



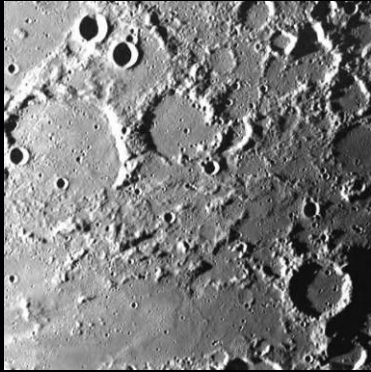
ESA: space exploration programmes and perspectives

Moon Base International Conference
12 October 2005

F. Nordlund

Head, ESA Washington Office

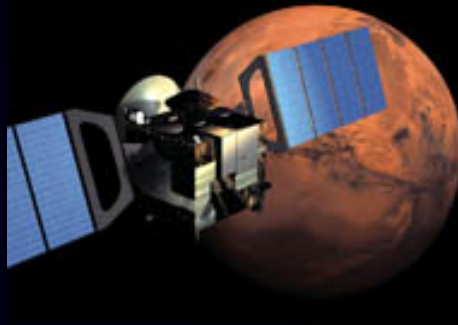
Moon



Mars



And Beyond !

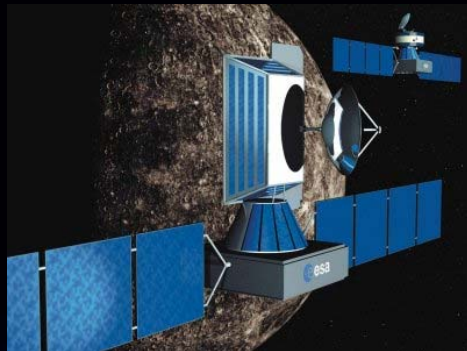
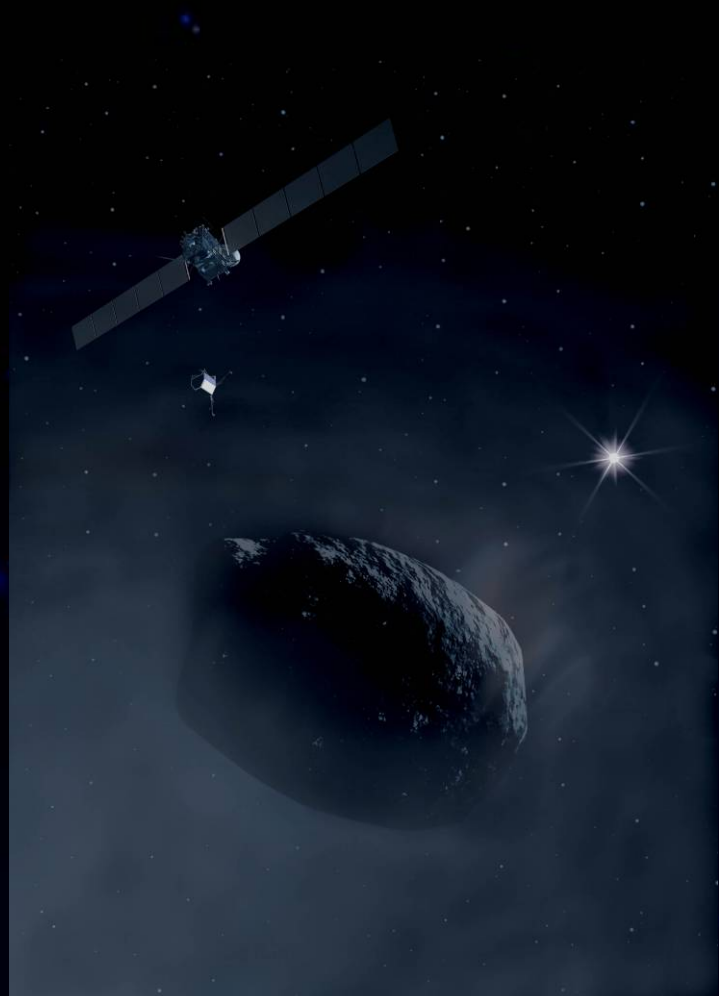


And more to come !

Venus Express (2005)



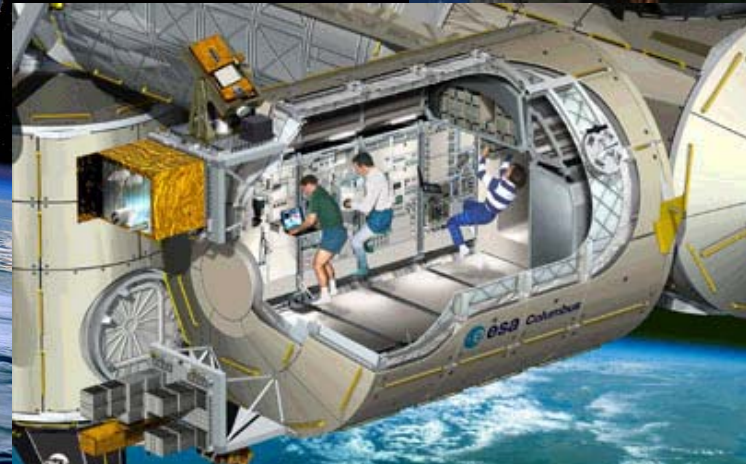
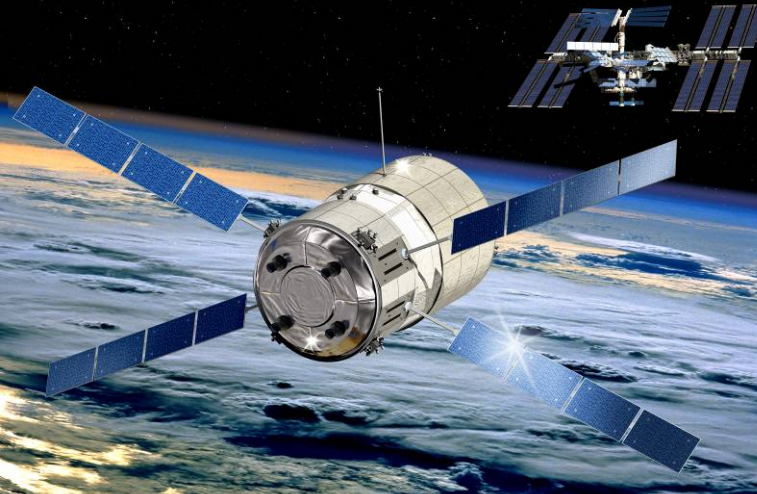
**Rosetta on its way to asteroids and to
Comet 67P/Churyumov-Gerasimenko**

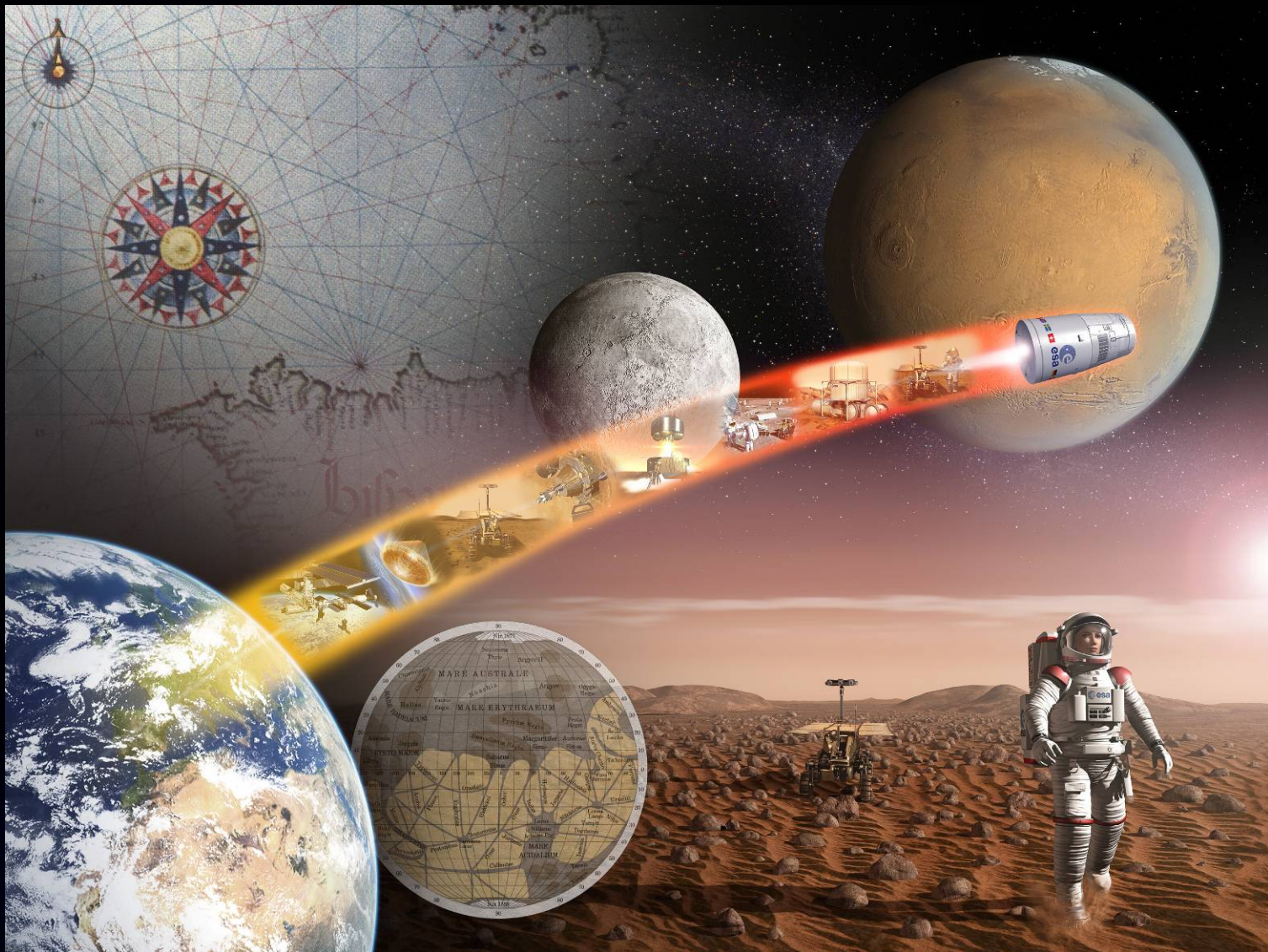


**BepiColombo to
Mercury**

Cooperation with ISRO on Chandrayaan-1

Two interrelated international endeavours: ISS and the formation of a cooperative international space exploration programme







Knowledge

Inspiration

Industrial competitiveness

Innovation

European identity

Security

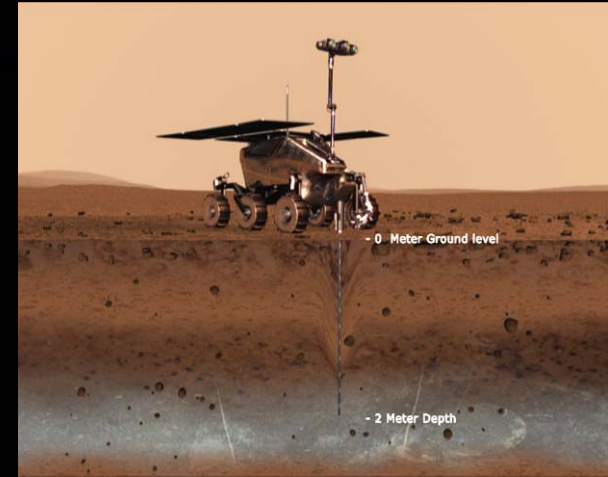
Decision point: the ESA Council meeting at Ministerial level in December 2005

Among others:

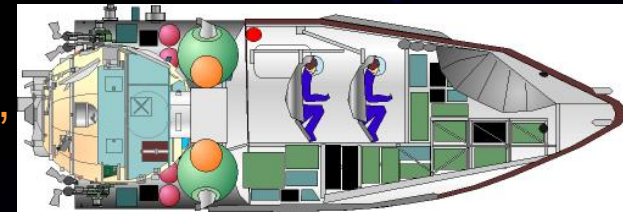
- Pursue Europe's International Space Station objectives and commitments**
- Exploration programme - Aurora**
- Cosmic Vision 2015-2025**

Core Programme: to establish the ability for Europe to participate in meaningful ways to the future global exploration initiatives

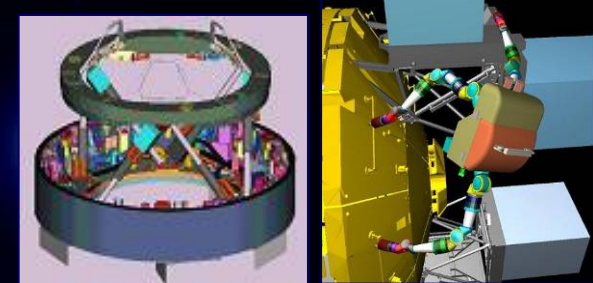
- *Exploration roadmaps, scenarios and associated architecture studies*
 - Mars Sample Return (MSR) preparation*
 - Preparation of robotic and human exploration technology*
 - *Awareness activities*



Exploration Missions: to provide for the development, launch and operation of selected exploration missions, starting with **ExoMars**



Preparatory Phase for a potential contribution to a crew transportation system as an essential and strategic enabling function for future human exploration missions





- **Exploration: a global undertaking**
- **A significant, visible and robust European role in the emerging international space exploration agenda**
- **Flexibility to adapt to changes of the international context**

- Contribution to sustainability and/or affordability ?
- Medium-term ?
- Balance between mutual dependence and autonomy ?

A transatlantic dialogue in view of the next round of decisions in 2008.

