

---

# Executing successful partnerships with NASA - International Partners' Perspectives

## ESA Remarks

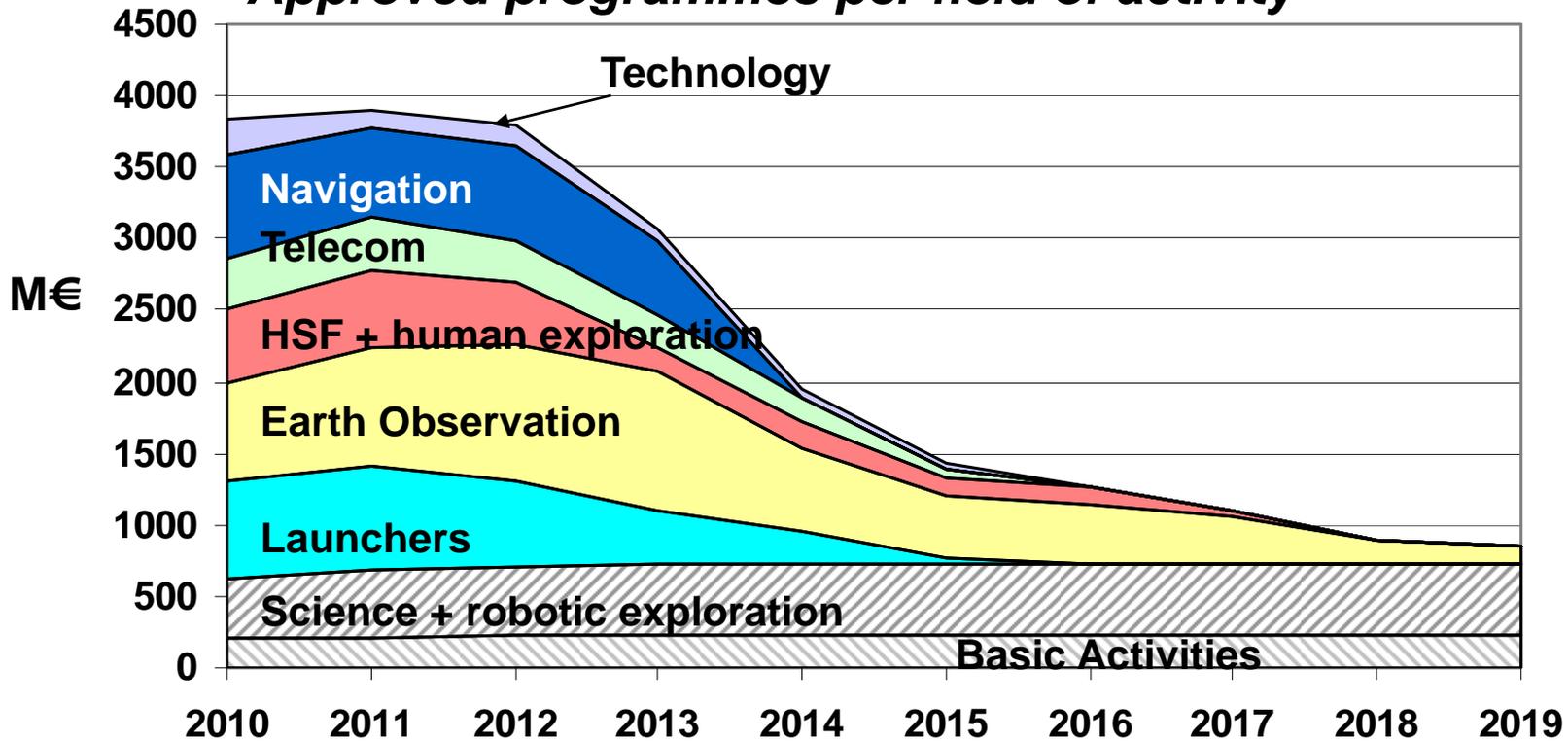
**2010 NASA PM Challenge  
9-10 February 2010, Galveston, Tx**

Andreas Diekmann  
ESA Washington Office  
955 L'Enfant Plaza SW – Suite 7800 – Washington, DC 20024  
Tel: (202) 488 4158; Email: [andreas.diekmann@esa.int](mailto:andreas.diekmann@esa.int)

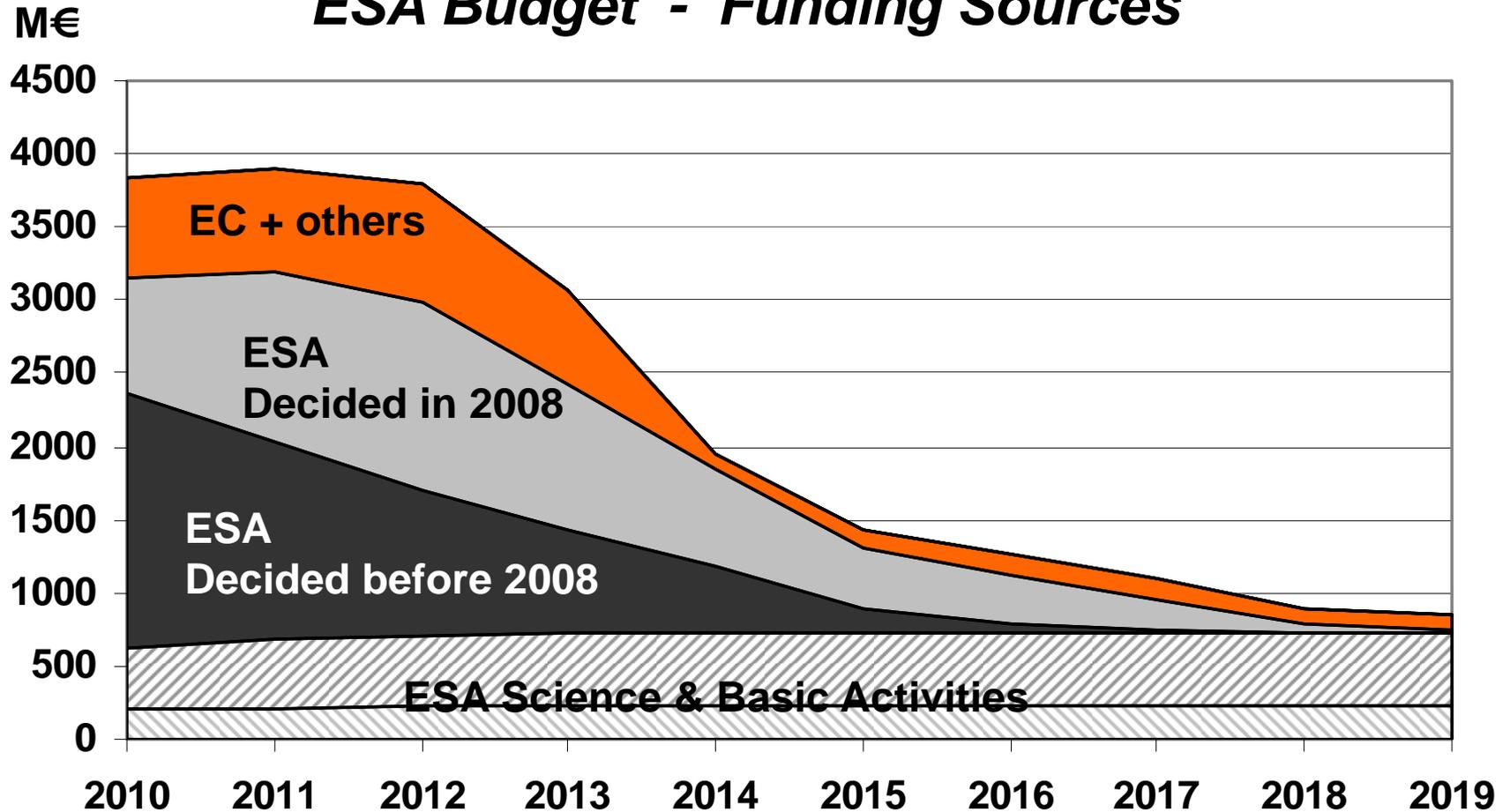
---

- 2000 staff + 2000 on-site contractors
- Strong international orientation (internally + externally)
- Research and Development Agency -> Operations handed over to operators (Arianespace, Eumetsat,..)

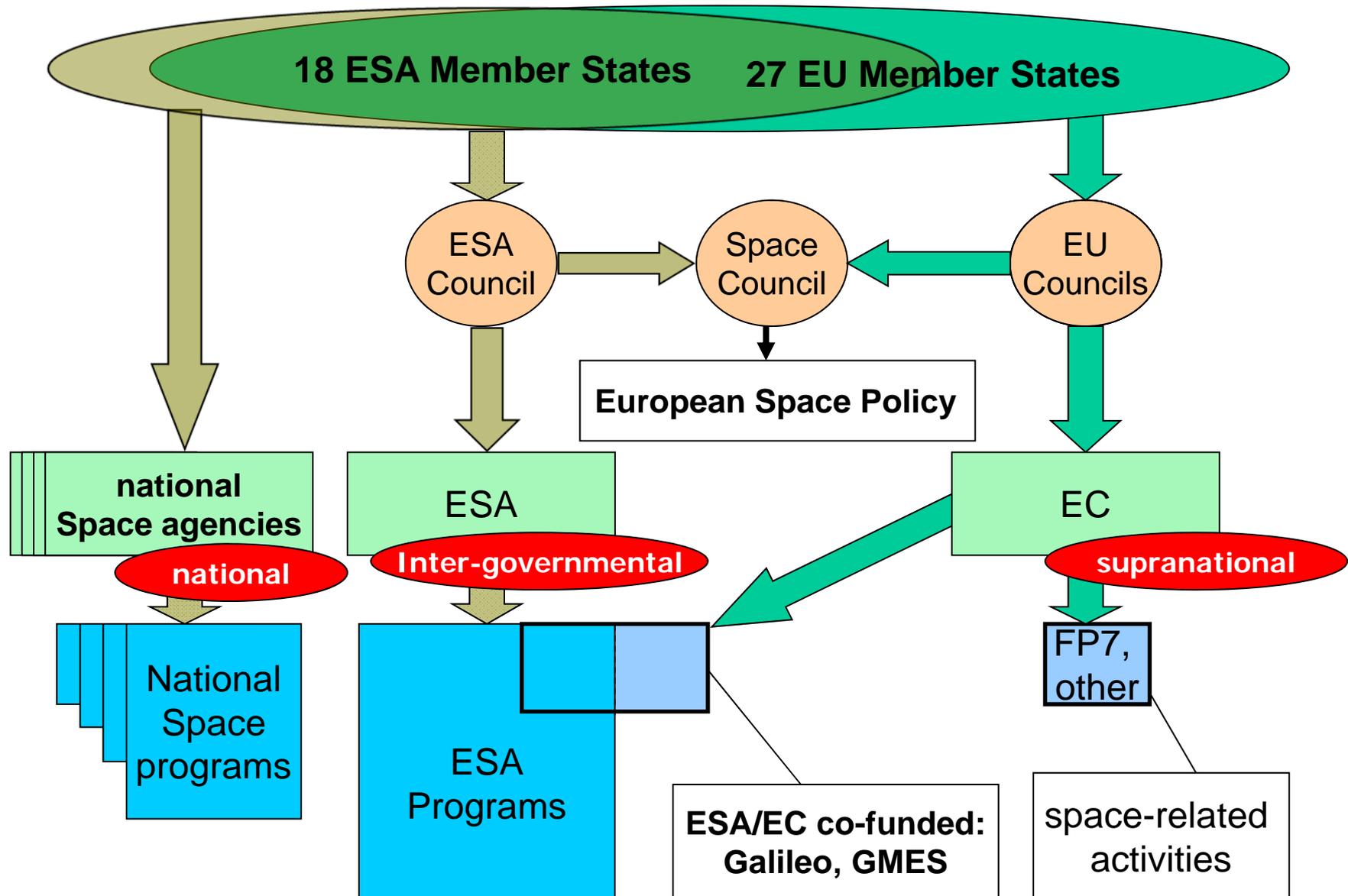
### Approved programmes per field of activity



## ESA Budget - Funding Sources



# European public space players



---

## *History of NASA-ESA/Europe space cooperation*

- March 1959: US offer to European scientists to fly experiments on US satellites
- 1960ies: Close relations between NASA and ESRO
- 1969: NASA offers Europe to participate in post-Apollo activities (Shuttle, Space Station) -> resulting in Spacelab (Shuttle cooperation did not materialise)
- 1983: First ESA astronaut on Space Shuttle (STS-9 Spacelab)
- 1984: President Reagan's invitation to participate in Space Station Programme
- 1990ies: Cooperative science missions (SOHO, Ulysses, Hubble)

---

## *Current NASA-ESA space cooperation*

- International Space Station
- Space exploration (human, robotic)
- Space Science (Cassini/Huygens, Hubble, JWST,...)
- Earth Science (joint search for new cooperation opportunities)
- Space Transportation (recent MoU)
- Space Situational Awareness (exchange of info)

---

## *Peculiarities of NASA-ESA space cooperation*

- NASA is ESA's most significant cooperation partner (in terms of history and volume of cooperation).
- ESA/European space engineering and management culture is based on NASA model.
- In many cases, there is long continuity of personal contacts between ESA and NASA programme and project managers.
- ESA is much smaller than NASA. Therefore, (a) NASA mostly in leadership role, (b) the prominent mode of cooperation so far: contributions to each others missions; new trend: more integrated cooperation.

---

## *Ingredients of a successful cooperation – from a project manager's view (1/2)*

- “Collaboration in a project should be like a marriage, not like a business contract” – in terms of demands on trust, transparency and credibility – “surprises” to be avoided.
- Nevertheless, early, clear and detailed formulation and documentation of the project baseline (programmatic, technical and management) and establishment of mechanism to control that baseline.
- Early and clear definition of inter-Agency interfaces (minimize the number and complexity of interfaces!)
- Regular and frequent communication.

---

## *Ingredients of a successful cooperation – from a project manager's view (2/2)*

- Recognition/Acceptance of differences in the processes of ESA and NASA – do not invent specific processes just for the specific project (however PM see need for “common processes and standards”).
- Joint teams are important, but should not result in blurring of the responsibilities of each partner.
- International cooperation requires the involvement of various capacities on both sides in addition to project management (e.g. external relations, legal service). Good communication and careful distribution of roles are important.

---

## *Conclusions*

- There is a strong cooperation heritage and fundament – often manifested in trustful and long-lasting personal relationships between project managers on both sides.
  - Programmatic decisions can sometimes complicate or disrupt matters.
  - The future may show
    - more integrated cooperative programmes/projects (not just a “contribution-mode” of cooperation).
    - More partners in a project (intern., commercial, academia)
- This may pose new challenges for project managers.
- Our PM cultures are similar. This should help overcoming those challenges.
-