



International Telecommunication Union

Satellite Operations in Romania

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MEDIA SAT S.A.

- o Private company incorporated in 1997
- o Important player on the communications market in Romania
- o Business Lines:
 1. Video / Audio / Data Broadcasting (both terrestrial and on satellite)
 2. INTERNET
 3. Call Centers Operator and CTI
 4. Telephony Operator for CUG



MEDIA SAT in Satellites

- o Satellite infrastructure operated:
 - 1. Earth Station Facilities near Bucharest
 - 2. Digital Satellite News Gathering Van (DSNG)
 - 3. Satellite links operated on: EUTELSAT
HOT BIRD 3
EUTELSAT II F3
EUTELSAT W2 – ENEX Contribution



MEDIA SAT in Satellites

- o Services operated on satellite:
 1. Up-link 3 TV channels (PRO TV, ACASA TV and PRO TV International)
 2. Up-link 2 Radio channels (PRO FM, INFO PRO)
 3. TV Live Transmissions with DSNG
 4. TV Feeds (mainly news and sports)
 5. Data Broadcasting
 6. INTERNET (8/2 Mbps)



MEDIA SAT in Satellites

Buftea Earth Station





MEDIA SAT in Satellites

- o Strategy on Business Development:
Target the international market
providing excellent satellite services
and low cost facilities for all types of
satellite services, our main system
attributes being high reliability and
scalability and low operating costs



MEDIA SAT in Satellites

Our System:

- o Main up-link antenna - Scientific Atlanta 9.1m
- o 4 ports transmit/receive
- o Fully deiced and motorized
- o CPII HPA's 500W
- o RF fully redundant, hot stand-by
- o Up-link frequency Ku extended 17GHz
- o MPEG-2 PowerVu Plus Scientific Atlanta
- o Conditional Access for each signal
- o 2:4 redundant encoders system
- o Plan on adding a statistical multiplexer and increase to 6 the active encoding units



Satellite Market in Romania

- o Digital Video Broadcasting is the only mature service, TV channels practicing a hybrid distribution (satellite + local transmitters).
 1. No requirement for national coverage (local licenses)
 2. High terrestrial long distance distribution costs
 3. High Urban Cable Penetration before Commercial TVs development



Satellite Market in Romania

- o R.A. Radiocomunicatii
 - 1. State owned operator
 - 2. Earth Station located ~120km from Bucharest
 - 3. All types of services operated:
 - Digital Video
 - Telephony (IDR/IBS and DAMA) part of the Romanian intl. traffic and transit services
 - Data Transmission / INTERNET



Satellite Market in Romania

- o RaRTeL S.A.
 - 1. JV between Telespazio SpA and Radiocomunicatii
 - 2. VSAT solutions using Radiocomunicatii's HUB from Cheia
 - 3. Satellite Mobile Telephony on Emsat
 - 4. Internet and Intranet via satellite services



Satellite Market in Romania

- o Adisam Telecom
 - 1. Video Broadcasting for 3 TV channels (MTV Romania, B1 TV and Tele7abc)
 - 2. Earth Station located in Bucharest
 - 3. Satellite used AMOS 1
 - 4. MPEG-2 compression Tandberg Television



Satellite Market in Romania

- o Logic Telecom
 1. VSAT network combined with terrestrial in order to provide data transmission services
 2. HUB located in Bucharest
- o Digicom
 1. Data Transmission on a VSAT network
 2. HUB located in Bucharest
 3. Low transmission capacities



Satellite Market in Romania

- o Telenor / AS Computer - VSAT with HUB in Norway
- o S&T - VSAT with HUB in Germany
- o Rokura - GPS applications; VSAT with HUB in Germany
- o MOBIFON - INTERNET back-up
- o Own Satellite Video Broadcasting operated by Antena1, Prima, ATOMIC, Realitatea TV and ETNO



Satellite Legislation in Romania

- o Romania has a new regulatory framework in communications through the Emergency Ordinance No. 79/2002 (OJ 457/June 27 2002)
- o This EO states that the newly established National Regulatory Authority for Communications will elaborate new procedures for authorizing communications services, including on satellite.



Satellite Legislation in Romania

- o Until new procedures will be established satellite operations are regulated through Order No. 177/1996 (OJ 108/ May 28, 1996).
- o No changes expected from the new legislation on the authorization process for satellite operations, the only difference expected being on terminology (harmonized with the new regulatory framework).



Satellite Legislation in Romania

- o Current legislation regulates operations for:
 1. VSAT networks with HUB located in Romania
 2. VSAT networks with HUB located outside Romania
 3. SNG operation
 4. Earth Stations for Video/Audio Broadcasting are assimilated to VSAT HUBs



Satellite Legislation in Romania

- o Operating Authorizations are given by the Regulatory Authority (presently ANRC) and need:
 1. Purchasing Approval given after a certification for conformity by the General Inspectorate for Communications and Information Technology IGCTI (terminals need type approvals given by the same institution)



Satellite Legislation in Romania

- 2. Satellite access approval given by R.A. Radiocomunicatii for the satellites of intl. organisations in which Romania is affiliated. This was the case in the past for INTELSAT, EUTELSAT and INMARSAT. This requirement is not valid anymore.
- o Starting operations for any HUB or terminal needs an individual Technical Authorization (IGCTI)



Satellite Legislation in Romania

o Useful links:

1. www.mcti.ro
2. www.anrc.ro
3. www.igcti.ro
4. www.gov.ro
5. www.mediasat.ro



THANK YOU!

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