The DVB-RCS MIB
draft-combes-ipdvb-mib-rcs-00.doc

IETF meeting #68
ipdvb WG
Prague, 20\textsuperscript{th} March 2007
SatLabs Group basics

• Association set up to bring the DVB-RCS (EN 301 790) standard to large-scale adoption
  – Foster availability of interoperable products
  – Ensure availability of solutions for interoperability testing and certification

• Membership open to all organizations worldwide interested in the DVB-RCS standard
  – Network/Service providers
  – Satellite operators
  – Satellite manufacturers
  – DVB-RCS system suppliers
  – Equipment/technology suppliers

• Main emphasis on interoperability but addressing other aspects related to DVB-RCS implementation

• Creation: October 2001.
  – EEIG (European Economic Interest Grouping) status since 2005.
SatLabs Group Interoperability activity

• **Objective**
  – complement the DVB-RCS standard with recommendations and guidelines to facilitate DVB-RCS terminal interoperability, and to provide a mechanism for formal DVB-RCS interoperability certification.

• **Interoperability Phase 1 (2005-2006)**
  – Basic interoperability: DVB-RCS specification
  – Phy+MAC layer compatibility

• **Interoperability Phase 2 (2007- )**
  – Extend the level of interoperability beyond the DVB-RCS specification to cover areas such as:
    • Management & control (including MIB)
    • Quality of Service
    • TCP/IP – HTTP acceleration
  – Recommendations published as “SatLabs System Recommendations, version 2”, publicly available at www.satlabs.org
DVB-RCS protocol stack

DvbRcsMac interface represents the whole satellite side interface (combination of DVB and DVB-RCS modems) for Tx and Rx

Uni- or bi-directional interfaces

2 encapsulation options on DVB-RCS TDMA links

2 possible stream types depending whether:
• DVB-S: TS only
• DVB-S2: TS or GS
The DVB-RCS MIB

- The DVB-RCS MIB is located under `iso.org.dod.internet.mgmt.mib-2.transmission`.
  - It holds information which is useful for the satellite interface as a whole (in DVB-RCS, DvbRcsTdma is very much dependent on DvbTdm and cannot exist alone).
  - It includes four sub-groups: rcstSystem, rcstConfig, rcstStatus and rcstAction.
IANA assigned number for DVB-RCS

• The following ifType values have been assigned:
  – 239  dvbRcsMacLayer  DVB-RCS MAC Layer  
    [ETSI EN 301 790, SatLabs]
  – 240  dvbTdm  DVB Satellite TDM  
    [ETSI EN 300 421, ETSI EN 302 307, SatLabs]
  – 241  dvbRcsTdma  DVB-RCS TDMA  
    [ETSI EN 301 790, ETSI EN 300 421, SatLabs]

• The following transmission number has also been assigned:
  – 239  dvbRcsMacLayer  DVB-RCS MAC Layer  
    [ETSI EN 301 790, SatLabs]

• See the following registries:
  – http://www.iana.org/assignments/smi-numbers  
  – http://www.iana.org/assignments/ianaiftype-mib
DVB-RCS MIB and ipdvb WG

• This MIB was produced by an industry consortium

• It does not require that change control be ceded to the IETF
  – Maintenance will be done by SatLabs

• It conveys information for the Internet community
  – It should aimed at becoming an Informational RFC

• The draft will be posted when the I-D archives re-open