

Online lecture series:

Patents and Intellectual Property as strategic business tools

ESA COMMERCIALISATION GATEWAY

Space for Business | Business for Space

European Space Agency

SME-Office &

**Technology Transfer and Patent Office** 

ESA UNCLASSIFIED – For ESA Official Use Only

→ THE EUROPEAN SPACE AGENCY



# Online lecture series: Patents and Intellectual Property as strategic business tools

- Intellectual Property Foundations 1 (22 September)
- Intellectual Property Foundations 2 (29 September)
- Quantum Computing and Intellectual Property (13 October)
- Intellectual Property in Software (27 October)
- Machine Learning and Artificial Intelligence (10 November)
- IP in Space Tech, Territorial Rights in an Extra-Terrestrial World (24 November)
- Disclosing your invention to investors/technical partners or customers (8 December)
- Litigation what happens if there is a dispute? (15 December)



# Webinar Etiquette



## Please:

- Switch off your camera
- Ensure that your microphone is on mute when you are not speaking



Use the chat function to ask questions or to indicate that you wish to take the floor

The presentation material will be made available on the ESA Learning Hub



This webinar is being recorded

# Where can you find the presentations?





Q

**ESA Learning Hub** 





#### → DOING BUSINESS WITH ESA

18 Mar 2021 - 09:00 to 10:30 (UTC)

WEBINAR

#### DESCRIPTION

This webinar will take place on 18 March 2021 at 10:00 CET. It is targeted at newcomers and companies new to ESA that wish to do business with the Agency in the future.

The session will consist of a presentation and a Q&A session.

#### **OBJECTIVES**

The main objectives of the session are to:

- · understand ESA's main operating principles and basic institutional set up
- · learn about the Agency's procurement principles and procedures
- · get to know the Agency's Procurement tools
- learn about ESA's Industrial Policy
- · learn how to sign up as a tenderer and access Invitations to Tender
- · be introduced to the Agency's SME Initiative

#### TRAINER

ESA SME and Industrial Analysis section

#### CANCELLATION POLICY

If you sign up for the webinar but cannot attend, please send an email to: sme-office@esa.int at your earliest convenience to inform the organisers.



→ Please log in, visit the pages for the training and click on "Resources"





































# The SME Office



#### The SME Office

The SME Office is part of ESA's Directorate of Commercialisation, Industry and Competitiveness

#### What we do

The Office implements and manages the **SME Policy** adopted by Member States, and coordinates its activities with other institutional actors, such as national space agencies

#### Our objectives:

- To facilitate the involvement of SMEs, including start-ups and newcomers, in the R&D activities and programmes of the Agency
- To address problems that are traditionally faced by SMEs (sustainability, viability, access
  to in-flight heritage, proper and timely information, etc)

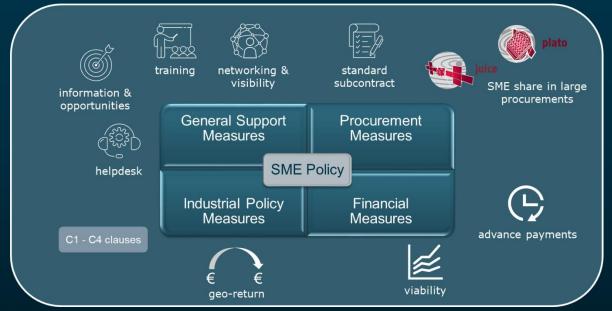
# The SME Policy overview



- The activities of the SME Office address the four main areas of the SME Policy:
  - General Support Measures: Training, Networking & Visibility, Supporting Awareness of ESA Business Opportunities, and Analyses and surveys
  - Procurement Measures: Reserved Share for SMEs in the Frame of Large Procurements, Model-

subcontracts, COVID-19 measures ...

- Industrial Policy Measures: SME specific procurement clauses, Advance Payments ...
- Financial Measures: Financial viability of SME, Neutral Cash flow, Access to Finance



# General Support Measures - Information



### **Information for SMEs**

- the SME Portal www.esa.int/sme
- the SME Initiative Twitter account @ESAforSME
- SME Newsletter https://bit.ly/2TzBL0q
- ESA Learning Hub learninghub.esa.int
- Industry matchmaking on <u>esa-match</u>

SME Office Helpdesk sme-office@esa.int





# ESA COMMERCIALIZATION- SCALEUP OVERVIEW





SUPPORTING THE SCALEUP OF VENTURES

#### BUSINESS SUPPORT

Pool of various services to best answer individual acceleration needs For companies with high business potential with mature technology

#### ESA MARKETPLACE

Development of industrial players on new upstream & downstream markets aggregating service requests and offers from and for industry

Disruptive research innovation projects

Φ-LABNET

Start-up creation & incubation services for entrepreneurs

ESA BICs NETWORK Commercial innovation projects integrating space technologies

ESA BROKERS NETWORK

BOOSTING INNOVATION AND COMMERCIALISATION

ESA UNCLASSIFIED – For ESA Official Use Only

**→ THE EUROPEAN SPACE AGENCY** 

# ESA Technology Transfer and Patent Office





#### **Give ACCESS to Space technologies and expertise**

Identification of space technologies and know-how Licensing of ESA patents

#### **BRIDGING** the GAP to terrestrial applications

Funding & support of de-risking activities Access to ESA's technical expertise

#### **Management of ESA IP**

Maturation of ESA inventions Management of ESA patents IP Helpdesk



#### IP as leverage for business

Patent landscaping Support on IP strategy

# Call for ideas for the Technical and Commercial Maturation of ESA's Inventions



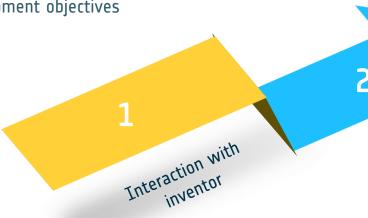


#### **Outline Proposal:**

Field of application.

 Technical benefits and development objectives (bulleted development plan).

• Commercial opportunity.



2. Proposal Step - <u>competitive procurement</u> <u>through esa-star</u>

#### Full Proposal:

- Commercial opportunity
  - Market opportunity
- Technical opportunity
  - Related R&D
  - Maturation strategy
- Technical and Commercial Workplan, expected results, MPP
- Deliverables

Funding: 50-175k€ for industry-driven proposals Implementation: max 18 months 6 inventions proposed every 4 months







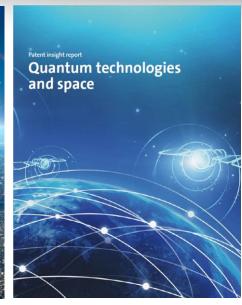
# PATENT INSIGHT REPORTS

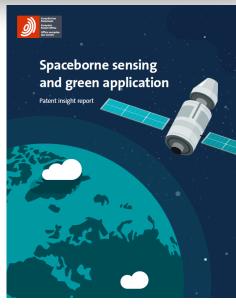


#### **OBJECTIVES**

- Investigate future and emerging space technology trends
- Understanding the evolution of competitiveness and commercialisation in the space sector
- Compliment economic and policy insights with patent data
- Raising awareness about intellectual property rights in the space industry
- Provide exemplary analytical approaches for patent data relevant to space industry







11/2021 07/2021 10/2022

available at: https://www.epo.org/searching-for-patents/business/patent-insight-reports.html













# TOGETHER WE INVEST AND INNOVATE YOU SCALE UP!









# ESA LEARNING HUB





**ESA Learning Hub** 

은 Login / Register







#### Webinars on Intellectual Property and Patents - part 2 of the series

Monday, September 11, 2023 - 11:00 (CEST)

#### Register Now for Upcoming Intellectual Property and Patents Webinars

In an effort to enhance knowledge and understanding of Intellectual Property (IP) and Patents, part 2 of a series of enlightening webinars is set to run from September through December 2023. These webinars, presented by the ESA Technology Transfer and Patent Office in collaboration with the SME office via the ESA Learning Hub, will offer invaluable insights suitable for participants of all experience levels. Part 2 of the series follows the successful first IP and patent lecture series, presented in 2022 (available for replay here).

Session overview (click on the hyperlink for more information about each webinar and to register):

- Intellectual Property Foundations 1 (22 September)
- Intellectual Property Foundations 2 (29 September)
- Quantum Computing and Intellectual Property (13 October)
- . Intellectual Property in Software (27 October)
- . Machine Learning and Artificial Intelligence (10 November)
- . IP in Space Tech, Territorial Rights in an Extra-Terrestrial World (24 November)
- . Disclosing your invention to investors/technical partners or customers (8 December)
- . Litigation what happens if there is a dispute? (15 December)

Do not miss this opportunity to expand your knowledge. Register for these webinars and gain valuable insights into the world of IP and patent management.











































# Benefits of licensing ESA patents



## Patent licensing is just another element in the innovation chain.

- Access to established intellectual property and being able to enter the market more quickly.
- No need to gather resources to conduct research and development to develop their own products or services.
- No need to bear patent costs.
- Market credibility having ESA as a reliable partner.

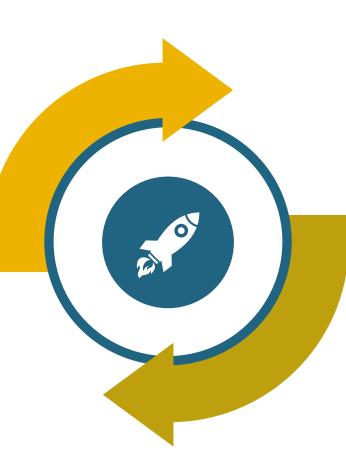


# ESA Licensing scheme

esa

- ✓ Non-exclusive, free of charge right of use for space applications
- ✓ Favorable conditions for non space applications

**ESA Member State industry** 



www.esa.int/ip

Patent@esa.int

**Non-ESA Member State industry** 

- ✓ Market conditions
- ✓ Non-exclusive constraints





#### **ESA Technology Broker Network**

Technology scouting and potential matchmaking

Implementation of Technology Transfer projects



#### **Access to Space Expertise**

- ➤ Finding space solutions and partners for non-space challenges
- ➤ Access to ESA's technical expertise and facilities.

**SPARK Funding** 

Funding scheme for industry to innovate based on space technology, know-how or needs



# ESA Technology Transfer 2.0



Hands-on support for generating innovation projects between space and non-space entities.

ESA Technology Broker ESA Spark Funding Funding to accelerate the product development process and refine the commercial roadmap

Coaching for companies understand space market and ESA programmes.

Prepare for Space

IP for Commercialisation

Funding for SMEs to develop a strategy for the protection and commercialisation of IP generated under ESA or National contracts.

# Intellectual Property Protection as a driver for innovation



#### **IP Support Scheme to Industry**

Funding scheme to support industry with IP strategy and commercialisation [arising from ESA contracts]



#### **Management of ESA's patents portfolio**

Protecting ESA's inventions

#### **Patent Intelligence**

- Internal Prior Art Search
- Patent landscaping studies for ESA and industry

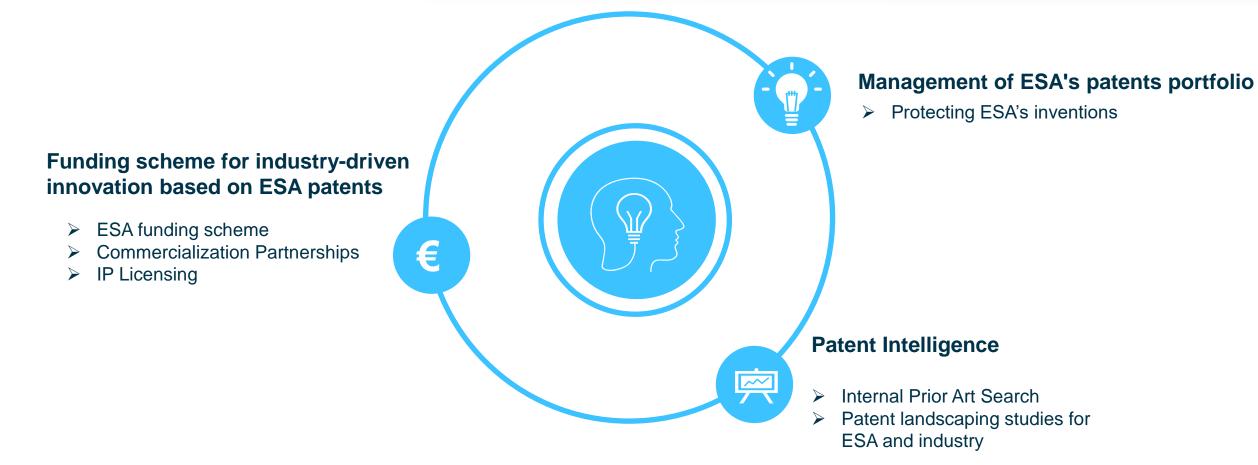
Funding scheme for industry-driven innovation based on ESA patents

- ESA funding scheme
- Commercialization Partnerships
- > IP Licensing



# Intellectual Property Protection as a driver for innovation



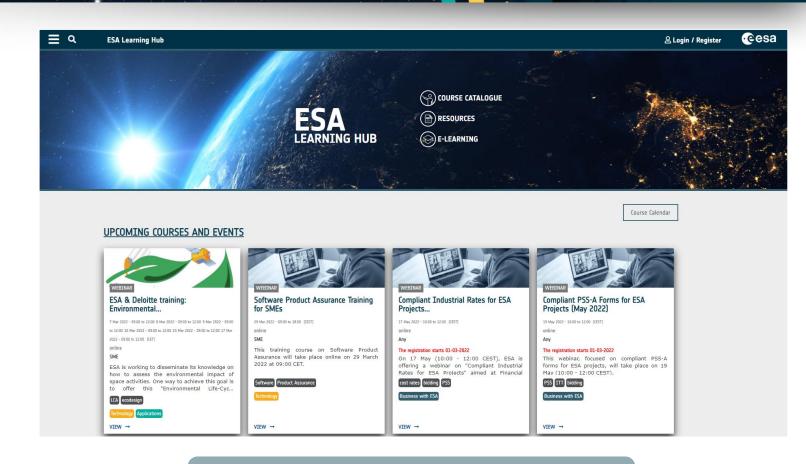


# General Support Measures – Training





- R&D Proposal Writing
- Product Assurance in ESA Projects
- EEE Components Procurement
- ECSS
- Compliant Industrial Rates
- PSS Forms
- · and many more



https://learninghub.esa.int

# General Support Measures – Networking



- Industry Consultation Processes and Events such as the ESA SME Forum
- > Events in Member States, Associate States and Cooperating States
- The ESA Industry Space Days



Next ISD: 2024 ESA/ESTEC (Noordwijk, NL)

Free attendance

https://isd.esa.int/





# General Support Measures - Visibility













Complete your esa-match profile and showcase your competences

Let others know about your needs, ideas and upcoming projects and

Browse tenders and Marketspace ads and identify the right partners

Search in all tenders, Marketspace ads and esa-match profiles to find

#### esa-match objectives:

- support entities in their networking and visibility efforts and help them showcase their products, services and experience
- facilitate partnering, teaming and cooperation between companies, especially SMEs, and key partners and customers
- bring together (potentially unknown) products or services and (latent) needs
- help entities to become involved in **ESA programmes** and **develop their space business**

ASSIFIED - For ESA Official Use Only





























# SME Definition





Ownership, partnerships and linkages are taken into consideration when calculating staff numbers and financial amounts

\*Recommendation of the European Commission 2003/361/EC of 6 May 2003 (OJ L 124, 20.5.2003, p.36)