

ASTRA OU SERVICES



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ISOG Atlanta 12-13 June 2008

The Quality Link

SES ASTRA OU UPDATE



COMPANY UPDATE

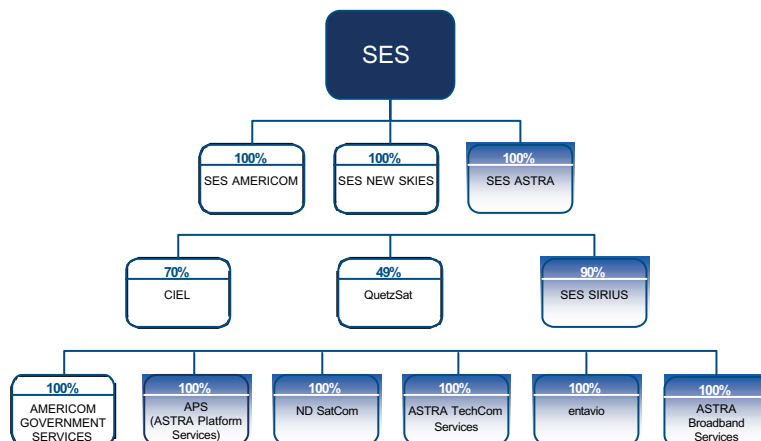
- ? SES ASTRA COMPANY OVERVIEW
- ? SPACE SEGMENT AND SATELLITE UPDATE
- ? OCCASIONAL USE CAPACITY SUMMARY
- ? SNG EQUIPMENT AND TECHNOLOGIES
- ? UPCOMING NEWS AND SPORT EVENTS
- ? FUTURE SERVICE OFFERINGS

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2



SES ASTRA within the SES group

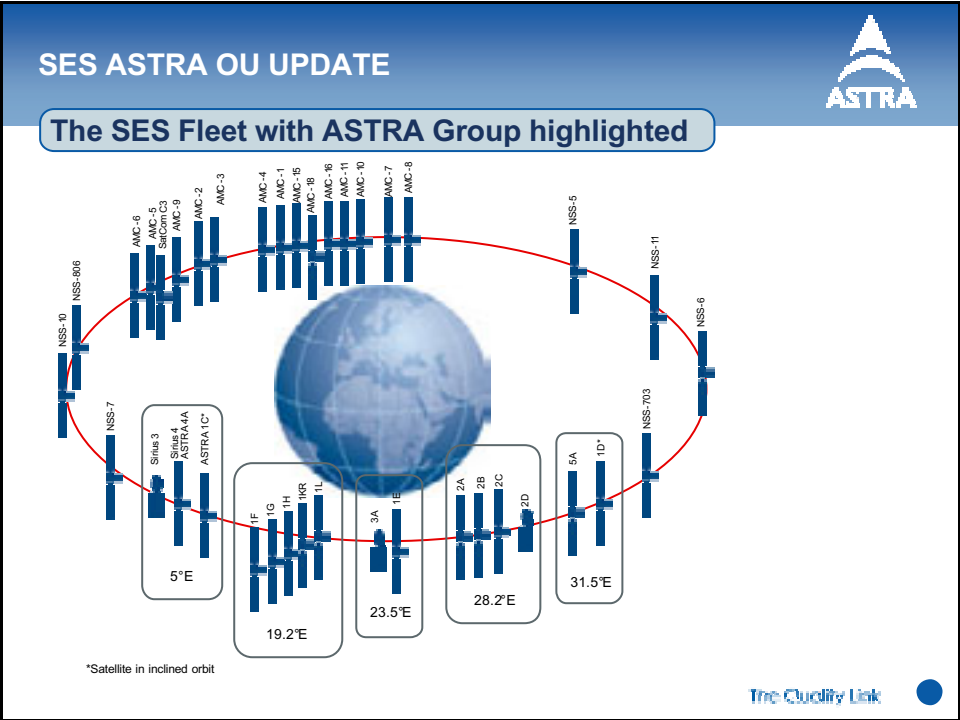


Note: shaded boxes (eg SES SIRIUS, entavio) indicate companies under SES ASTRA management control



Who we are

- ? A wholly-owned SES company
- ? Operator of the leading DTH broadcast satellite system in Europe
- ? Extensive product and service portfolio
- ? 368 employees from 23 different countries
- ? Headquarters in Luxembourg, 8 affiliate offices in Europe & Africa
- ? 16 ASTRA Group (ASTRA + SIRIUS) satellites over Europe, 2 new satellites under procurement
- ? More than 2,200 TV, radio and interactive channels available
- ? In total 117 million homes are connected to the ASTRA Group satellites





KU Band Orbital Slots for DTH DVB Services

19.2 Degrees East - DTH Only

28.2 Degrees East - DTH Only

Slots offer:

Fully redundant service
 A neighbourhood between them of 2,200 TV, Radio and Interactive Channels
 Between them reach 117 million homes

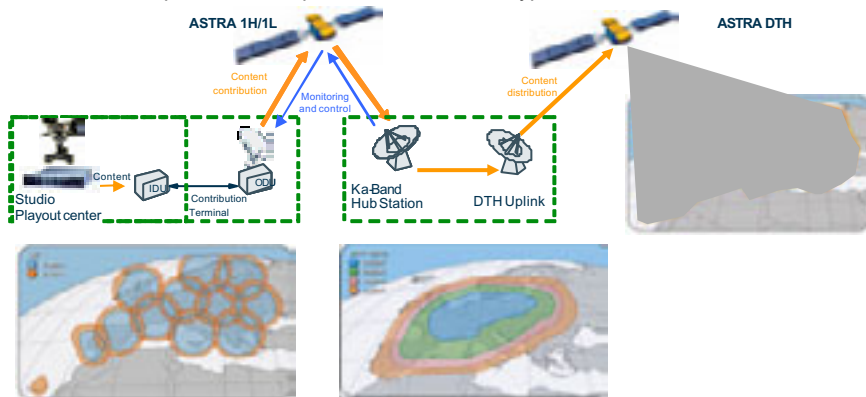
OU services excluded on

- Cost
- Availability
- Interference Risk

Ka Band capacity is however available and ASTRA is lobbying for some deregulation and has developed Ka band uplinks for Contribution type services .



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The Challenge is to develop other available slots

5 Degrees East - Astra 4A (Sirius 4), Astra 1C

23.5 Degrees East - Astra 3A, Astra1E

31.5 Degrees East – Astra 1D, Astra 5A (Sirius 2)



The obstacles to developing these slots for OU services are

Availability of coordinated deregulated spectrum (14.0 – 14.25 GHz)

Competition for what space there is from other services requiring this Spectrum eg ASTRA2CONNECT 2 Way Broadband and IPTV

Cost effective space segment

Suitable ground segment for alternative frequency bands eg Ka and BSS



To meet these challenges ASTRA is

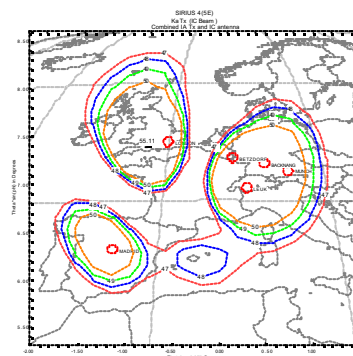
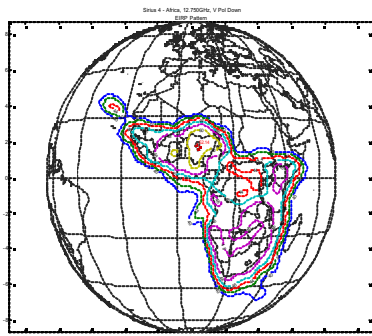
Redeploying satellites to keep space segment costs competitive

Working with other operators to coordinate additional frequencies

Leveraging other SES companies to offer new cost effective ground segment for additional frequency bands eg Ka and BSS technology

Lobbying for further deregulation.

ASTRA 4A



Features

Ku connectivity Africa to Africa
Ka <-> Ku connectivity Europe<->Africa

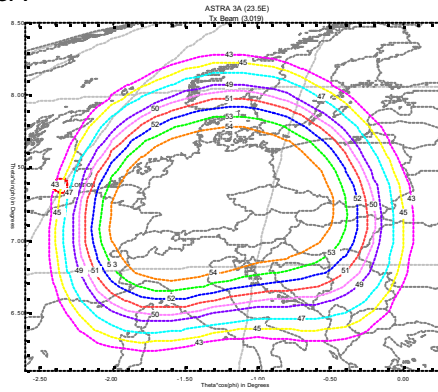
Current OU applications

“Mandela Watch”
World Cup 2010
Contribution Services





ASTRA 3A



Short term availability

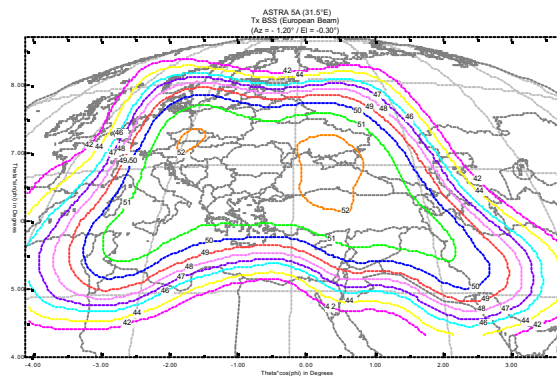
Current OU applications

- Tour de France
- European Cup 2008
- Contribution Services

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ASTRA 5A



Features

- Broad European footprint
- But BSS frequencies

Current OU applications

- Special events only
- ASTRA development of cost effective BSS Uplinks

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New Service Segments

IPTV

- ? Offering an additional delivery technology to Broadcasters into the expanding IP media market
- ? Increasing the Broadcasters and Telco market penetration with DTH IPTV
- ? ASTRA IPTV/DTH enables 3-play coverage to all broadband subs
- ? ASTRA can deliver the channels to reach a broad audience
- ? Centralized IPTV Platform in MPEG-4 format where broadcaster programming is already available.
- ? Program Delivery by secure DVB-CSA v3.0 scrambling to protect broadcaster rights
- ? Enables Broadcasters, Telcos, ISP's and Broadband operators to immediately offer customers high definition and standard definition programming
- ? Customer trial scheduled for early Sept 2008

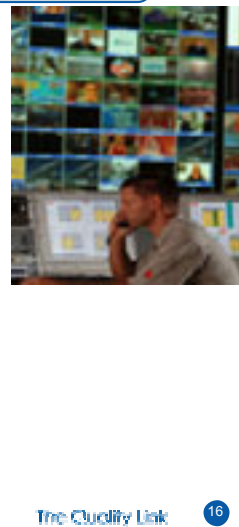


New Service Segments

ASTRA2CONNECT

Two Way Broadband service

- ? Offering Telco's extended service coverage
- ? Triple play service, Internet, VoIP, VOD
- ? Rapid service initialisation
- ? Low cost CPE
- ? Results in high demand for deregulated spectrum for return channels.
- ? This will affect availability and/or cost of ASTRA capacity for OU services





New Service Segments

SOLARIS

Mobile Services

- ? Joint Venture with EUTELSAT
- ? Development of S Band services @ x deg East
- ? DVB –SH for mobile applications

