THE REMARKABLE CONTRIBUTION OF SPACE DURING THE COVID-19 CRISIS

A unique source of information to monitor the impact of the crisis

- On international trade and traffic flows
- On agricultural productivity
- On emergency hospitals construction
- On industrial activities
- On air quality
- On greenhouse gas emissions

On our economy and society

And to support the recovery

- Movement of goods
- Industry recovery
- Climate and environment

Monitoring the recovery
Guiding new policies and supporting their implementation

Unique tools to fight against the pandemic

- Coronavirus contact-tracing
- Mapping contagious areas
- Managing the flux of people

And to ensure the resilience of our societies

- Tele-medicine
- Tele-education
- Teleworking in sub-urban, rural and remote areas
SUSTAINING THE EUROPEAN PUBLIC INVESTMENT IN SPACE IN TIME OF CRISIS

Space creates Value to the European Economy and Society
- Brings significant economic value and employment in Europe and supports the whole economy
- Ensures Europe’s strategic independence and geopolitical position
- Contributes to Europe’s scientific and technological leadership

Space Solutions will become even more indispensable in the Post-Crisis World
- Space-based services will support an ever-more connected economy and society
- Space-enabled data will support an ever-more digital economy and society
- Space exploration will bring cutting-edge technologies that can transform other sectors

Public Investment is essential to the Health of the European Space Industry
- Enables competitiveness of the European sector and its success on the commercial and export market
- Allows more ambitious programmes and boosts innovation
- Fosters private funding and supports new financing schemes

Sustained Investment in Space will support a Durable Economic Recovery
- Innovation and R&D are particularly at risk during an economic crisis
- Public investment in innovation is one of the keys to durable recovery
- Long-term damages occur when high-skilled workforce is not retained
Space creates Value to the European Economy and Society

Brings significant **economic value** and **employment in Europe** and supports the whole economy

- **230,000 jobs** in the European space industry
- **€ 8 billion** sales of the European space upstream industry
- **€ 60 billion** European downstream commercial market
- **€ 25 billion** to be generated by ESA’s €2 billion investment in 11 Satcom Partnerships
- **Up to 90%** of ESA funding returned to governments as taxes

Ensures Europe’s **strategic independence** and **geopolitical position**

- Independent navigation system **Galileo**
- Autonomous access to space **Ariane and Vega**
- Independent access to world-class environmental information **Copernicus and FutureEO**
- International cooperation **Low Earth Orbit and Moon Exploration**
- Autonomous systems for security **Gevsatcom**

Contributes to Europe’s **scientific** and **technological leadership**

- Cutting-edge technologies benefiting other innovation fields
- Leading European scientific community: Highest levels of discovery and innovation ensured by scientific and exploration missions
Space Solutions will become even more indispensable in the Post-Crisis World

**Space-based services** will support an **ever-more connected** economy and society

- Bridging the digital divide
- Space for 5G
- Tele-medicine
- Tele-education
- GNSS tracking to fight contagious diseases

Supporting **global connectivity**

Supporting **digital transformation**

**Space-enabled data** will support an **ever-more digital** economy and society

- Climate change
- Economic intelligence
- Movement of goods
- Crisis management

Ensuring a **continuous Earth monitoring** to the benefit of citizens, businesses and the environment

Supporting **political decision-making** and **public policies**

**Space exploration** will bring **cutting-edge technologies** that can transform other sectors

- Being at the forefront of **robotics** and **autonomous operations** in hazardous environments
- Advancing **virtualisation** and **digitalisation**
Public Investment is essential to the Health of the European Space Industry

Enables **competitiveness** of the European sector and its success on the commercial and export market

**1st and 3rd**
SES and Eutelsat on the global satcom operator market

**1st and 2nd**
Airbus Defence and Space and Thales Alenia Space on the commercial satcom GEO manufacturing market

**1st**
Arianespace on the commercial launch market

Allows **more ambitious programmes** and **boosts innovation**

- Successful Public-Private Partnerships
- Innovative risk-sharing schemes
- Investment allocated to highly-innovative technologies

Fosters **private funding** and supports **new financing schemes**

- Up to €3 Co-invested by Third Parties for each euro invested by ESA
- SME access to financing Supported by ESA and European Investment Bank
- Innovative funding schemes ESA Grand Challenge
Sustained Investment in Space will support a Durable Economic Recovery

**Innovation and R&D** are particularly at risk during an economic crisis

SMEs and start-ups, engines of innovation, are fragile and particularly exposed

Public investment in innovation is one of the **keys to durable recovery**

The 2008 financial crisis demonstrated the positive impact of significant investments in R&D on the economic growth recovery

Access to finance and funding must be guaranteed for the survival of strategic industry in times of crisis

Long-term damages occur when **highly-skilled workforce** is not retained

The highly-skilled workforce in the space sector has gained knowledge and expertise during years of research and development

Policies aimed at avoiding employment losses in innovative sectors are essential to maintain leadership and enable durable economic recovery
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