European Satellite Operators Association

Satellite Prospects for Europe
Satellite Finance 2005

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ESOA
European Satellite Operators Association

ESOA

- Association based in Brussels
- Represents interests of European satellite operators
- 11 full members, 3 supporting members (Arianespace/ EADS Astrium/ ISB)

telespazio una Società Finmeccanica
SES GLOBAL
inmarsat Total Communications Network™
EURASIASAT International Satellite Operator
EUROPE*STAR POWERFUL CONNECTIONS
hispasat acercando culturas
EADS SPACE SERVICES
NEWskies SATELLITES
telenor
HELLAS SAT
SIRIUS SATELLITE SYSTEM

Mission:

- 'To work with key [European] organisations including the European Commission, Parliament, Council, the European Space Agency and other relevant international organisations to create the political, industrial and regulatory environments necessary to deliver vital communications services to citizens across the globe'

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ESOA Activities

"create the political, industrial and regulatory environments necessary to deliver vital communications services":

- Ensure accurate perception of satellite operators as providers of services [via satellite] rather than as providers of infrastructure and ensure satellite communications are not forgotten in policy-making
- Strengthen policy-makers'/ consumers' awareness of satellite services as a competitive and efficient complement to other means of communication ensuring that satellites peculiarities with respect to other electronic transmission means are well understood
- Defend, preserve, facilitate access for satellite services in markets accross the globe

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Promoters of Growth

EU POLICY:
The European Union sees Space as vital in securing the role of Europe as a technology leader:

EC's White Paper on Space:
"Satellite communications services can play a very important role in delivering broadband technologies to areas where 'conventional' solutions are not possible"

Lisbon objectives:
Growth, competitiveness, i2010: information, innovation; ICT's enabling social cohesion against a background of ***Technology Neutrality***

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Obstacles to Growth

Reality:

- Fragmented smaller EU budgets which can hardly fund new satellites services without ESA/ multiple MS's
- EC instruments pay for Research/ Pilot projects/ Regional solutions, never for operational business
- 'Structural Funds' managed by regions usually given to terrestrial Telco's
- Terrestrial lobbying power:
  - Age-old legacy of incumbents, traditionally state-owned
  - Massive companies with huge presence and lobbying power

  (BT: ca. 92,000 employees in UK alone)

  (France Telecom: 110,000 employees in France alone)

THERE IS NO REAL FOCUS ON THE INTRODUCTION OF NEW SERVICES

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A strategy for Growth

Round table focus:
"…expected relays of growth for the European market, and the strategies to be followed to support growth. The discussion will focus on both the historical core businesses as well as potential investments in new development areas such as mobile services or public/private projects."

Options for a positive future of the satellite services:

- GALILEO as a forerunner for info-mobility
- New TV (HDTV, UDTV, 3DTV, interactive TV) pushed by new digital receivers
- Integration with 3G and 4G mobile furnishing efficient broadcast capabilities

GOING BACK TO BASICS, SATELLITE IS MOSTLY EFFICIENT WHEN BROADCASTING AND MOBILE COMMUNICATIONS ARE INVOLVED

1. Broadcast

NEW TV

- The major success demonstration for satellites is TV broadcast: more than 4,000 channels delivered over Europe at a typical cost of 5-10 €¢/user/year

- New TV (HDTV, UDTV, 3DTV, interactive TV) and digital radio can be introduced via existing satellites to be optimized on new generation ones

One interesting new application concerns new types of audio services (e.g. satellite delivery of digital radio to mobile handhelds or vehicles). ESOA notes that the experiences in the United States and Asia, where millions of people have subscribed within a few years of introduction, suggest that this nascent market should be promising in Europe,too. *Provided there is sufficient radio spectrum available when needed and the regulatory framework* allows operators to adapt their products to the specifics of the European market place, satellite radio services in Europe could attain similar levels to those predicted for the US market (i.e. around 46 million subscribers by 2014, generating nearly US$ 7.6 billion in annual revenue in 2014).

2. Galileo

INFO MOBILITY AND SECURITY

- Galileo is the first European Infrastructure with world wide coverage
- Position determination is only one face of the coin, the other being position reporting which calls for satellite communications
- The role and status of Galileo Concessionaire is under definition
- The contiguity of navigation and communication bands (S-band) should be fully exploited with dual receivers to be installed in each new car at factory level. As a by-product, this could also ease the Digital Radio market start-up
- The impact of these decision on the ***Homeland Security*** is self evident

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3. 3G and 4G Integration

ACCOMPANY CONVERGENCE MOVE IN THE TELECOM WORLD

- The S-Band availability for Satellite communications is best exploited through Broadcasting Characteristics utilization.
- Wide Band services are possible
- Complement the satellite limitations with terrestrial solutions in dense areas advantages
  - *Satellite for global coverage and terrestrial for urban, semi urban and indoor coverage*
  - *Backhauling of terrestrial solutions for fixed and mobile networks*
- Further integration with Galileo Communication

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Conclusions

- Satellites: A solution with Natural Advantages:
  - Ubiquitous coverage with one main piece of infrastructure
  - Existing capacity for quick-fix solutions
  - A wireless technology: no unsightly poles & cables

- Recognition from Local/ National/ European governments as a viable option
- A fair chance to compete or cooperate with other technological alternatives
- **Develop the standard and regulatory frameworks**

Adaptation of terrestrial standards to satellite and influence new terrestrial standards in order to incorporate a satellite option

- *Facilitate hybrid systems development*
- *Leverage on large volumes to ensure multi sources low cost terminal*

Preparation of the regulatory framework forfuture satellite systems

- *Spectrum needs estimation*
- *Worldwide availability of frequencies*
- *Complement terrestrial regulations for hybrid systems*