

SPACE EXPLORATION AS A DRIVER FOR GROWTH – ESA INITIATIVE TO PARTNER WITH PRIVATE SECTOR

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- Rationale
- Context
- Status and outlook
- New opportunities for outreach

- Emergence of Public-Private-Partnership (PPP) and Private-Private Initiative (PPI), impacting directly/ in-directly scope of future ESA programmes
- Supported in US at political level (vision, enabling policy framework) and by NASA
 - ✓ Political vision and specific legal instruments (space act agreements)
 - ✓ Significant public funds
 - ✓ NASA technical support and know-how transfer (funded and un-funded agreements)
- Some notable European initiatives, but challenging European institutional environment
 - ✓ Lack of policy to promote economic development of space in field of exploration
 - ✓ Smaller institutional market
 - ✓ Less competitive environment

GROWING NUMBER OF INITIATIVES

US Initiatives (PPP) for cargo and crew access to ISS

← Operational → ← Under Development →

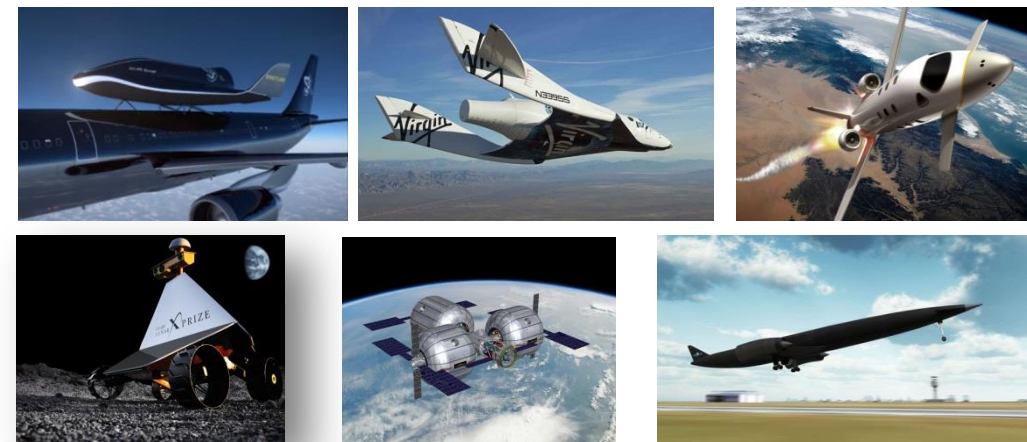


Other US/ International Initiatives

← PPP's →



← PPI's →



I Resolution on Europe's space exploration strategy and accompanying strategy document provides clarity on ESA's

- Ambition and goals
- Exploration destinations
- Programmatic focus and potential roles

II Resolution on ESA evolution addressing also evolution of ESA's relation with industry

- Notes that established space power have introduced new models of cooperation between governments and industry
- Invites ESA DG to make proposals prior to CM16 on Most promising opportunities to adapt relationship with industry in cooperative endeavours

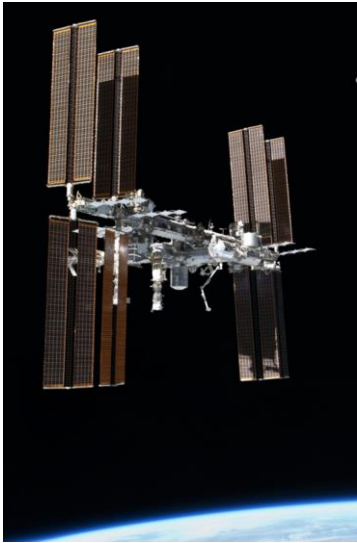
PARTNERSHIPS AS DRIVER OF GROWTH



Establish ESA as Business Partner of private sector initiatives contributing to advancing the implementation of the ESA space exploration strategy through

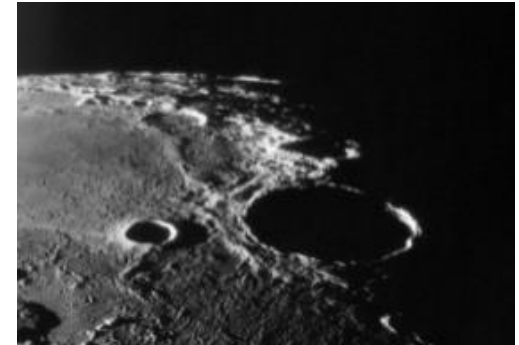
- Open solicitation for partnership ideas proposed by private sector
- Clear definition of ESA evaluation criteria
 - Within scope of ESA exploration strategy
 - Technical and programmatic feasibility
 - Sound business plan and viable Partnership model
- Systematic and transparent process





Promote broader utilisation of ISS
Open perspectives for sustained LEO exploitation services post ISS

Position European industry as provider of exploration enabling services at global level



Stimulate and foster development of innovative capabilities for integration into future ESA missions

Foster innovative approaches for inspiring the public



Contribute to strengthen sustainability of exploration endeavour by

- Leveraging on private sector investments
- Benefitting from risk sharing
- Stimulating open innovation
- Enlarging and diversifying industrial community engaged in space exploration

Free agency funds for extended robotic and human access to new destination

- 60 partnership ideas received and evaluated since call opened in spring 2015
- 19 ideas pre-selected and discussed in consultation meetings
- 8 ideas selected for pilot phase implementation
- First 3 pilot phase preparation meetings held
- First pilot phase to be formalised and kicked-off still this month

Some of the partnerships envisaged will open up new opportunities for outreach

- Lunar nanosats
- Low cost access to ISS

THANK YOU