SME4SPACE

THE EUROPEAN PANEL OF SPACE SME ASSOCIATIONS

SME4SPACE

What is SME4SPACE

- An Association of Associations (registered in Belgium)
- Membership of individual SMEs also possible
- Representing 13 Countries so far
- More than 350 SMEs
- MoU with ESA
- Providing feedback to/from SMEs
- Participating in EU/ESA projects

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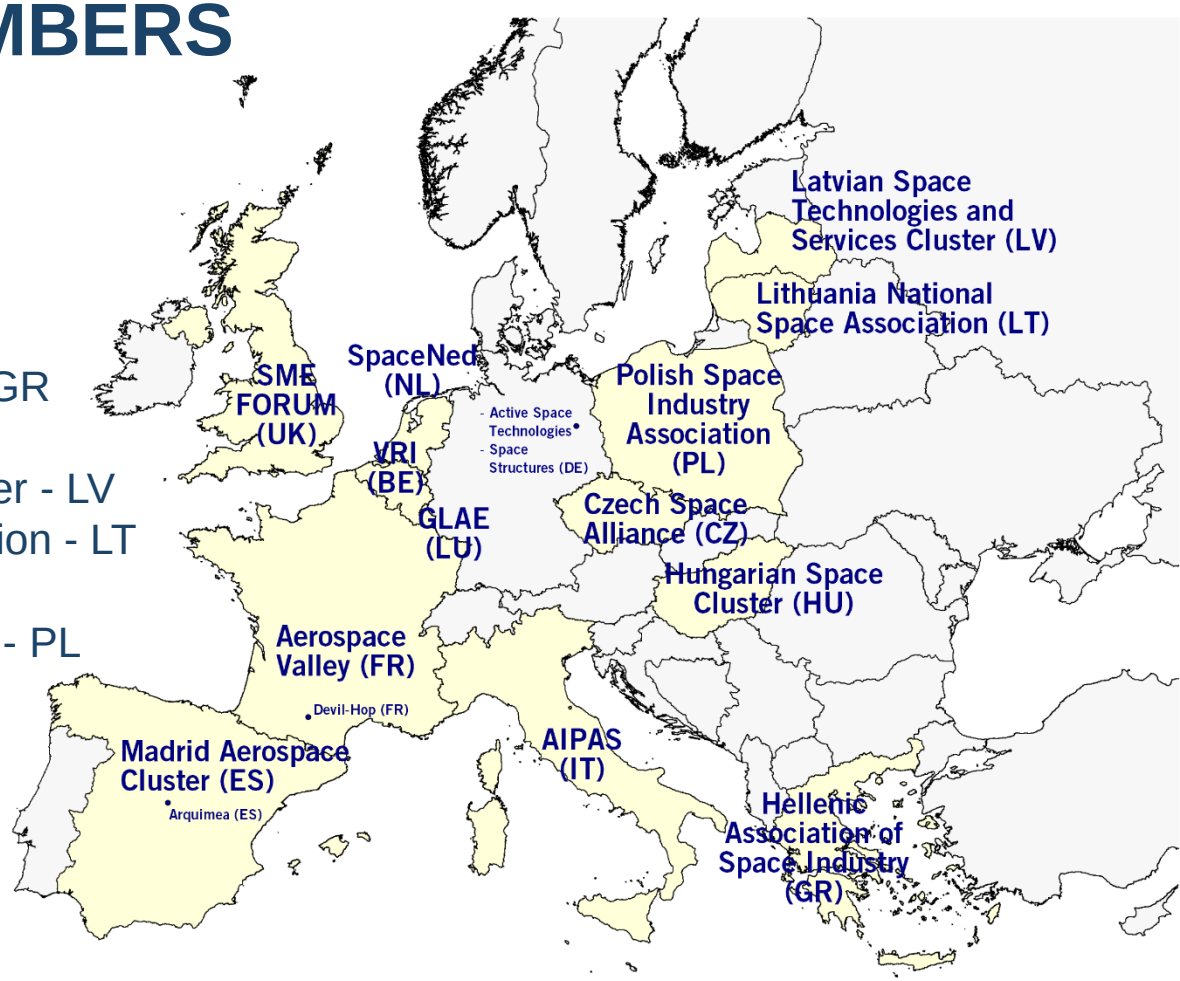
SME4SPACE MEMBERS

Working Members (Associations)

- Aerospace Valley - FR
- AIPAS – IT
- Czech Space Alliance - CZ
- GLAE – LU
- Hellenic Ass. of Space Industry – GR
- Hungarian Space Cluster – HU
- Latvian Space Technologies Cluster - LV
- Lithuania National Space Association - LT
- Madrid Aerospace Cluster - ES
- Polish Space Industry Association - PL
- SME Forum – UK
- SpaceNed – NL
- VRI – BE

Individual Company Members

- Active Space Technologies - DE
- Arquimea – ES
- Devil-Hop – FR
- Space Structures - DE



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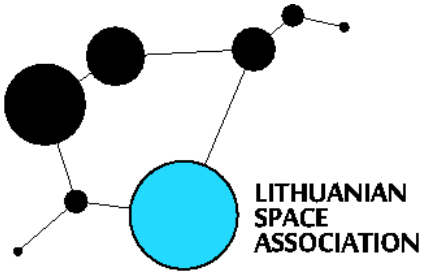
SME4SPACE WORKING MEMBERS



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SME4SPACE MISSION

- defining and defending common positions, representing the SMEs towards public authorities i.e. the European Space Agency, the European Union and its related agencies; officially recognized rep
- organizing seminars and information sessions;
- organizing a network of SMEs in order to increase the possibilities to cooperate;
- promoting the networking and cooperation of SMEs with research centres and institutions;
- carrying out research projects, participating at National, European and International calls in space and related activities.
- Member Benefits
  - Increased market share
  - Increased visibility from/to ESA/EU
  - Increased efficiency

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SME4SPACE in the Harmonisation process

- **SHARP** (Sme4space HARmonisation suPport), an ESA direct contract to SME4SPACE in the framework of the *European Space Technology Harmonisation Process*.
- This process is designed by ESA to achieve better coordinated space technology R&D activities among all European actors, with the '*filling of strategic gaps*' and the '*minimising of unnecessary duplications*' as major objectives.

The process is developed in a first mapping and a following roadmap phase; every year 8/10 topics are foreseen to be harmonised by ESA in two cycles.

SME4SPACE has the mandate to gather SMEs' inputs and contributions on technologies to be harmonised in 2015 cycles. S4S has contributed in the phase of technologies mapping and for the definition of the technologies roadmaps.

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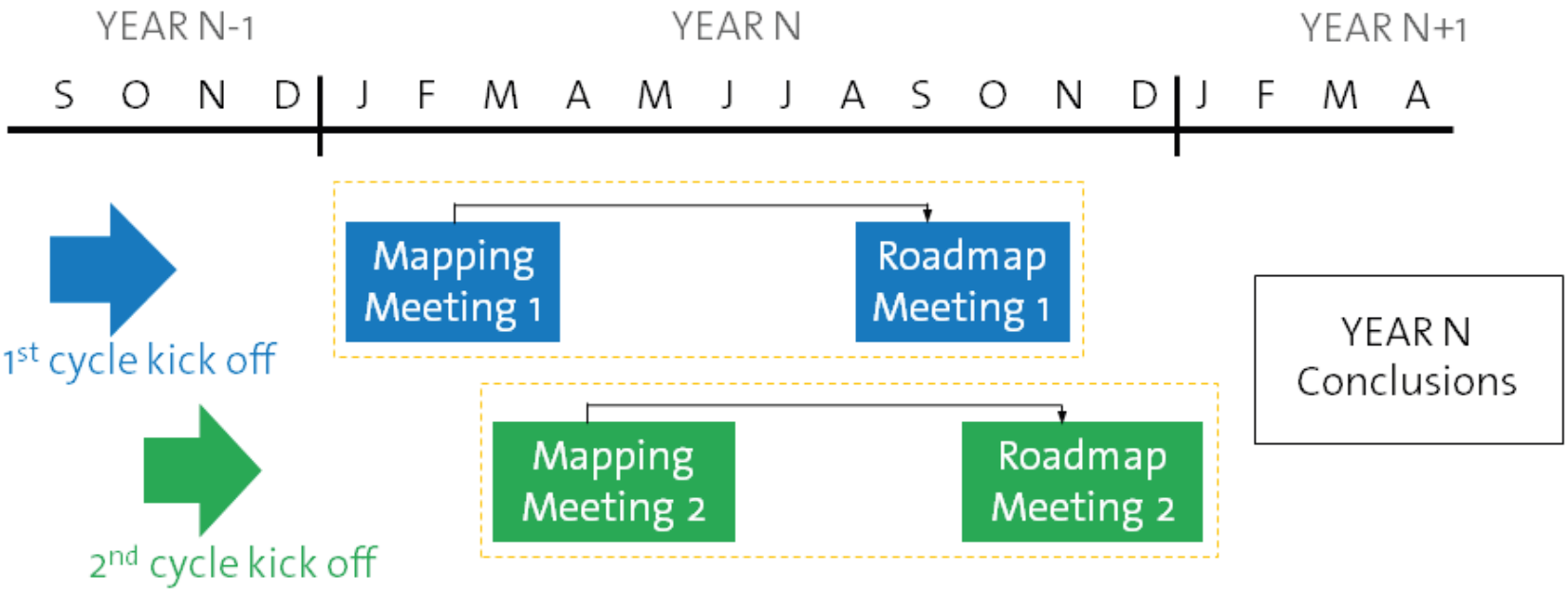
SME4SPACE in the Harmonisation process



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SME4SPACE in the Harmonisation process

SME4SPACE has also contributed for the definition of next Technologies list to be harmonised in 2016, 2017 and 2018.

Therefore we ask you to express your interest for the Technology Domains in which you want to be involved using our mailing list registration form (http://eepurl.com/bgmSUH).

If you have any doubt or you would like to learn more, please do not hesitate to contact us

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ESA Harmonisation: List of Technologies for 2016 cycles

1st cycle 2016			
Technical Subdomain	Title	Revisit	New
1B, 2A, 2B, 5A	Avionic Embedded Systems	2010	
1A	On-Board Payload Data Processing	2011	
1B	Data Systems and On-Board Computers	2011	
1C	Microelectronics - ASIC & FPGA	2011	

2nd cycle 2016			
Technical Subdomain	Title	Revisit	New
7A	Reflector Antennas	2009	
7B	RF Metamaterials and Metasurfaces		x
6E, 7A, 23B	Technologies for Passive Millimetre and Sub-millimetre Wave Instruments	2010	
15A, 15B, 15G, 15F	Electric Propulsion Pointing Mechanisms	2009	

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ESA Harmonisation:
List of possible Technologies for 2017 cycles

	2017	Revisit
1	Two-Phase Heat Transfer Systems	2009
2	**Position Sensors**	**2009**
3	RF & Optical Metrology (formerly entitled Critical Enabling Technologies for Formation Flying – Metrology)	2009
4	Lidar Critical Subsystems	2010
5	Deployable Booms	2010
6	Inflatable Structures	2010
7	**Optical Communications for Space**	**2012**
8	Additive Manufacturing Technologies	2014/2015
9	**Big Data from Space**	**New**
10	Life Support Technologies	New

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ESA Harmonisation:
List of possible Technologies for 2018 cycles

	2018	Revisit
1	**Array Antennas**	**2011**
2	**Frequency and Time Generation and Distribution**	**2011/2013**
3	**Optical–Detectors, IR Range**	**2011**
4	Chemical Propulsion - Micropropulsion	2011
5	Chemical Propulsion - Green Propulsion	2012
6	Chemical Propulsion - Components	2012
7	Automation and Robotics	2012
8	**De-orbiting Technologies**	**New ***

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Positive Highlights in new ESA SME Policy

- Resources are (proposed to be) made available
- Information is key
  - Involvement at very early stages
  - Networking, Industry Days, …
  - Bi-directional: information of available technologies (cf. Recent contributions to Critical Technologies and Harmonisation: result of actively seeking high-potentials)

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Positive Higlights

- Strengthening the SME office as Single Point of Contact, internally and externally.
- Role of ESA as an expert
  - Quite unique: a person-to-person, face-to-face contact
  - Appreciated by SMEs (and researchers)
  - USP of ESA…
  - Training courses, also by distance learning
- Definition of SME: shareholders and capital requirements but no Trojan Horses

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Comments

- **Financial Sustainability of SMEs:**
  - **How will this be checked?**
  - **How will this be dealt with?**
  - **Agency can mitigate risks by**
    - **Smaller projects**
    - **Sufficient milestone payments**
- **Contractual Issues**
  - **Standard Subcontract is very difficult to achieve**
  - **GC&C should be flown down**
  - **IPR but also (limitation of) liability**

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Comments/ Future Actions

- SME check of existing programmes in addition to proposed actions (e.g. IAP “light”, PPP “light” for Telecom)
- Innovative Forms of Procurement to address specific needs and strengths of SMEs (lack of heritage, risks, “out-of-the-box”)
- Dialogue at regular intervals, both as part of general dialogue with industry and specific meetings

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Thank You for your attention!