



Cooperation -v- Competition in the Space Sector

Brussels, 21st May 2013

Aarti Holla Secretary General www.esoa.net

sg@esoa.net



ESOA Members







- Both *cooperation* & *competition* are very strong in the space sector
- Different entities involved:
 - **Public** sector European Institutions/ European space agency/ national space agencies & governments
 - **Private** sector manufacturers/ operators
- The European space sector **benefits from** <u>and</u> **faces competition** within Europe / from different parts of the world:
 - Satellite operators compete to sell services
 - Satellite manufacturers compete to sell satellites (Europe/ US/ China/ others)
 - Launch service providers compete to sell launchers to operators
- Particularities of the US market impact global competition:
 - ITAR rules
 - Rules to buy US products



Examples for in-orbit testing of *new technologies* & the roll-out of *new services*:

- **On-board processing**: ESA-EUT **Skyplex** (2002)
- Spot beam satellite: ESA-Avanti Hylas
- Hosted payloads:
 - EC-SES EGNOS
 - ESA-EUT-Astrium EDRS
 - New 'bus' & technology payloads: ESA-INM Alphasat
- Electric propulsion platform: ESA-SES 'Electra'
- Cooperation between operators:
 - SES-EUT Solaris JV (mobile services)
 - Space Data Association



Promoting Common Interests through Associations

- **ESOA**: The association of <u>all</u> European satellite operators:
 - Ensuring a level playing field for satellite (alongside other communications technologies)
 - Protecting satellite spectrum
 - Promoting benefits of satellite services emergency communications/ broadband/ security/ mobile services
- Cooperation between regional associations (ESOA/ SIA/ GVF/ APSCC/ others):
 - Global Satellite Spectrum Initiative to protect C-Band at ITU WRC (2007, 2015)
 - Joint presentations on key issues e.g. space security
 - Joint approaches towards national regulators on specific regulatory or market access matters
- Cooperation between associations of different sectors (ESOA (operators)/ Eurospace (manufacturers)/ Nereus (regions):
 - Joint initiatives towards EC on matters of mutual interest
 - Raising awareness through joint events



Satellite operators ensure healthy competition in multiple markets:

• Towards end-users:

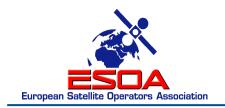
- TV Broadcasting
- Satellite Broadband
- Essential services: government/ security/ emergency
- Towards public sector:
 - Competition between operators for key contracts





There are sometimes competing interests between different parts of the same sector:

- Manufacturers: Lobby to seek public funding support for new technologies
- **Operators**: Highlight their private investments to demonstrate the cost-effectiveness of using satellite solutions (compared to terrestrial solutions)
- ⇒ This leads to cooperation in some areas & working independently in others



There is plenty of choice!

- Satellite operators:
 - ⇒ Almost 70% of total FSS industry revenue comes from the top 5 FSS operators
 - ⇒ approx. 40 other small regional & national satellite operators account for the remaining 30%

• Satellite manufacturers:

- ⇒ European/ US/ Chinese/ Indian manufacturers
- ⇒ Of the 40 'other' operators above, around half are "sponsored" by China (building satellites/ launchers/ control centers)
- Launchers:
 - \Rightarrow Plenty of choice with competition centering on cost -v- reliability



US rules & regulations impact global competition:

- ITAR:
 - ⇒ Prevent the export of US technology/ know-how to non-approved countries
- Buy American!:
 - ⇒ US government agencies must buy American (satellites/ launches) unless there is no suitable alternative

These rules have Pros & Cons:

- \Rightarrow Affect imports into the US market
- ⇒ Affect European companies who are selling satellites with US component parts on them & provides info on potential customers to the US
- ⇒ "Buy American" provides a comparative, structural advantage for US space industry given the huge size of the US market



The Space Industry faces huge challenges that demand cooperation to respond to them:

- Massive public subsidies into terrestrial communications infrastructures: risk crowding out satellite communications in the long-term
 - ⇒ 'Satcoms' sustain the entire European space industry
- Threats to spectrum: Satellites operate using key spectrum bands that cannot easily be shared
 - ⇒ Key satellite spectrum risks being lost to terrestrial wireless interests at the next ITU World Radio Conference
 - ⇒ If lost, this will impact future growth

Cooperation is fundamental to raising awareness of ALL essential satellite services & their role in assuring the availability & efficiency of ICT services in all corners of the globe



THANK YOU