SPINE Meeting overview
A. Hilgers

- Objectives: Identify Requirements for Space Instruments related to Spacecraft Plasma Interactions.
- Triggered by a SEENoTC (Spacecraft Environment and Effects Network of Technical Competences) action.
- Jointly organised with CNES CCT
- Output shall be conveyed to SEENoTC

SEENoTC (TOR – extract)

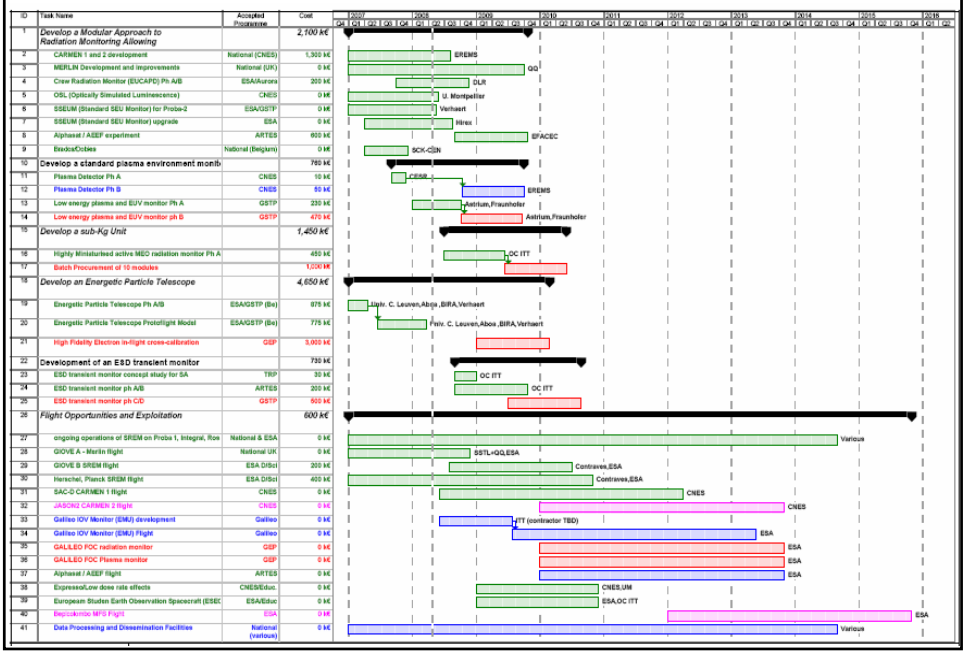
- The purpose of the Network of Technical Competences on Space Environments and Effects (SEENoTC) is to reinforce the coordination of both existing and planned activities related to space environments and effects in Europe, and to strengthen Europe's position in this field through the implementation of a coherent strategy developed by the participants of this Network with a view to improving efficiency and reducing risk in these activities.
- The scope of the domain covered by the SEENoTC includes:
  - energetic particle radiation and its effects on systems, payloads and humans and
  - natural and induced plasma environments and their interactions with spacecraft, and resulting effects on systems and payloads

SEENoTC activities

- KO 2007
- Identify members' activities
- Identify and implement support actions
- Identify requirements for future activities
- Define harmonised work plan
- Next WG meeting: 16-17 June 2008
- Next Workshop: ~13-17 October 2008
- Next Steering board meeting: ~29 October 2008.

SPINE, 28-5-2008

Space Environment and Effects Monitors activity list



Space Environment and Effects Monitors main goals and priority axes

Table 1: Priority axes versus main goals		Priority axes					
		Recurrent radiation monitors and experiments	Plasma monitors	Science class radiation monitor	ESD monitor	Very low mass technology	Data exploitation and exchange
Main goals	Cover full radiation and effects range	X	X	X	X	X	
	Tailored capabilities	X	X	X	X	X	
	Modular and standard detector elements	X	X	X			
	Low integration cost					X	
	Coordinated exploitation						X

Outline of the programme

- 28 May
  - Review of the needs
  - Review of state of the art
- 29 May
  - Analysis of requirements
  - Planning

Agenda of SPINE Meeting 28-29 May 2008

Speaker	Title	Time
A. Hilgers	Welcome and objectives of the meeting	10:00
	Session: Measurement needs in spacecraft plasma interaction	10:20
D. Rodgers (ESA)	Review of spacecraft plasma interactions effects	10:20
	Coffee Break	11:00
A. Hilgers (ESA)	Mission specific needs: Science, EP systems, SSA, etc…	11:20
V. Inguimbert (ONERA)	Ground testing of spacecraft plasma interaction effects	12:00
	Lunch Break	12:40
	Session: Ongoing and past development and experiments	14:00
D. Payan (CNES)	CNES development and experiments	14:00
A. Eriksson (IRF)	Measurement of spacecraft potential	14:30
R. Marchand (CETP)	Geometry, biasing and measurement of ion distribution functions	15:00
	Coffee Break	15:30
R. Brunner (IPM) W. Konz (IPM)	IPM experience and development of EUV and plasma monitors	15:45
W. Hajdas (PSI)	LEED current status	16:15
A. Hilgers (ESA)	Overview of European space experiments	16:35

Agenda of SPINE Meeting 28-29 May 2008

Speaker	Title	Time
	Session: Requirements for future measurements (Round table)	09:00
Moderator: D. Payan	Plasma measurements	09:00
Moderator: D. Rodgers	Effects experiments	09:45
	Coffee Break	10:30
Moderator: A. Hilgers	Mission specific requirements	10:45
Moderator: V. Inguimbert	Ground systems	11:30
	Lunch Break	12:15
	Session: Discussion on R&D requirements and plan (Round table)	13:15
D. Payan	CNES current R&D plan	13:15
D. Rodgers	ESA current R&D plan	13:45
	Coffee Break	14:15
E. Daly	Programme opportunities and harmonisation	14:30
A. Hilgers	New requirements and workplan	15:00
	Closing	16:00