



Space research collaboration with NASA: The Working Arrangement

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The Background:

US participants in FP7:

- **Universities**, which signed the Grant Agreement allowing them to benefit from EU funding
- **NOAA and NASA**, which started/wanted to participate but had to drop out due to incompatibility of some clauses in the Grant Agreement with their own law



Participants until now:

Proposal	Project Acronym	Project Title	Participant Legal Name
2007-1	PROVISG	Planetary Robotics Vision Ground Processing	THE OHIO STATE UNIVERSITY
2010-1	BETS	Propellantless deorbiting of space debris by bare electrodynamic tethers	COLORADO STATE UNIVERSITY SYSTEM
2010-1	DEORBIT SAIL	De-Orbiting of Satellites using Solar Sails	California Institute of Technology
2010-1	EURISGIC	European Risk from Geomagnetically Induced Currents	The Catholic University of America
2010-1	HESPE	High Energy Solar Physics Data in Europe	UNIVERSITY OF CALIFORNIA
2010-1	PLASMON	A new, ground based data-assimilative modeling of the Earth's plasmasphere - a critical contribution to Radiation Belt modeling for Space Weather purposes	Los Alamos National Security LLC
2010-1			NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY
2010-1			UNIVERSITY OF WASHINGTON
2011-1	MAARBLE	Monitoring, Analyzing and Assessing Radiation Belt Loss and Energization	UNIVERSITY OF CALIFORNIA
2011-1	NEOSHIELD	A Global Approach to Near-Earth Object Impact Threat Mitigation	SETI INSTITUTE CORPORATION
2011-1	QB50	An international network of 50 CubeSats for multi-point, in-situ measurements in the lower thermosphere and re-entry research	SPACE SYSTEMS INC CORPORATION
2011-1			LELAND STANFORD JUNIOR UNIVERSITY

The Problem:

NOAA and NASA had the technical skills, the willingness to participate (and even some times the financial capacity) but the incompatibility of legal regimes did not provide an adequate framework for their participation.

The contentious issues:

- Financial and technical Audits
- Exchange of funds
- Incompatibility of Public-Private law regimes

Possible solutions:

- **“Third party” solution**, which allows NASA to participate in a project without signing the GA but signing the Consortium Agreement (which is not subject to approval by the EC)
- **Bilateral solution**, NASA will only establish a legal relation with one partner of the consortium agreement (like a subcontractor)

Limitations:

- **“Third party” solution:** NASA could only sign an agreement under US law – the whole regime of the consortium agreement would be under US law
- **Bilateral solution:** The Commission would still be responsible for the Audits on the work and finances of the tasks executed by NASA



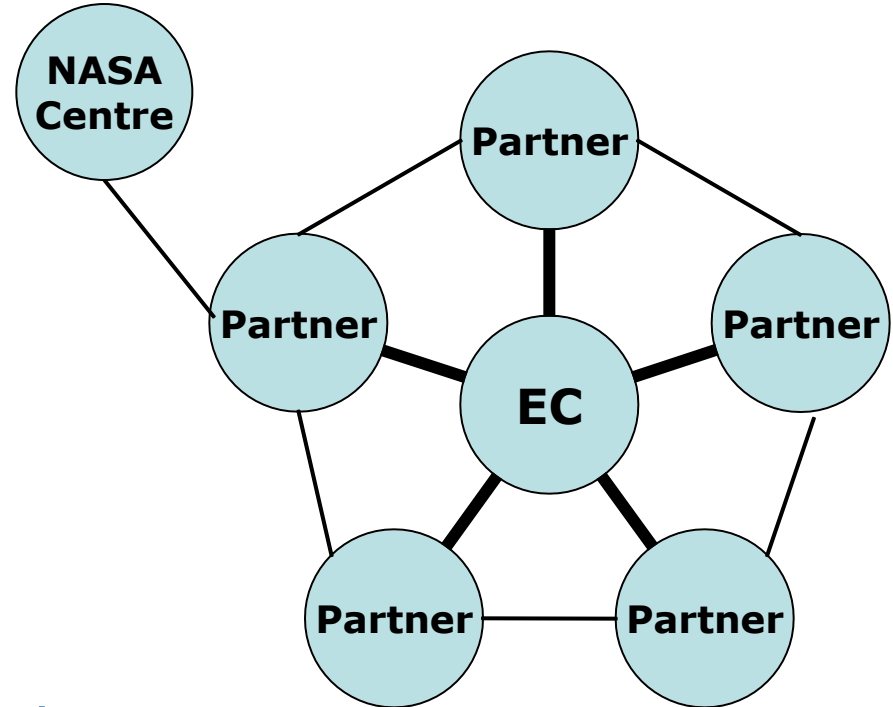
The Solution: “Principles regarding the cooperation of NASA personnel with projects funded by the EU’s framework programs in the area of space research”

Bilateral+ solution : NASA does not sign the grant or consortium agreement, but a bilateral agreement with one consortium member, under:

- a) Pre-existing bilateral agreement: ESA, DLR, CNES, ASI...
- b) Public International Law agreement: If European partner can bind its State
- c) Private Law: Only under US law

Restrictions:

- No exchange of funds
- The relevant consortium member is responsible for the tasks in question
- There is no legal relation between the EU/other partners and the NASA personnel



Restrictions: (i) NASA

- **NASA should fully share and benefit from the results:** The consortium partner should be able to guarantee that
- **No-confidentiality / no-proprietary results:** NASA will not contribute to results that will not be made available to the broader scientific community

Restrictions: (ii) Commission

- **Identification of the NASA tasks:** The Commission should be informed of the potential contribution of NASA and for which tasks in the Description of Work (Annex I)
- **Identification of the European Partner:** At the proposal stage
- **Consultation to REA:** Check before signature of Grant Agreement if bilateral agreement is ok with FP7 rules

Restrictions: (iii) Consortium – partner

- **No exchange of funds**
- **Liability:** The partner is fully responsible for the work and future audits
- The consortium agreement would **acknowledge NASA's contribution** through the bilateral agreement

Implementation:

- Only through NASA's Office of International and Interagency Relations, **OIIR** - If done through a Public International Law Agreement, it may need a multi-agency coordination process managed by the State Department
- It does not modify internal EU or NASA rules – Working arrangement principles

Thank you for your Attention

http://ec.europa.eu/enterprise/policies/space/research/index_en.htm

http://ec.europa.eu/enterprise/policies/space/files/research/principles_nasa_eu_en.pdf