

SPACE DEBRIS ACTIVITIES 2000-2002

ASI

Twelfth Space Debris Coordination Meeting with
European National Space Agencies

Pisa, 20 January 2000

ASI activities supported by CNUCE/CNR

- Debris mitigation support for ASI space projects and operations
- Feasibility study of an electro-dynamic tether for de-orbiting
- IADC modeling activities
- Reentry predictions of risky space objects for the Italian Department of Civil Protection (Ministry of Interiors).

Activities funded by ASI in 1999

- ASI-CNUCE/CNR cooperation agreement
1997-2001 - Space debris activities
[130 keuro]
- Development of an hypervelocity impact
facility for hydrocodes validation and
material characterization (CISAS)
[50 keuro]

Activities funded by ASI in 1999

- Feasibility study of the use of the Sardinia Radio-Telescope (SRT) for radar astronomy and space debris detection
[15 keuro]
- Feasibility study of an electro-dynamic tether system for de-orbiting in LEO
[130 keuro]

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Proposals to ASI (not yet funded)

- Debris and meteoroids detectors on ISS and ASI satellites
- Ground-to-ground bi-static radar at 30 GHz to observe small debris in LEO
- Use of SRT for debris observation (receiver of bi-static array, beam park mode)

Conclusion

- No program nor specific budget allocation for space debris
- No firm medium-term commitment
- The ongoing activities will be reasonably continued
- New activities might be funded, depending on interest and money available