions: Prizes, SME Instrument, FTI, experts groups and procurements,

- **Transport relevant topics** in other parts of the H2020 WP: NMPB, ICT, ENERGY, SECURITY, FOOD and complementarities with calls and activities of CleanSky, SESAR, Shift2Rail, FCH2

- **Open Access to Data policy**: applies by default to the whole H2020 to scientific publications and research data generated by projects

- Improved **focus and clarity** in the topic descriptions (notably the expected impacts)…while keeping an open and non-prescriptive approach
Important elements for applicants (1)

• **Calls are challenge-based, and therefore more open to innovative proposals**
  
  – Calls are less prescriptive - they do not outline the expected solutions to the problem, nor the approach to be taken to solve it
  
  – Calls/topics descriptions allow plenty of scope for applicants to propose innovative solutions of their own choice

• **There is a greater emphasis on impact, in particular through each call or topic impact statements**
  
  – Applicants are asked to explain how their work will contribute to bringing about the described impacts
  
  – During the evaluation, evaluators are asked to assess this potential contribution
More emphasis on innovation

- Horizon 2020 supports all stages in the research and innovation chain including non-technological and social innovation and activities closer to the market

Proposals may bring together different disciplines, sectors and actors to tackle specific challenges

- e.g. scientists, industry, SMEs, societal partners, end-users...

Gender and SME participation: an important element (where relevant)
Important elements for applicants (3)

Some useful advice:

• Read the **topic identifier** (e.g MG-2-1-2018) as well as the **type of Action** (RIA, IA, CSA) and look also at the respective call conditions

• In the **Scope** part, pay attention to whether you are required to address, **one**, **several** or **all of** the areas concerned. Justify your choices

• Pay attention to the expected **Impact**. You are supposed to demonstrate **HOW** your proposal will contribute to it (avoid simply stating the impact text...)


Implementation modalities

- **One project = One funding rate** for all beneficiaries / activities in the grant
- Funding **up to 100% of eligible costs** for 'Research and Innovation Actions' (RIA) and for 'Coordination and Support Actions' (CSA)
- Funding **up to 70%** for 'Innovation Actions' (IA), except non-profit organisations (up to 100%)
- **Indirect costs** (overheads): 25% flat rate
- **Minimum conditions:**
  - **IAs, RIAs**: minimum three legal entities each established in a different Member State or an Associated Country
  - **CSAs**: one legal entity established in a Member State or in an Associated Country
  - Plus **additional conditions** as indicated in the WP
- **Time to Grant** (from call closure date) maximum **eight months**
  - Proposers to be informed within **five months**
Thank you

Find out more:
Learn more about the Transport Challenge and the WP