



Ad-hoc Group to promote standardisation of Terminals for Regenerative Satellite Multimedia Systems (AHG-RSAT)

STATUS REPORT Jan 2001

*European Space Agency
Agence spatiale européenne*

ESTEC

Postbus 299 - NL2200 AG Noordwijk - Keplerlaan - NL2201 AZ Noordwijk ZH -
Tel. (31) 71 5656565 - Fax (31) 71 5656040



Background

- 1997: Ad-hoc Group to Promote Standardisation in Satellite Multimedia (Intelsat, ESA, Eutelsat, Hispasat, SES, Telenor, Telesat, Teracom)
- Technical recommendation document produced was the starting point for the DVB-RCS work

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The Multimedia Satellites

- Late 90's: Emergence of several Proprietary Satellite Regenerative Multimedia Systems
- Risk of multiple small sized proprietary terminal markets

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European Systems

- Alcatel Domino II System
- Alenia Euroskyway
- Astrium WEB/WEST System
- Eutelsat Skyplex System

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Background (II)

- October 1999: New Initiative to develop open recommendations which could form the basis for standards for interactive terminals able to work with a variety of **regenerative** multimedia satellite systems.
- Recommendation ready : December 2000

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AHG-RSAT Members

- Alcatel Space
- Alenia Spazio
- Astrium
- CNES
- ESA
- Eutelsat
- Hispasat
- Intelsat
- SES-Astra
- Telenor
- Telesat

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Group's Terms of References

- **Mission Statement**

- To promote standardisation of terminals for regenerative satellite multimedia systems through the fostering of commonalities in the Satellite Access Terminal (RSAT).

- **Objective**

- Leverage existing standard, including DVB-RCS, for the use with regenerative satellites.

- **Scope**

- Develop open recommendations which could form the basis for standards for RSATs to be designed to work with a variety of regenerative multimedia satellite systems.

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Scope of the Present Contribution

- Report of the Status of the work
- Highlight results which may be of interest to DVB
- Highlight initial reactions from DVB-RCS manufacturers and other members

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Contribution's Main Points

- OBP to ground-based NCC information exchange (return link control)
- Routing/Switching On-board Requirements
- Protocol stack for IP transport
- Network Specific Functionality
- VPI/VCI, PID, Channel_ID assignment, recommendations for MPEG profile

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Main Achievements

- Full Convergence towards ONE common recommendation satellite regenerative systems
- Solution based on DVB-RCS
- Minor compatible additions (not changes)
- Proposed additions presented to DVB-RCS for information and potential comments by individual members

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Conclusions

- **Common Recommendation** from AHG-RSAT Group is being finalised
- **DVB-RCS** is very well suited as a basis for regenerative systems
- **Regenerative systems** consistent with DVB Commercial Requirements for Satellite Interactive Services

Conclusions (II)

- **Minor** enhancements to DVB-RCS would be required to support a range of regenerative systems
- **The market** for DVB-RCS related equipment, in particular terminals, and services would be significantly broadened
- Final report will be made available to DVB