



**International Participation**  
**Explorer Program 2007**  
**Small Explorers & Missions of Opportunity**  
**Pre-Proposal Conference**  
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# ***NASA International Cooperation***

- **Since 1958, NASA has concluded over 4000 agreements with over 100 nations and international organizations**
- **Cooperation now established with every region in the world**
- **Every Mission Directorate has international partnerships**
- **SMD presently has 46 missions on orbit, 27 of which have international contributions**
- **SMD is also participating in an additional 15 foreign-led operating science missions**
- **NASA follows foreign policy guidance from the Department of State**



# *Why International Cooperation?*

***The National Aeronautics and Space Act of 1958 directs NASA to conduct its activities so as to contribute materially to:***

- “Cooperation by the United States with other nations and groups of nations in work done pursuant to the Act and in the peaceful application of the results thereof.”

***Benefits of international cooperation:***

- **Combining of financial resources**
- **Access to foreign capabilities or geography**
  - **Adds unique capability and/or expertise**
  - **Increases mission flight opportunities**
  - **Enhances the scientific return**
- **Promote U.S. foreign policy interests**



# *Cooperation Guidelines*

- **Cooperation must be mutually beneficial**
- **Must have scientific/technical merit and meet NASA programmatic objectives**
- **International partner funds its respective contribution – not eligible for NASA funding**
- **If AO proposal is from a foreign entity – or if U.S. AO proposal includes foreign participation - a strong letter of endorsement is needed from foreign partner's government agency or funding institution, indicating sufficient funds will be made available**



## ***Cooperation Guidelines*** (cont.)

- **International partners are generally government agencies, but occasionally are universities**
- **Contributions need not be equivalent**
- **Clearly defined and distinct managerial and technical interfaces**
- **Protects against unwarranted technology transfer and takes into account industrial competitiveness**
- **Cooperation to be documented in a written, specific agreement**



# *Challenges to Cooperation*

## *Management complexity*

- Decision-making is more complex
- Communications difficulties
- Differing specifications, standards and assumptions

## *Technical and programmatic risk*

- Interdependence – the “critical path” issue
- Interfaces are difficult to manage at a distance; it’s harder to monitor progress and get early warning of problems
- Multiple partners with multiple interfaces adds complexity

## *Political risk*

- Budgetary and bureaucratic uncertainties
- Potential linkage to political activities or economic problems



# Why Do We Need Agreements?

- ***International Agreements are tools that:***
  - clarify responsibilities of the partners
  - confirm commitments and terms
  - document the quid pro quo (benefits) of the cooperation
  - protect investment and interests, such as:
    - technical data rights
    - intellectual property rights
    - allocation of risk -- cross-waiver of liability
  - allow import/export of technical data and goods
  - confirm arrangements to meet international obligations, such as UN Registration Convention, if necessary
- ***Note: International Agreements may take several weeks to months to put into place!***



# Questions?

## Office of External Relations

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<http://www.hq.nasa.gov/office/oer/index.html>