



REPUBLIKA SLOVENIJA  
MINISTRSTVO ZA IZOBRAŽEVANJE,  
ZNANOST IN ŠPORT



REPUBLIKA SLOVENIJA  
MINISTRSTVO ZA INFRASTRUKTURO,

# OBZORJE 2020

## »Smart, Green and Integrated Transport«

Dr. Fedor Černe  
MZI - Služba za mednarodne odnose

S sodelovanjem in pomočjo

David Doerr, NKT Nemčije



# Kako uspeti na razpisu

- Pristaši teorije zarote naj ta del izpustijo
- Spremljanje in razumevanje politik (raziskav in področij)
- Vključitev v razne povezave, ki odločilno vplivajo na delovni program
- Predlog projekta utemeljiti na pričakovanem učinku in sestaviti kompetentno skupino

# EPP za bližnje dogodke





- O RRA
- PODROČJA DELA
- O POSAVJU
- NOVINARSKO SREDIŠČE



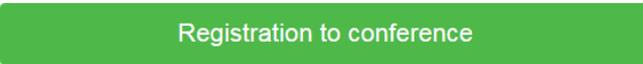
- REGIONALNO RAZVOJNO NAČRTOVANJE
- GOSPODARSTVO
- TURIZEM
- ČLOVEŠKI VIRI
- OKOLJE IN PROSTOR
- RAZVOJ PODEŽELJA
- MEDNARODNO RAZVOJNO SODELOVANJE



The second conference on  
**TRANSPORT AND RESEARCH IN THE DANUBE REGION**

20<sup>th</sup> and 21<sup>st</sup> October 2015  
 Catež ob Savi / Slovenia  
 Venue: Terme Catež, Hotel Terme

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# H2020 Budget Distribution

Horizon 2020: 2014-2020



Societal Challenge IV  
„Smart, Green and Integrated Transport“

€ 6,339 billion

# Implementing the programme: WP calls and large initiatives

budget

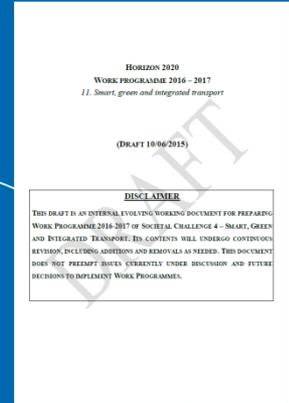
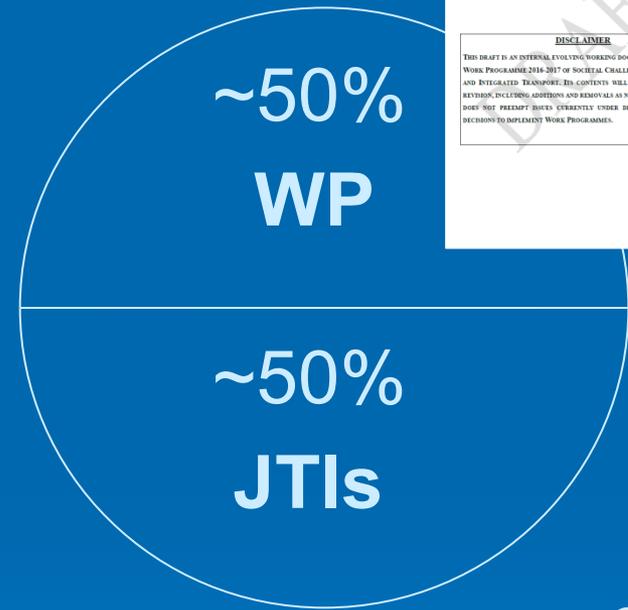
## ➤ Collaborative Research

Calls for Proposals (in Work Programme)

## ➤ Innovation

### Investment Package

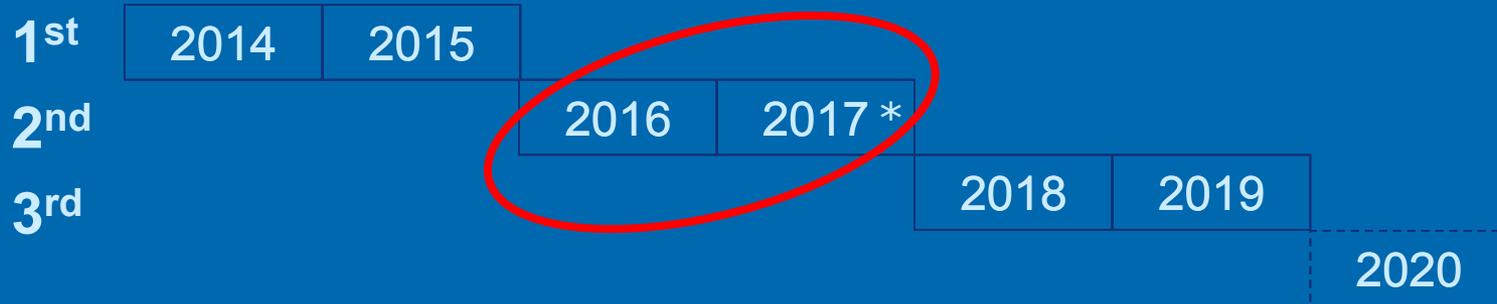
- Clean Sky
- SESAR
- Shift2Rail
- Fuel Cells & Hydrogen (contribution)
- ECSEL (contribution)



# Work Programme – 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)**
- **simplified list of actions/funding rates**  
(research and innovation actions: 100%; innovation actions: 70%/100%;...)
- **2-stage evaluation for most topics**
- **facilitated access through keywords and tags**

# Work Programme Cycle in H2020



**Calls: annual, biennial or open**

**Single stage or 2-stage evaluations**

\* revision possible



# WP Transport – Main Funding Instruments

- **Research and Innovation Actions (RIA)**

Objective: development of new knowledge, new technologies, processes, products and/or services

- **Innovation Actions (IA)**

Objective: development of plans, concepts and provisions for new, improved, products and services

- **Coordination and Support Actions (CSA)**

Objective: coordination and networking of research and innovation activities, support of the implementation of the programme (H2020) and European policies



# Funding Modalities

Type of Funding	Funding Instrument	Funding Rate	Minimum No. of Partners
<b>Grant</b>	Research and Innovation Actions (RIA)	100%	3
	Innovation Actions	70% / 100%*	3
	Coordination and Support Actions (CSA) - Coordinating	100%	3
	Coordination and Support Actions (CSA) - Supporting	100%	1
<b>Programme Co-Fund</b>	ERA-Net Co-fund	33% ("Top-up")	3
	Pre-Commercial Procurement (PCP)	70%	3
	Public Procurement of Innovative Solutions (PPI)	20%	3
<b>Prizes</b>	Inducement Prizes, Awards	Lump Sum	1
<b>Procurement</b>	Tenders	100%	1
<b>Specific Procedures</b>	SME-Instrument	Lump Sum / 70%	1
	Fast-Track To Innovation	70%	5

\* 100% for non-profit organisations

# WP Transport – Main Calls 2016-2017

## Mobility for Growth (2016: 20 Topics, € 210 million)

Modal Focus {  
1. Aviation  
2. Waterborne

Cross and multi  
modal, system  
approach {

3. Safety
4. Urban Mobility
5. Logistics
6. Intelligent Transport Systems
7. Infrastructure
8. Socio-economic and Behavioral Research and Forward-looking Activities for Policymaking

## Automated Road Transport (2016: 4 Topics, € 64 million)

## European Green Vehicles Initiative (PPP) (2016: 4 Topics, € 78,5 million)

# Main Calls 2016-2017 - Calendar

Orientation  
Paper

Sept. Oct. Nov. Dec. Jan. Feb. March Apr. May June Julx Aug. Sept. Oct. Nov. Dec. Jan. ... May  
2015 2016 2017

## Mobility for Growth

single stage: 26.01.2016  
two-stage: 20.01 2016  
(1st Stage)

Evaluation

## Mobility for Growth

zweistufig: 29.09 2016  
(zweite Stufe)

Evaluation  
(2nd Stage)

## Aut. Road Transport

single stage: 26.01.2016  
two-stage: 20.01 2016  
(1st Stage)

Evaluation

## Aut. Road Transport

zweistufig: 29.09 2016  
(zweite Stufe)

Evaluation  
(2nd Stage)

## Green Vehicles

single stage: 26.01.2016

Evaluation

## MfG u. ART 2017

first Deadline: 26.01.2017

## Green Vehicles 2017

single stage: 01.02.2017

# Mobility for Growth – Overview 2016

Area	Identifyer	Topic	Instr.	Projekt Budget (million €)	Topic-Budget (million €)
Aviation	MG-1.1-2016	Reducing energy consumption and environmental impact of aviation	RIA	5 - 9	40,0
	MG-1.4-2016	Breakthrough innovation	RIA	2 - 4	15,0
	MG-1.5-2016	Identification of gaps, barriers and needs in the aviation research	CSA	1 - 2	4,0
Waterborne	MG-2.2-2016	Development, production and use of high performance and lightweight materials for vessels and equipment	IA	7 - 9	38,0
	MG-2.3-2016	New and improved transport concepts in waterborne transport	RIA	6 - 12	
Safety	MG-3.1-2016	Addressing aviation safety challenges	RIA	5 - 9	22,0
	MG-3.3-2016	Safer waterborne transport and maritime operations	RIA	5 - 7	
	MG-3.5-2016	Behavioural aspects for safer transport	RIA	4 - 9	
	MG-3.4-2016	Transport infrastructure innovation to increase the transport system safety at modal and intermodal level (including nodes and interchanges)	RIA	2 - 5	12,0
	MG-3.6-2016	Euro-African initiative on road safety and traffic management	CSA	2,5 - 3	3,0
Urban Mobility	MG-4.4-2016	Facilitating public procurement of innovative sustainable transport and mobility solutions in urban areas	CSA	0,6 - 1	2,0
	MG-4.5-2016	New ways of supporting development and implementation of neighbourhood-level and urban-district-level transport innovations	RIA	2 - 4	10,0
Logistics	MG-5.1-2016	Networked and efficient logistics clusters	RIA	4 - 6	12,0
	MG-5.3-2016	Promoting the deployment of green transport, towards Eco-labels for logistics	CSA	1 - 2	2,0
ITS	MG-6.1-2016	Innovative concepts, systems and services towards 'mobility as a service'	RIA	3 - 3,5	25,0
	MG-6.2-2016	Large-scale demonstration(s) of cooperative ITS	IA	11 - 13	
	MG-6.3-2016	Roadmap, new business models, awareness raising, support and incentives for the roll-out of ITS	CSA	1 - 2	5,0
Socio-economic, Behavioral, Policy Research	MG-8.1-2016	Research, technology development and market trends for the European transport manufacturing industries	CSA	0,5 - 1,5	1,5
	MG-8.3-2016	Assessing future requirements for skills and jobs across transport modes and systems	RIA	2 - 3	3,0
	MG-8.6-2016	Innovation awards for students and researchers in the context of the Transport Research Arena conference - TRA 2018	CSA	0,4 - 0,6	0,6
				<b>Gesamt:</b>	<b>210,1</b>

# Mobility for Growth – Aviation

Year	Identifyer	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-1.1-2016	Reducing energy consumption and environmental impact of aviation	RIA	5 - 9	40,0
	MG-1.4-2016	Breakthrough innovation	RIA	2 - 4	15,0
	MG-1.5-2016	Identification of gaps, barriers and needs in the aviation research	CSA	1 - 2	4,0

2017	MG-1.2-2017	Reducing aviation noise	RIA	5 - 9	20,0
	MG-1.3-2017	Maintaining industrial leadership in aeronautics	RIA	5 - 9	45,0
	MG-1.4-2017	Breakthrough innovation	RIA	2 - 4	15,0
	MG-1.5-2017	Identification of gaps, barriers and needs in the aviation research	CSA	1 - 2	7,0



# Mobility for Growth – Waterborne

Year	Identifyer	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-2.2-2016	Development, production and use of high performance and lightweight materials for vessels and equipment	IA	7 - 9	38,0
	MG-2.3-2016	New and improved transport concepts in waterborne transport	RIA	6 - 12	
2017	MG-2.1-2017	Innovations for energy efficiency and emission control in waterborne transport	IA	5 - 9	40,0
	MG-2.4-2017	Complex and value-added specialised vessels	IA	8 - 12	



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Romy1971 / pixelio.de



Hans-Jürgen Leiner / pixelio.de

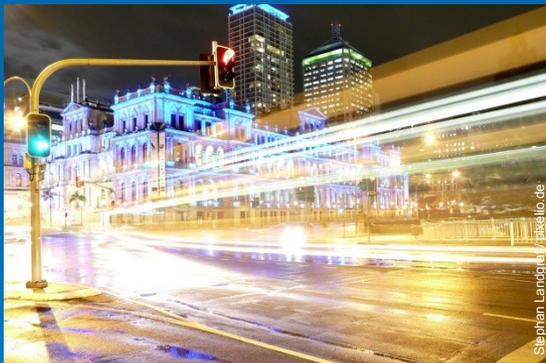
# Mobility for Growth – Safety

Year	Identifyer	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-3.1-2016	Addressing aviation safety challenges	RIA	5 - 9	15,0
	MG-3.3-2016	Safer waterborne transport and maritime operations	RIA	5 - 7	22,0
	MG-3.5-2016	Behavioural aspects for safer transport	RIA	4 - 9	
	MG-3.4-2016	Transport infrastructure innovation to increase the transport system safety at modal and intermodal level (including nodes and interchanges)	RIA	2 - 5	12,0
	MG-3.6-2016	Euro-African initiative on road safety and traffic management	CSA	2,5 - 3	3,0
2017	MG-3.2-2017	Protection of all road users in crashes	RIA	4 - 9	14,0



# Mobility for Growth – Urban Mobility

Year	Identifier	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-4.4-2016	Facilitating public procurement of innovative sustainable transport and mobility solutions in urban areas	CSA	0,6 - 1	2,0
	MG-4.5-2016	New ways of supporting development and implementation of neighbourhood-level and urban-district-level transport innovations	RIA	2 - 4	10,0
2017	MG-4.1-2017	Increasing the take up and scale-up of innovative solutions to achieve sustainable mobility in urban areas	IA	2 - 5	22,0
	MG-4.2-2017	Supporting 'smart electric mobility' in cities	IA	4 - 5	
	MG-4.3-2017	Innovative approaches for integrating urban nodes in the TEN-T core network corridors	CSA	1 - 2	2,0



# Mobility for Growth – Logistics

Year	Identifier	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-5.1-2016	Networked and efficient logistics clusters	RIA	4 - 6	12,0
	MG-5.3-2016	Promoting the deployment of green transport, towards Eco-labels for logistics	CSA	1 - 2	2,0

2017	MG-5.2-2017	Innovative ICT solutions for future logistics operations	RIA	3 - 5	10,0
	MG-5.4-2017a	Potential of the Physical Internet	RIA	2 - 3	2,0
	MG-5.4-2017b	Potential of the Physical Internet	CSA	0,5 - 1	1,0



# Mobility for Growth – ITS

Year	Identifier	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-6.1-2016	Innovative concepts, systems and services towards 'mobility as a service'	RIA	3 - 3,5	25,0
	MG-6.2-2016	Large-scale demonstration(s) of cooperative ITS	IA	11 - 13	
	MG-6.3-2016	Roadmap, new business models, awareness raising, support and incentives for the roll-out of ITS	CSA	1 - 2	5,0



# Mobility for Growth – Infrastructure

Year	Identifyer	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2017	MG-7.1-2017	Resilience to extreme (natural and man-made) events	RIA	3 - 5	37,0
	MG-7.2-2017	Optimisation of transport infrastructure multi-modal corridors and terminals	RIA	2 - 6	
	MG-7.3-2017a	The Port of the Future	RIA	3 - 5	
	MG-7.3-2017b	The Port of the Future	CSA	1 - 1	1,0



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berggeist07 / pixelio.de

UPRStoto / pixelio.de

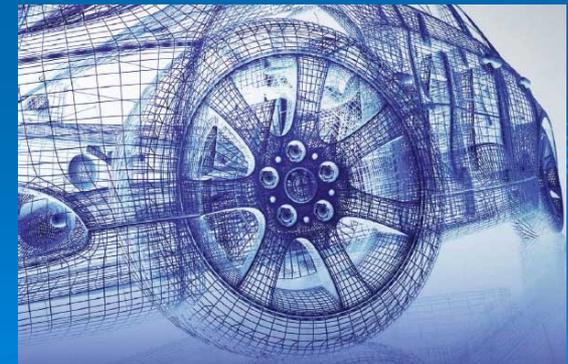
# Mobility for Growth – Socio-economic

Year	Identifier	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	MG-8.1-2016	Research, technology development and market trends for the European transport manufacturing industries	CSA	0,5 - 1,5	1,5
	MG-8.3-2016	Assessing future requirements for skills and jobs across transport modes and systems	RIA	2 - 3	3,0
	MG-8.6-2016	Innovation awards for students and researchers in the context of the Transport Research Arena conference - TRA 2018	CSA	0,4 - 0,6	0,6
2017	MG-8.2-2017	Big data in Transport: Research opportunities, challenges and limitations	CSA	0,5 - 1,5	2,0
	MG-8.4-2017	Improving accessibility, inclusive mobility and equity: new tools and business models for public transport in prioritised areas	RIA	1 - 3	7,5
	MG-8.5-2017	Shifting paradigms: Exploring the dynamics of individual preferences, behaviours and lifestyles influencing travel and mobility choices	RIA	1 - 2	



# Automated Road Transport

Year	Identifyer	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	ART-02-2016	Automation pilots for passenger cars	IA	18 - 36	48,0
	ART-04-2016	Safety and end-user acceptance aspects of road automation in the transition period	RIA	3 - 6	
	ART-05-2016	Road infrastructure to support the transition to automation and the coexistence of conventional and automated vehicles on the same network	RIA	2 - 5	13,0
	ART-06-2016	Coordination of activities in support of road automation	CSA	1 - 3	3,0
2017	ART-01-2017	ICT infrastructure to enable the transition towards road transport automation	IA	5 - 15	50,0
	ART-03-2017	Multi-Brand platooning in real traffic conditions	IA	15 - 20	
	ART-07-2017	Full-scale demonstration of urban road transport automation	IA	10 - 15	



# European Green Vehicles Initiative

Year	Identifyer	Topic	Instr.	Projekt-Budget (million €)	Topic-Budget (million €)
2016	GV-02-2016	Technologies for low emission light duty powertrains	RIA	5 - 10	65,0
	GV-03-2016	System and cost optimised hybridisation of road vehicles	IA	7 - 10	
	GV-11-2016	Stimulating European research and development for the implementation of future road transport technologies	CSA	2 - 3,5	3,5
	GV-12-2016	ERA-NET Co-fund on electromobility	ERA-NET Cofund	10	10,0

2017	GV-01-2017	Optimisation of heavy duty vehicles for alternative fuels use	IA	5 - 10	128,0
	GV-04-2017	Next generation electric drivetrains for fully electric vehicles, focusing on high efficiency and low cost	RIA	5 - 10	
	GV-05-2017	Electric vehicle user-centric design for optimised energy efficiency	RIA	7 - 10	
	GV-06-2017	Physical integration of hybrid and electric vehicle batteries at pack level aiming at increased energy density and efficiency	IA	5 - 7	
	GV-07-2017	Multi-level modelling and testing of electric vehicles and their components	RIA	4 - 10	
	GV-08-2017	Electrified urban commercial vehicles integration with fast charging infrastructure	IA	5 - 15	
	GV-09-2017	Aerodynamic and flexible trucks	IA	7 - 10	
	GV-10-2017	Demonstration (pilots) for integration of electrified L-category vehicles in the urban transport system	IA	7 - 10	

# European Green Vehicles Initiative

Complementary R&D in other areas of H2020:

- **SC 3: Safe, Clean and Efficient Energy:** esp. energy storage technologies
- **LEIT-Materials:** z.B. NMBP 09-2016: Materials for Weight Reduction of Heavy Vehicles
- **LEIT-ICT**
- **LEIT-Production Technologies**
- **SC 5: Climate Action, Environment, Resource Efficiency and Raw Materials**



# Transport-relevant Research and Innovation in other Areas of H2020 (1/2)

## **Energie:**

- Bio-fuels and other alternative/renewable fuels
- Bio-energie Motor
- Energy Storage
- 'Smart Cities'

## **Climate/Environment:**

- Urban Air Quality

## **Security:**

- Management of Crises and Catastrophes
- Protection of Critical Infrastructures
- Technologies for the Inspection of Freight

## **Food/'Blue Growth':**

- Offshore Economy
- Underwater Technologies
- Reaction to Oil Spills and Pollution of the Oceans

# Transport-relevant Research and Innovation in other Areas of H2020 (2/2)

## Industrial Leadership (Key Technologies):

- ICT for Transportation Applications
- Post Lithium-ion Batteries
- Functional Materials
- Fibre-based Materials

## Research Infrastructures:

- includes also transportation infrastructure

# Calls ‚SME Instrument‘ and ‚Fast Track‘



## EUROPE Needs:

- The best products and services, in a time and cost efficient manner, in order to preserve transport sector's leadership and create new jobs
- The role of SMEs is critical in order to meet these challenges

# Nacionalna kontaktna točka

**Ministrstvo za infrastrukturo**  
Služba za mednarodno sodelovanje

Dr. Fedor Cerne

