

Intelligenter, umweltfreundlicher und integrierter Verkehr

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Interim evaluation of Horizon 2020

Areas of improvement:

- Oversubscription
- Complexity of structure
- Lack of clarity
- Broadness of topics



Efforts in WP 2018-2020:

- Providing a simpler structure
- Reduced number of topics endowed with adequate budget
- Improved expected impact statements
- Make the WP more explicit and comprehensible.

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Programmziele:

- a) Resource efficient transport that respects the environment
- b) Better mobility, less congestion, more safety and security
- c) Global leadership for the European transport industry
- d) Socio-economic and behavioural research and forward looking activities for policy making

Beitrag zu den Focus Areas:

- Building a low-carbon, climate resilient future
- Digitising and transforming European industry and services

Ausschreibungen 2018-2020

- **Call 'Mobility for Growth' (MG)**
Inkl. eines Bereichs zur Focus Area "Building a low-carbon, climate resilient future"
- **Call 'Digitising and transforming European industry and services: Automated Road Transport' (ART)**
- **Call 'Building a low-carbon, climate resilient future: Green Vehicles' (GV)**

Mobility for Growth Call - Struktur:

1. Building a low-carbon, climate resilient future: Low-carbon and sustainable transport
2. Safe, integrated and resilient transport systems
3. Global leadership and competitiveness
4. Accounting for the people

1) Building a low-carbon, climate resilient future: Low-carbon and sustainable transport – 10 Topics

1. LC-MG-1-1-2018: InCo flagship on reduction of transport impact on air quality
2. LC-MG-1-2-2018: Sustainable multi-modal inter-urban transport, regional mobility and spatial planning.
3. LC-MG-1-3-2018: Harnessing and understanding the impacts of changes in urban mobility on policy making by city-led innovation for sustainable urban mobility
4. LC-MG-1-4-2018: Hardening vehicle environmental protection systems against tampering
5. LC-MG-1-5-2019: Advancements in aerodynamics and innovative propulsion systems for quieter and greener aircrafts
6. LC-MG-1-6-2019: Aviation operations impact on climate change
7. LC-MG-1-7-2019: Future propulsion and integration: towards a hybrid/electric aircraft
8. LC-MG-1-8-2019: Retrofit Solutions and Next Generation Propulsion for Waterborne Transport
9. LC-MG-1-9-2019: Upgrading transport infrastructure in order to monitor noise and emissions
10. LC-MG-1-10-2019: Logistics solutions that deal with requirements of the 'on demand economy' and for shared-connected and low-emission logistics operations

2) Safe, integrated and resilient transport systems – 9 Topics

1. MG-2-1-2018: Human Factors in Transport Safety
2. MG-2-2-2018: Marine Accident Response
3. MG-2-3-2018: Airworthiness of mass-market drones
4. MG-2-4-2018: Coordinating national efforts in modernizing transport infrastructure and provide innovative mobility services
5. MG-2-5-2018: Innovative technologies for improving aviation safety and certification in icing conditions
6. MG-2-6-2019: Moving freight by Water: Sustainable Infrastructure and Innovative Vessels
7. MG-2-7-2019-: Safety in an evolving road mobility environment
8. MG-2-8-2019: Innovative applications of drones for ensuring safety in transport
9. MG-2-9-2019: Integrated multimodal, low-emission freight transport systems and logistics (Inco Flagship)

3) Global leadership and competitiveness – 3 Topics

1. MG-3-1-2018: Multidisciplinary and collaborative aircraft design tools and processes
2. MG-3-2-2018: The Autonomous Ship
3. MG-3-3-2018: "Driver" behaviour and acceptance of connected, cooperative and automated transport

4) Accounting for the people – 6 Topics

1. MG-4-1-2018: New regulatory frameworks to enable effective deployment of emerging technologies and business/operating models for all transport modes
2. MG-4-2-2018: Building Open Science platforms in transport research
3. MG-4-3-2018: Demographic change and participation of women in transport
4. MG-4-4-2018-2019: Support for dissemination events in the field of Transport Research
5. MG-4-5-2019: An inclusive digitally interconnected transport system meeting citizens' needs
6. MG-4-6-2019: Supporting Joint Actions on sustainable urban accessibility and connectivity

Mobility for Growth - Call conditions:

Budget

2018: 197.40 Mio.€

2019: 168.70 Mio.€

2020: TBD

Call-Dates

2018: Start: 31.10.2017

- Single Stage: Deadline - 04.04.2018
- Two Stage: Deadline 1 - 30.01.2018 & Deadline 2: 19.09.2018

2019:

- Single Stage: Start: 04.12.2018 & Deadline - 24.04.19
- Two Stage: Start: 05.09.2018
Deadline 1 - 16.01.2019 & Deadline 2: 12.09.2019

Digitising and Transforming European Industry and Services: Automated Road Transport - 6 Topics

1. DT-ART-01-2018: Testing, validation and certification procedures for highly automated driving functions under various traffic scenarios based on pilot test data
2. DT-ART-02-2018: Support for networking activities and impact assessment for road automation
3. DT-ART-03-2019: Human centred design for the new driver role in highly automated vehicles
4. DT-ART-04-2019: Developing and testing shared, connected and cooperative automated vehicle fleets in urban areas for the mobility of all
5. DT-ART-05-2020: Efficient and safe connected and automated heavy-duty vehicles in real logistics operations
6. DT-ART-06-2020: Large-scale, cross-border demonstration of highly automated driving functions for passenger cars

Digitising and Transforming European Industry and Services: **Automated Road Transport - Call conditions:**

Budget

2018: 15 Mio.€ **2019:** 38 Mio.€ **2020:** 50 Mio.€

Call-Dates

2018: Start: 31.10.2017 & Deadline - 04.04.2018

2019: Start: 04.12.2018 & Deadline - 24.04.2019

2020: TBD

Building a low-carbon, climate resilient future: **Green Vehicles - 9 Topics**

1. LC-GV-01-2018: Integrated, brand-independent architectures, components and systems for next generation electrified vehicles optimised for the infrastructure
2. LC-GV-02-2018: Virtual product development and production of all types of electrified vehicles and components
3. LC-GV-03-2019: User centric charging infrastructure
4. LC-GV-04-2019: Low-emissions propulsion for long-distance trucks and coaches
5. LC-GV-05-2019: InCo flagship on “Urban mobility and sustainable electrification in large urban areas in developing and emerging economies”
6. LC-GV-06-2020: Next generation and realisation of battery packs for BEV and HEV
7. LC-GV-07-2020: Advanced light materials and their production processes for automotive applications
8. LC-GV-08-2020: Reducing the environmental impact of hybrid light duty vehicles
9. LC-GV-09-2020: Next generation electrified vehicles for urban use

Building a low-carbon, climate resilient future:
Green Vehicles - Call conditions:

Budget

2018: 56 Mio.€ **2019:** 78 Mio.€ **2020:** 112 Mio.€

Call-Dates

2018: Start: 31.10.2017 & Deadline - 04.04.2018

2019: Start: 04.12.2018 & Deadline - 24.04.2019

2020: TBD

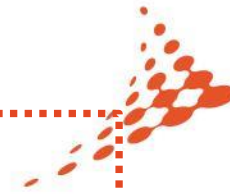
JTI - Joint Technology Initiatives: Clean Sky 2

Entwicklung, Validierung und Demonstration umweltfreundlicher Luftverkehrstechnologien

- **Förderbudget: 1,8 Mrd. €**
- **Themen:** Design, Triebwerke, Hubschrauber, Smart Aircraft, Systeme, regionale und große Flugzeuge,
- **Kurz- und mittelfristige Maßnahmen**
- **Besonderheiten:**
 - exakte Topic-Beschreibungen
 - Single Beneficiary möglich
- **7.Call:** wird für Anfang November 2017 erwartet

<http://www.cleansky.eu>

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FFG

Achtung: 2 Arten von Calls:

- Calls for Members: S2R-CFM-...
- Calls for non-Members: S2R-OC-...

JTI - Joint Technology Initiatives: Shift2Rail

Erhöhte Kapazität und Zuverlässigkeit für einen effizienten und nachhaltigen Eisenbahnverkehr und eine wettbewerbsfähige europäische Bahnindustrie

- **Alle Rail-Themen aus H2020** in Shift2Rail
- **Förderbudget: 450 Mio.€**
- **Themen:**
 - IP1: Cost-efficient and Reliable **Trains**, including high capacity trains and high speed trains;
 - IP2: Advanced Traffic **Management & Control Systems**;
 - IP3: Cost-efficient, Sustainable and Reliable High Capacity **Infrastructure**;
 - IP4: **IT Solutions** for Attractive Railway Services;
 - IP5: **Technologies** for Sustainable & Attractive European **Freight**
- Es gelten die **Regeln von H2020 (Ausnahmen!!!)**
- **3. Open Call:** wird für Jänner 2018 erwartet

<http://www.shift2rail.org>

Links

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

<http://ec.europa.eu/transport>

<http://ec.europa.eu/research/transport>

Veranstaltungen

H2020 Transport Infoday: 13.12.2017 in Brüssel

<https://ec.europa.eu/inea/en/news-events/events/horizon-2020-transport-info-day>

Clean Sky 2 Info Day: 30.11.2017 in Brüssel

<http://www.cleansky.eu/event/clean-sky-2-info-day-on-the-7th-call-for-proposals>

Shift2Rail Infotag: 4.12.2017 in Wien

https://www.ffg.at/europa/veranstaltungen/2017-12-04_shift2rail

Weltraum

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Multiannual Financial Framework 2014-2020



~ 1 479 M€



~ 4 291 M€



~ 7 071 M€

~ 12 841 M€

Interim evaluation of Horizon 2020

Priorities:

- Maximising the **benefits of space for society and the EU economy**;
- Fostering a **globally competitive** and innovative European space sector;
- Reinforcing **Europe's autonomy** in accessing and using space in a secure and safe environment;
- Strengthening Europe's role as a **global actor** and promoting international cooperation.

Statistics:

- Industrial participation in LEIT-Space stands at 53%
- SME participation around 28% (including the SME-instrument)
- 45% of the participants are newcomers from industry

WP 2018-2020 building blocks

Maximising benefits of space for society and EU economy

SPACE-EO

- EO market uptake
- Copernicus mission and services evolution
- International coop.
- Big data

SPACE-BIZ

- Support to space hubs
- Space outreach and education
- Horizon Prize for European low-cost space launch
- Innovfin Space Equity Pilot (ISEP)
- SME Instrument
- Fast-track to Innovation

SPACE-EGNSS

- EGNSS market uptake
- EGNSS infrastructure, mission and services evolution

Globally competitive and innovative space sector

SPACE-TEC and SPACE-SCI

- Technologies for European non-dependence and competitiveness
- Strategic research clusters
- Generic space technologies
- EO and SatCom technologies
- In-orbit validation/demonstration

- Scientific instrumentation and technologies enabling space science and exploration

Access to space & Secure and safe space environment

SPACE-TEC

- Access to space

SPACE-SEC

- Space weather
- Exploring concepts for space traffic management
- Space Surveillance and Tracking (SST)
- Near Earth Objects

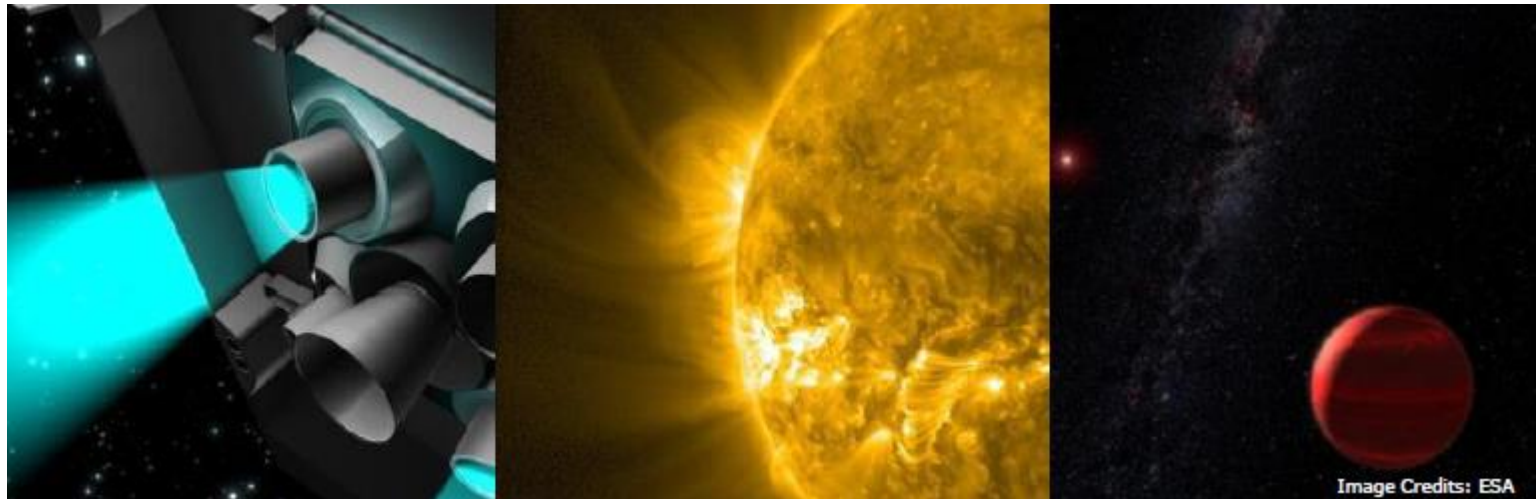
+ under "other actions": REA/GSA project monitoring, studies & communication and support to the Space NCPs network

Ausschreibungen 2018-2020

- **Space 2018-2020**
- **EGNSS market uptake 2019-2020**

Struktur Space 2018-2020 Call:

- Earth observation
- Space business, entrepreneurship, outreach and education
- Space technologies, science and exploration
- Secure and safe space environment



Earth observation – 6 Topics

1. DT-SPACE-01-EO-2018-2020: Copernicus market uptake
2. LC-SPACE-02-EO-2018: Copernicus evolution – Mission exploitation concepts
3. LC-SPACE-03-EO-2018: Copernicus evolution - Preparing for the next generation of Copernicus Marine Service ocean models
4. LC-SPACE-04-EO-2019-2020: Copernicus evolution – Research activities in support of cross-cutting applications between Copernicus services
5. LC-SPACE-05-EO-2019: Copernicus evolution – Research activities in support to a European operational monitoring system for fossil CO2 emissions
6. DT-SPACE-06-EO-2019: International Cooperation Copernicus – Designing EO downstream applications with international partners

Space business, entrepreneurship, outreach and education – 3 Topics

1. DT-SPACE-07-BIZ-2018: Space hubs for Copernicus
2. DT-SPACE-08-BIZ-2018: Space outreach and education
3. DT-SPACE-09-BIZ-2019: Space hubs (support to start-ups)

Space technologies, science and exploration – 10 Topics

1. SPACE-10-TEC-2018-2020: Technologies for European non-dependence and competitiveness
2. SPACE-11-TEC-2018: Generic space technologies
3. SPACE-12-TEC-2018: SRC – Space robotics technologies
4. SPACE-13-TEC-2019: SRC – In-Space electrical propulsion and station keeping
5. LC-SPACE-14-TEC-2018-2019: Earth observation technologies
6. SPACE-15-TEC-2018: Satellite communication technologies
7. SPACE-16-TEC-2018: Access to space
8. SPACE-17-TEC-2019: Access to space
9. SPACE-18-TEC-2019-2020: In-orbit validation/demonstration – Mission design, integration and implementation
10. SPACE-20-SCI-2018: Scientific instrumentation and technologies enabling space science and exploration

Secure and safe space environment – 1 Topic

1. SU-SPACE-22-SEC-2019: Space Weather

Space 2018-2020 - Call conditions:

Budget

2018: 104 Mio. € **2019:** 101 Mio.€ **2020:** 43 Mio.€

Call-Dates

2018: Start: 31.10.2017 & Deadline: 06.03.2018

2019: Start: 16.10.2018 & Deadline: 12.03.2019

2020: TBD

Call - EGNSS market uptake 2019-2020 – 4 Topics

1. LC-SPACE-EGNSS-1-2019-2020: EGNSS applications fostering green, safe and smart mobility
2. DT-SPACE-EGNSS-2-2019-2020: EGNSS applications fostering digitisation
3. SU-SPACE-EGNSS-3-2019-2020: EGNSS applications fostering societal resilience and protecting the environment
4. SPACE-EGNSS-4-2019: Awareness Raising and capacity building

EGNSS market uptake 2019-2020 - Call conditions:

Budget

2019 & 2020: jeweils 20 Mio.€

Call-Dates

2019: Start: 16.10.2018 & Deadline - 05.03.19 **2020:** TBD

Links

- <http://ec.europa.eu/research/participants/portal/desktop/en/home.html>
- <http://ec.europa.eu/growth/sectors/space/research/horizon-2020/>
- <https://www.ffg.at/weltraum>

Veranstaltungen

Space Info Day & Brokerage Event: 13/14.12.2017 in Warschau

- <https://www.b2match.eu/spaceinfoday-warsaw2017>