Satellite as the complementary solution in digitalization process

ITAPA 2008

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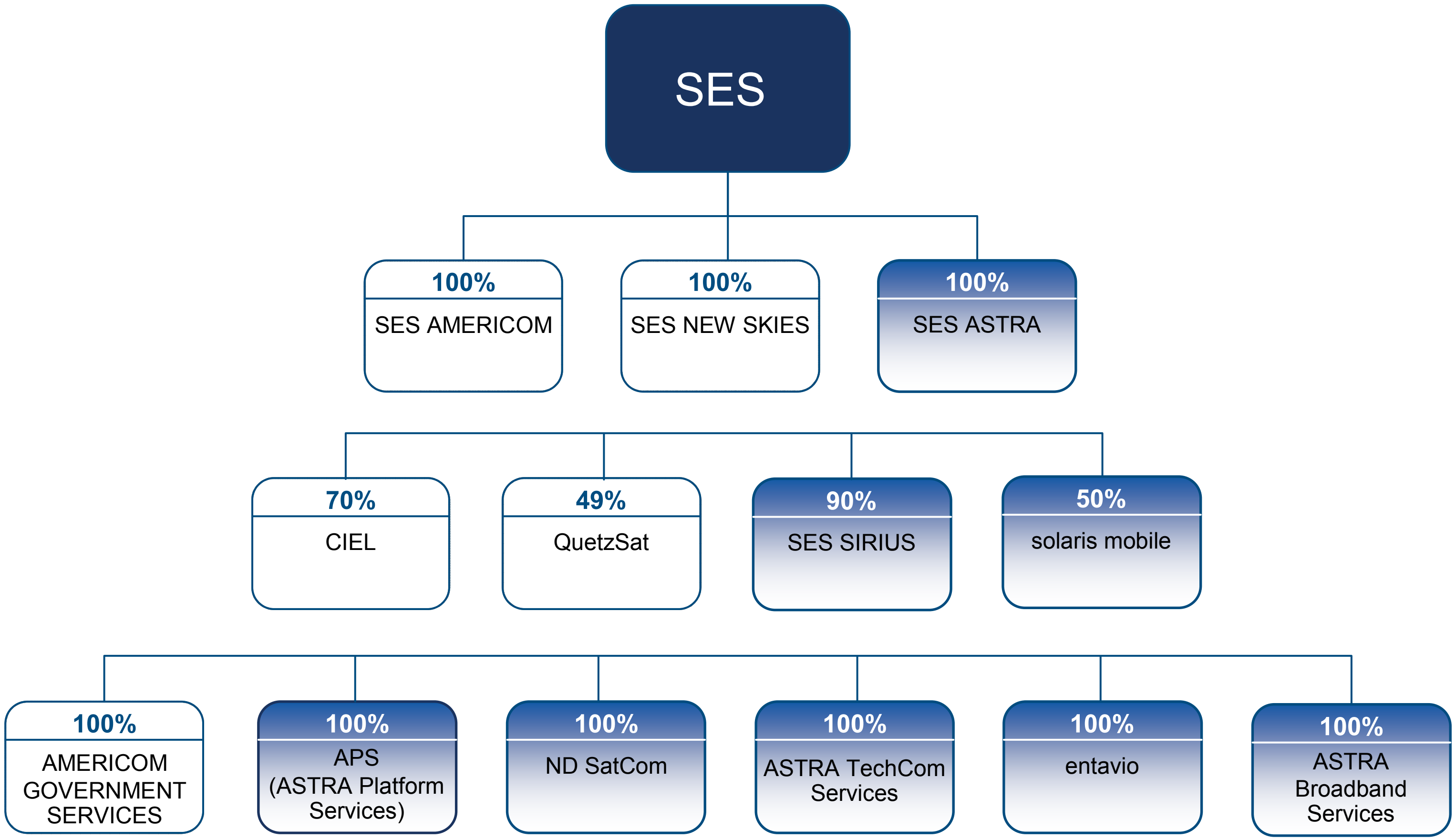
18.11.2008, Bratislava

Who we are

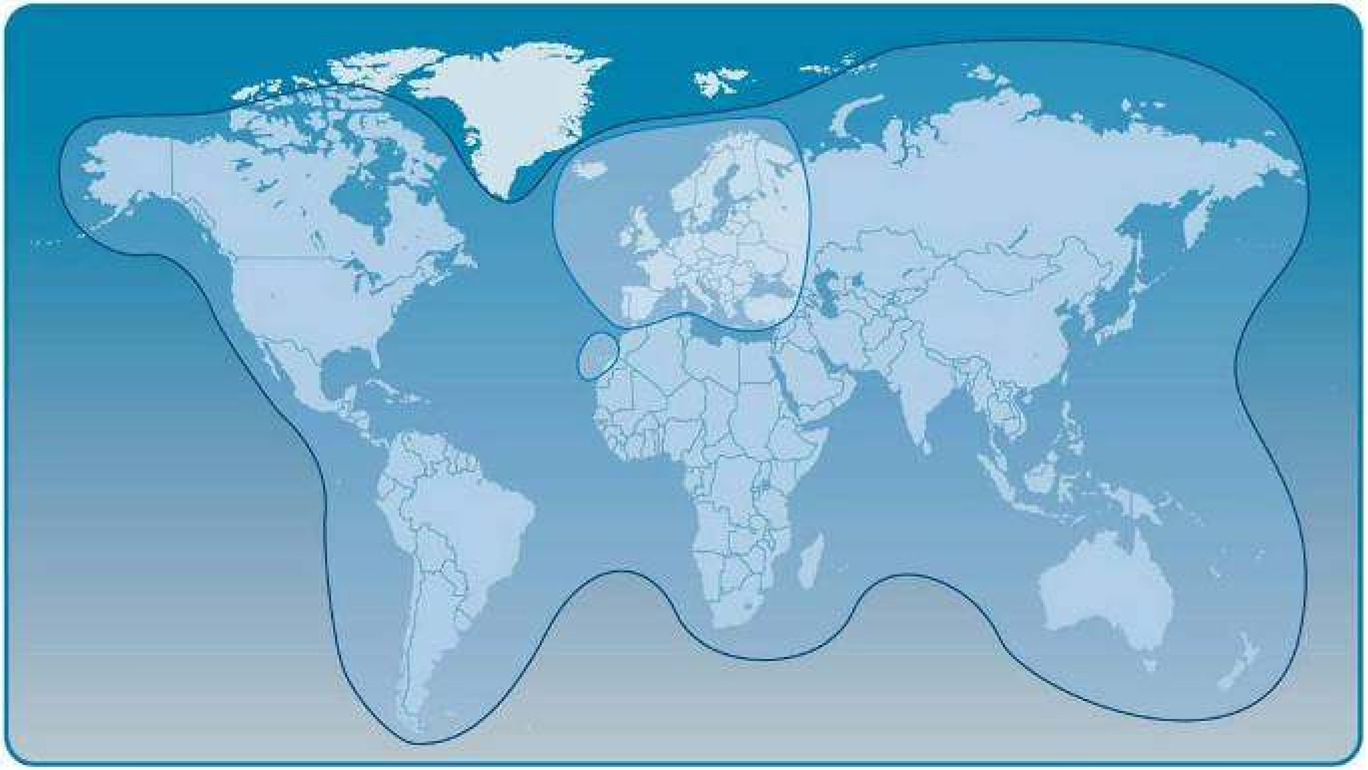
- A wholly-owned SES company
- Operator of the leading DTH broadcast satellite system in Europe
- Extensive product and service portfolio
- 368 employees from 23 different countries
- Headquarters in Luxembourg, 9 affiliate offices in Europe & Africa
- 16 ASTRA Group (ASTRA + SIRIUS) satellites over Europe, 3 new satellites under procurement
- More than 2,400 TV, radio and interactive channels available
- In total, 117 million homes are connected to the ASTRA Group satellites

SES ASTRA within SES



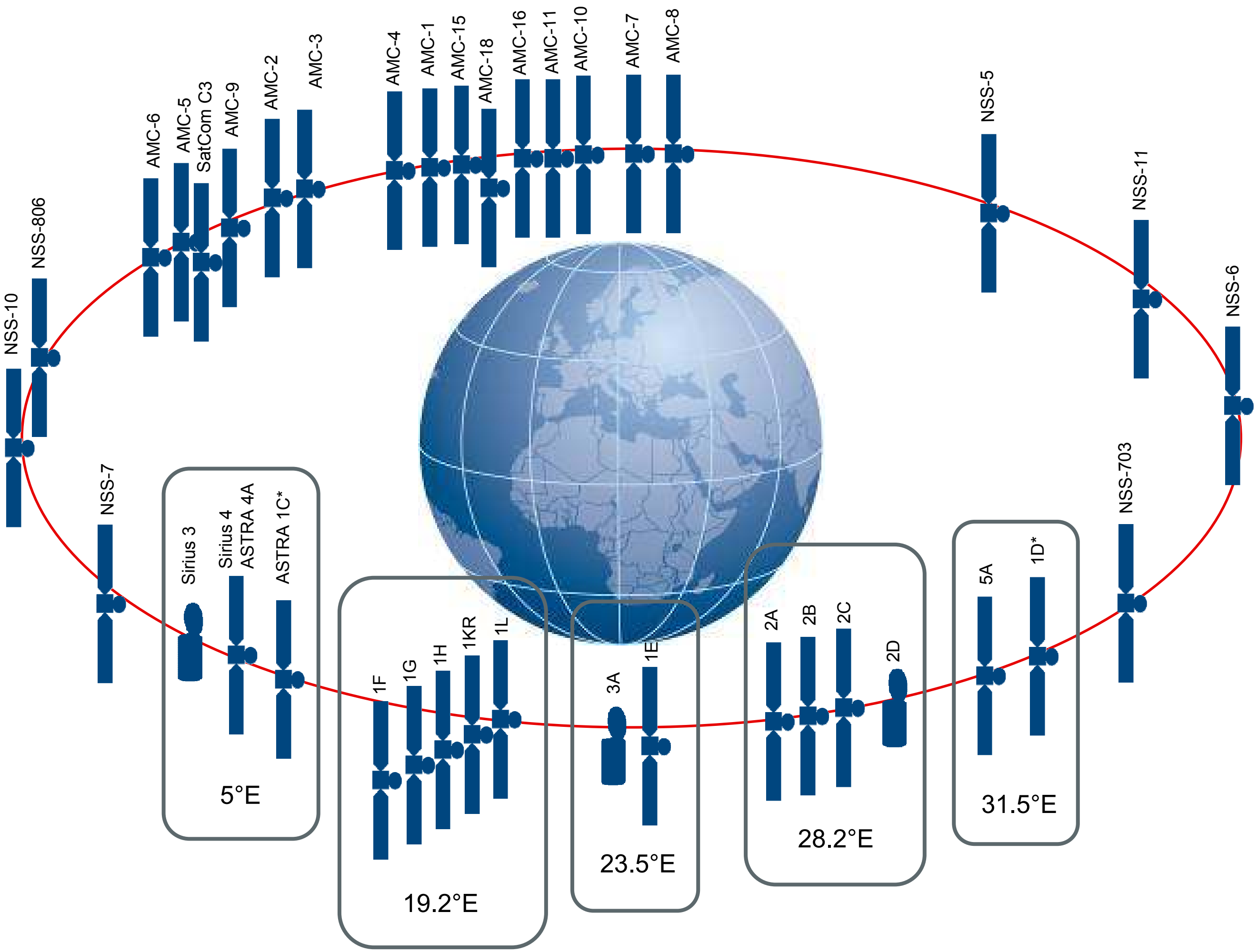
Note: shaded boxes (e.g. SES SIRIUS, entavio) indicate companies under SES ASTRA management control

SES worldwide coverage



- **SES ASTRA** is Europe's #1 DTH satellite service provider, reaching 117 million TV households
- **SES AMERICOM** is a major player in broadcasting for US cable services reaching some 80 million US households
- **SES NEW SKIES** is a premier provider of satellite communications services, with more than 250 customers based in 80 countries

The SES fleet (ASTRA Group highlighted)



*Satellite in inclined orbit

16 satellites at 5 orbital positions

19.2° east:
TV, radio, interactive TV
Continental Europe

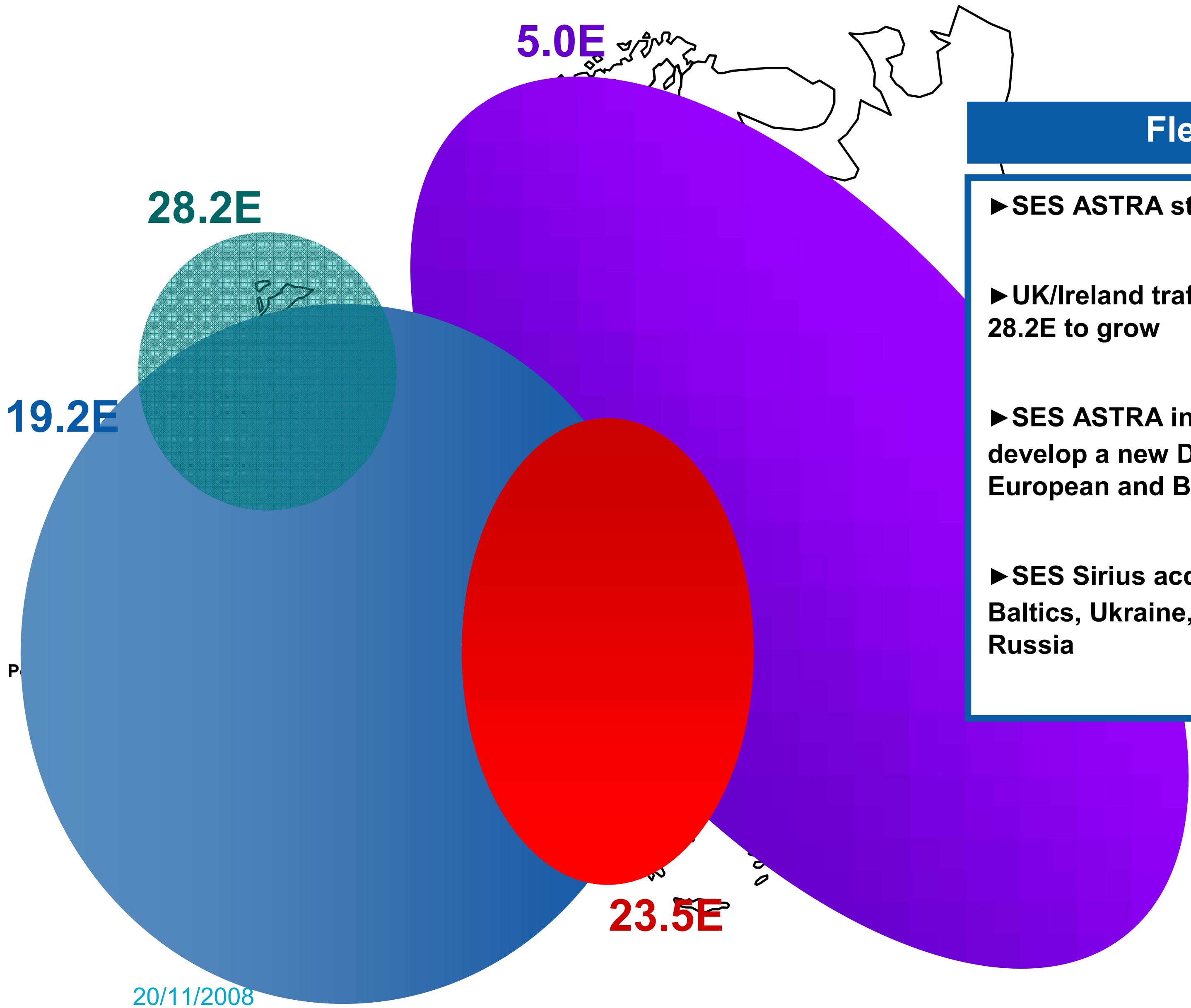
28.2° east:
TV, radio, interactive TV and broadband services
UK and Ireland

23.5° east:
TV, radio, cable feeds, and broadband services

5° east:
TV, radio, cable feeds, broadband services, OU and VSAT

31.5° east:
TV, radio, cable & terrestrial feeds, and broadband services

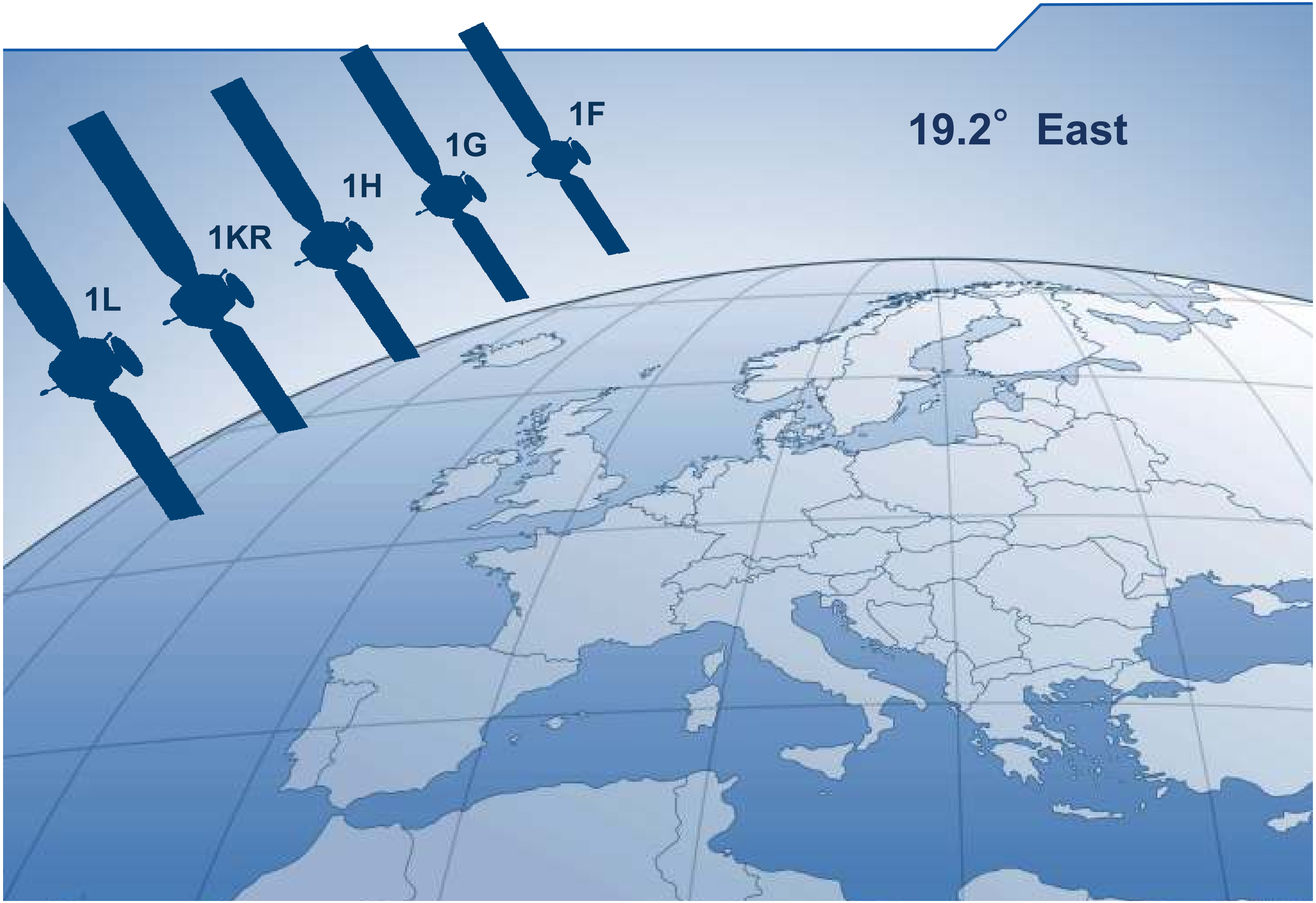
The SES (ASTRA and SIRIUS) fleet strategy



Fleet Strategy

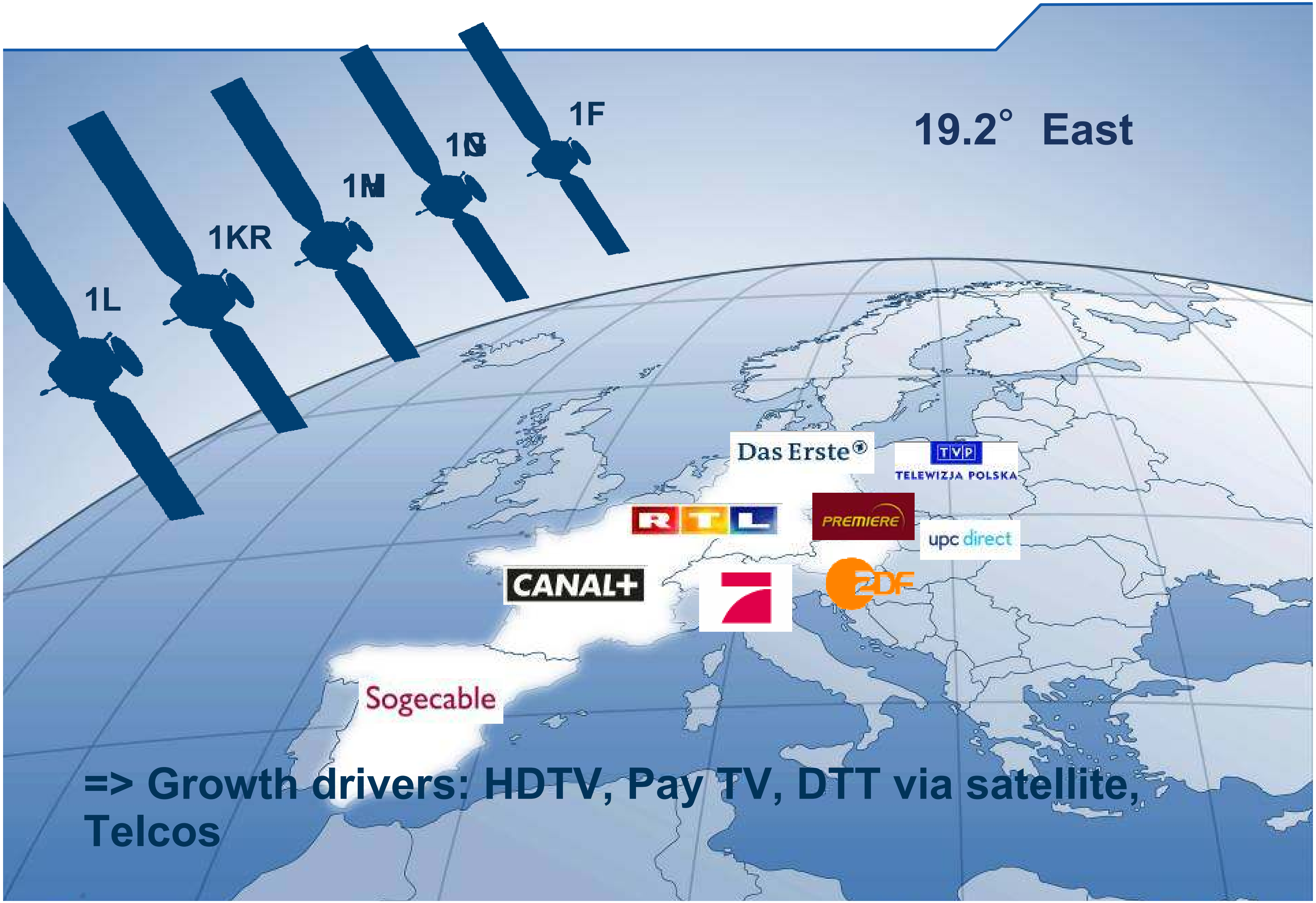
- ►SES ASTRA started out with 19.2E
- ►UK/Ireland traffic moved from 19.2E to 28.2E to grow
- ►SES ASTRA invests into 23.5E to develop a new DTH position for Central European and Balkan markets
- ►SES Sirius acquired, serving Nordic, Baltics, Ukraine, Romania, Bulgaria and Russia

ASTRA 1: key DTH orbital position



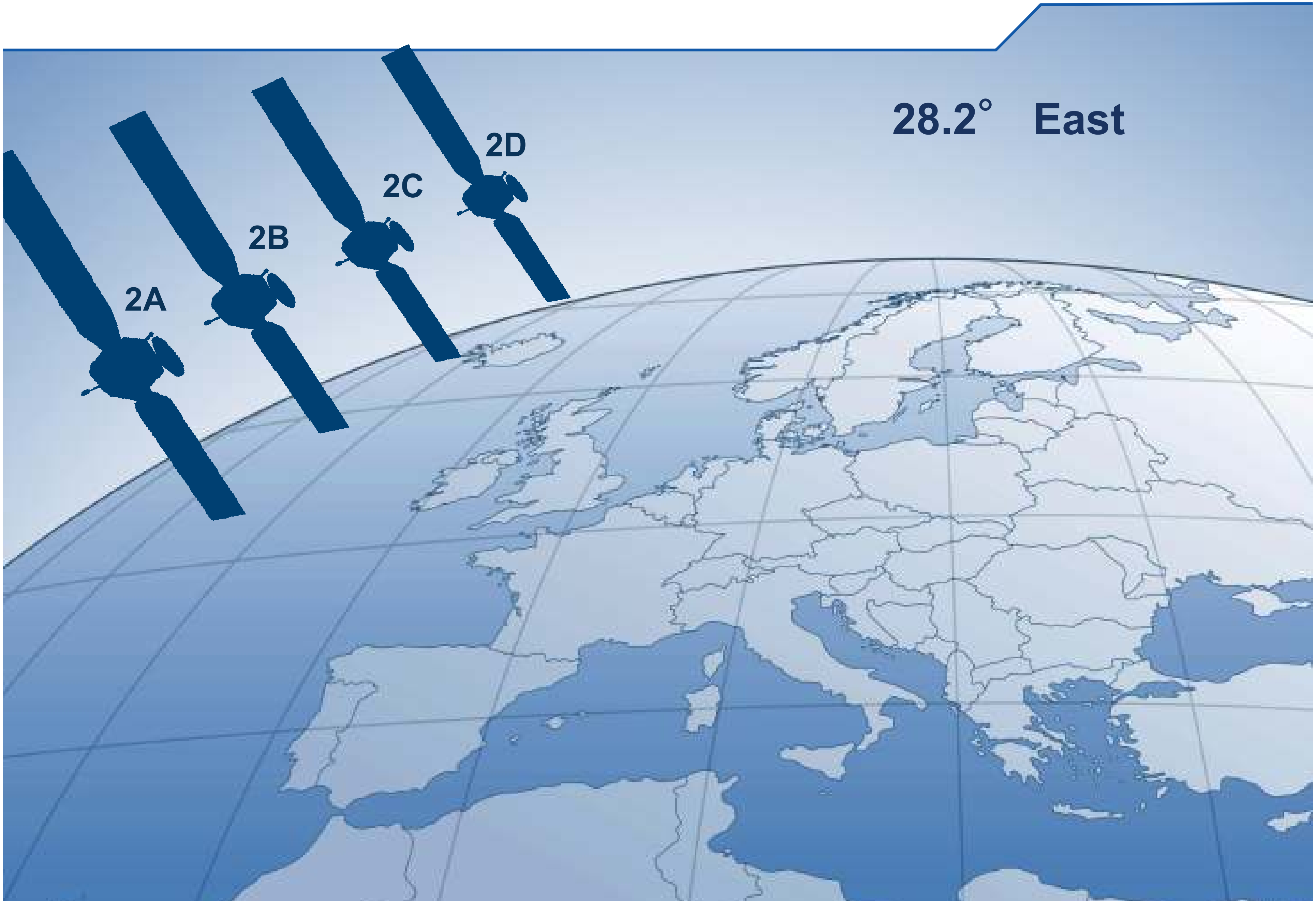
ASTRA 1: key DTH orbital position

Complete fleet renewal by 2011



=> Growth drivers: HDTV, Pay TV, DTT via satellite, Telcos

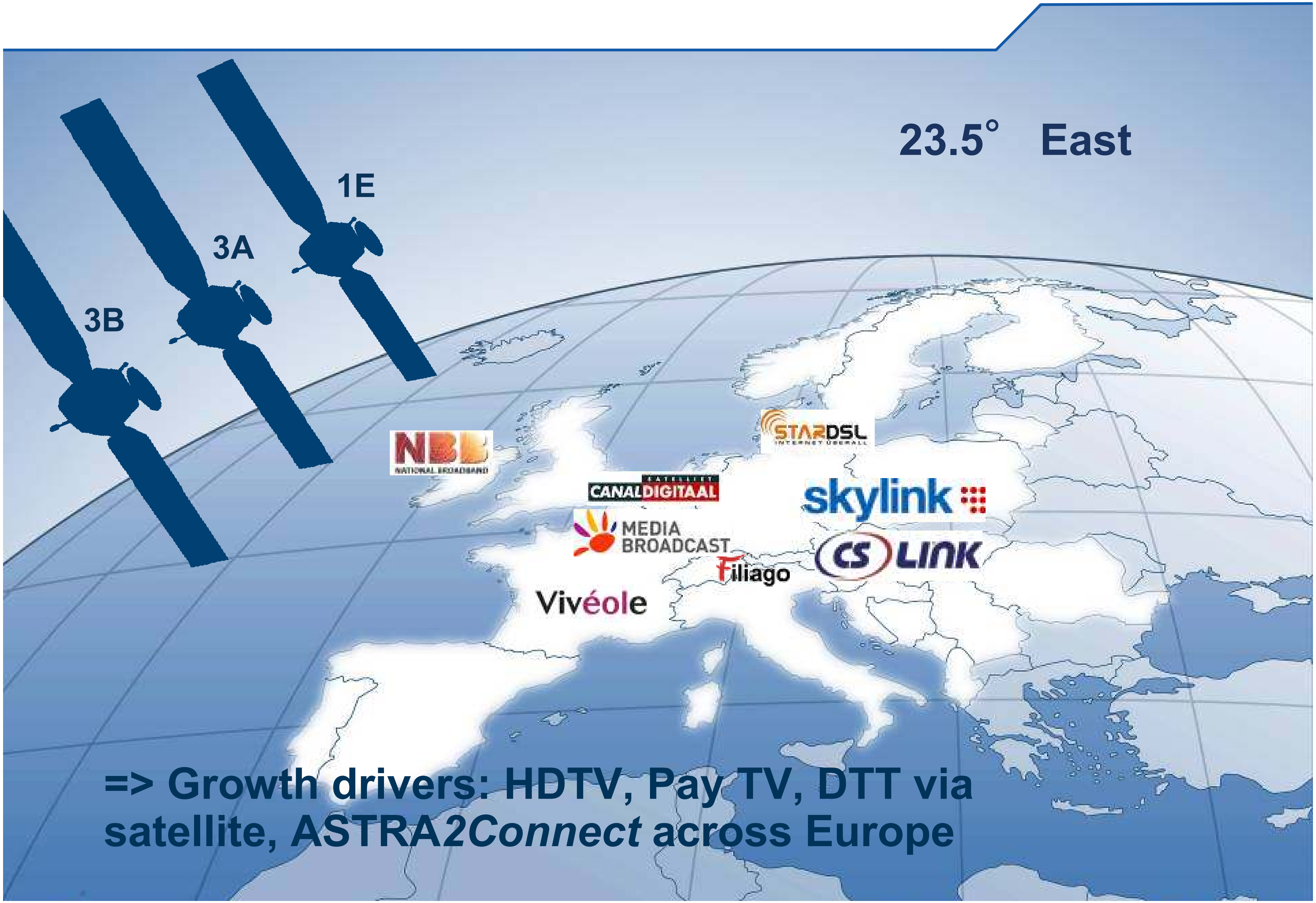
ASTRA 2: DTH for UK/Ireland



ASTRA 2: DTH for UK/Ireland

ASTRA 3: DTH for CEE

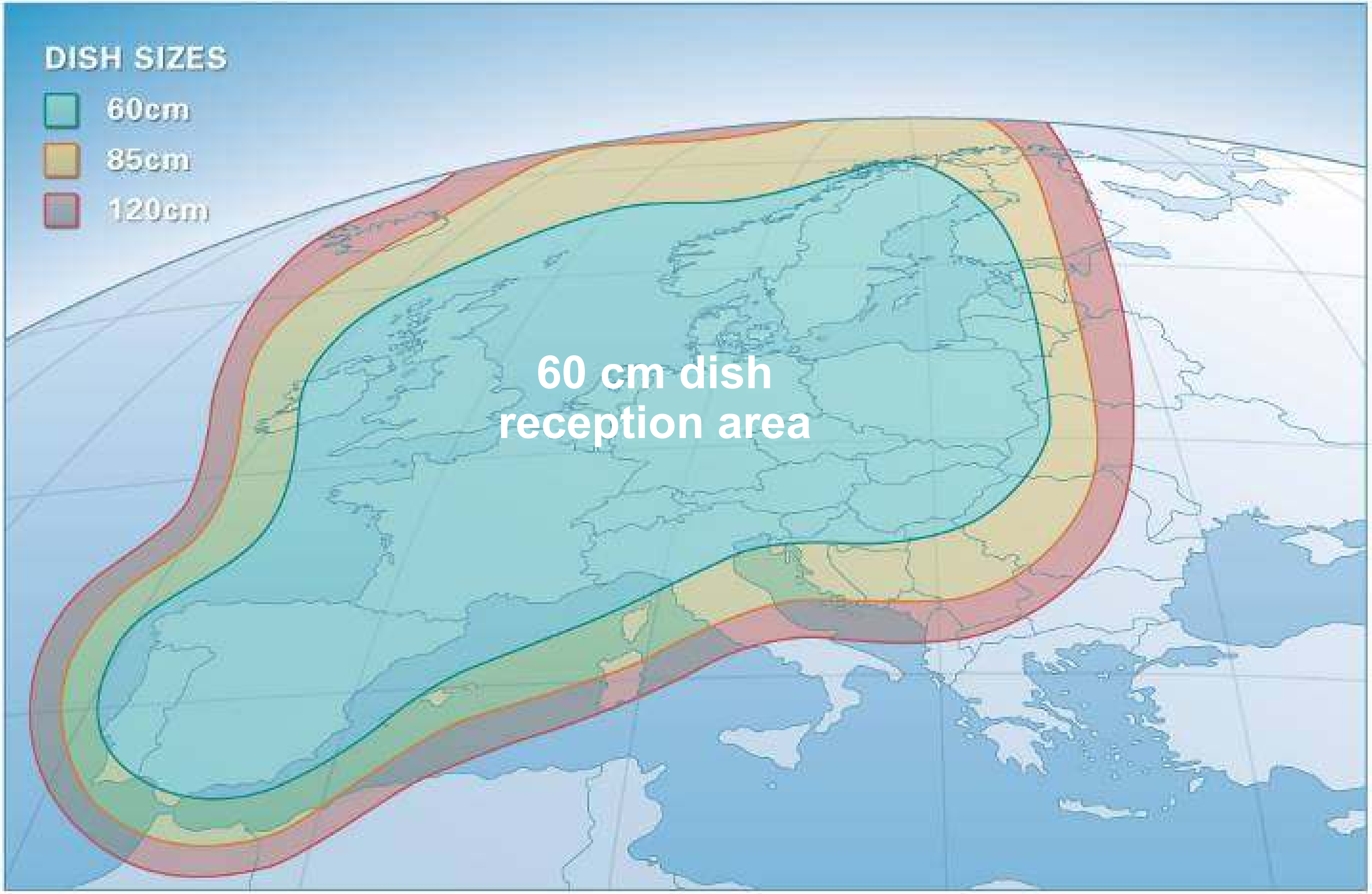
Fleet expansion



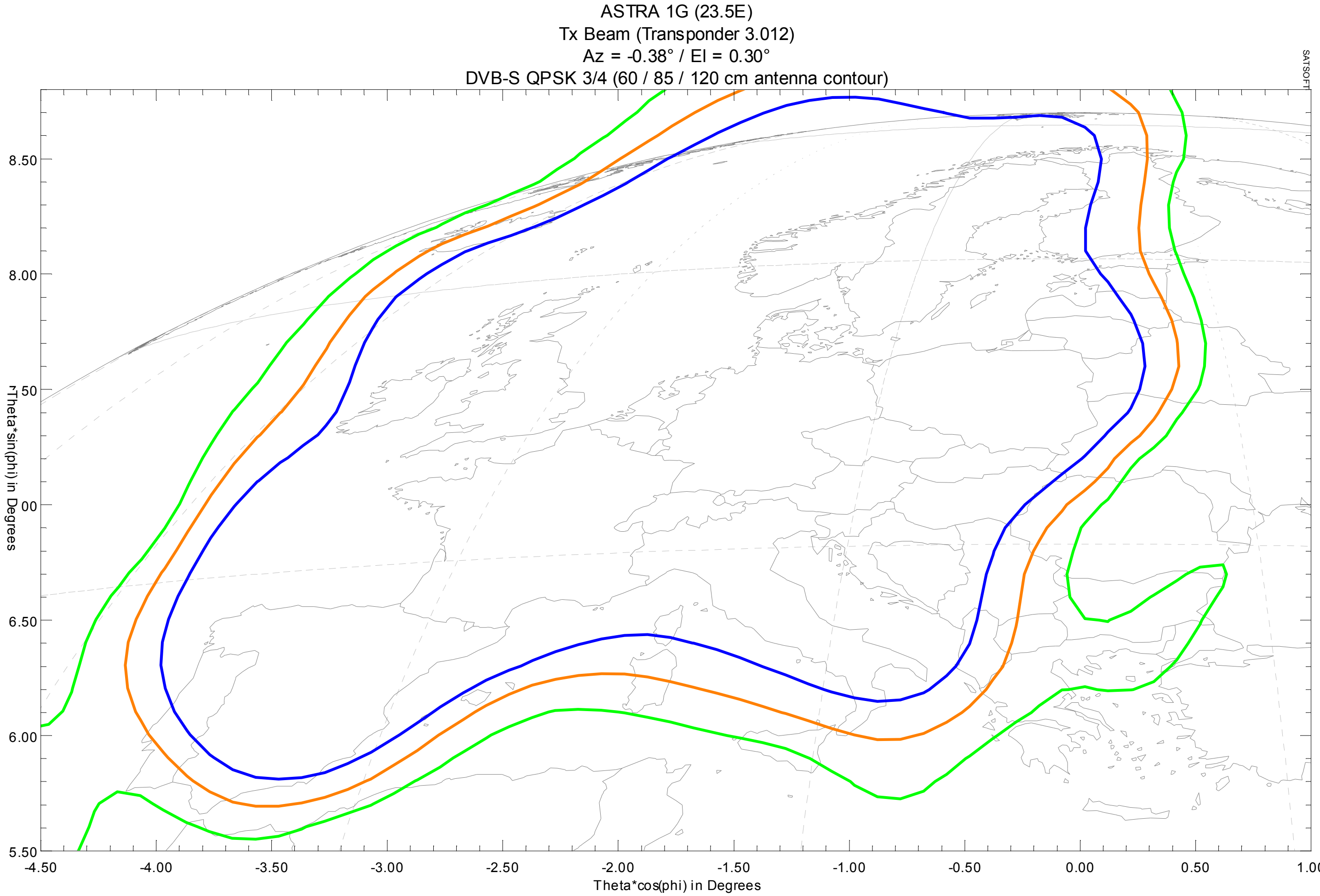
=> Growth drivers: HDTV, Pay TV, DTT via satellite, ASTRA2*Connect* across Europe

ASTRA fleet coverage at 23.5º E

Example: ASTRA 1E at 23.5° East

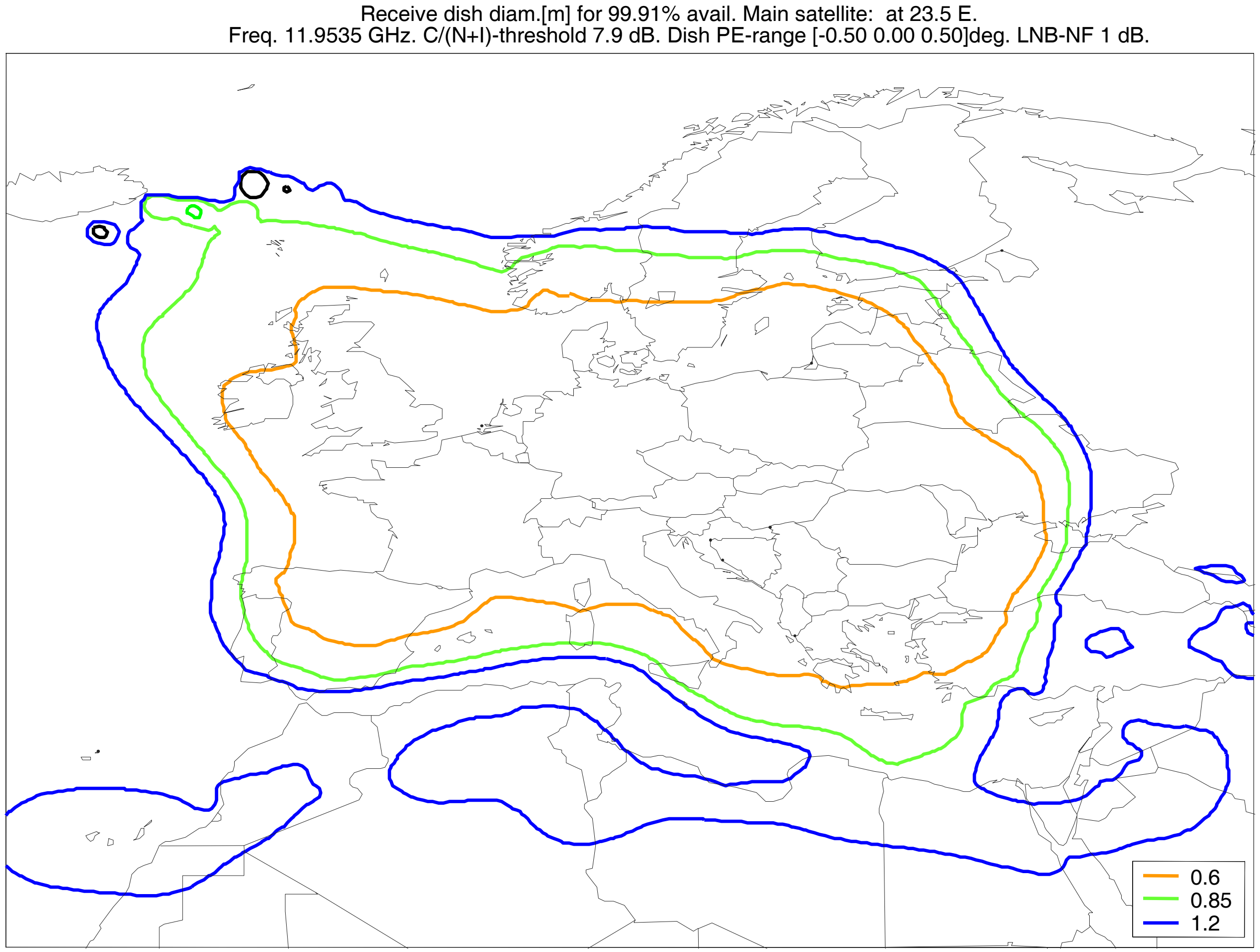


ASTRA1G strengthening the 23.5° E position



ASTRA1G OSD at 23.5°E in Q1 2009

ASTRA 3B providing extended service offering



ASTRA3B launch in Q4 2009, provisional footprint

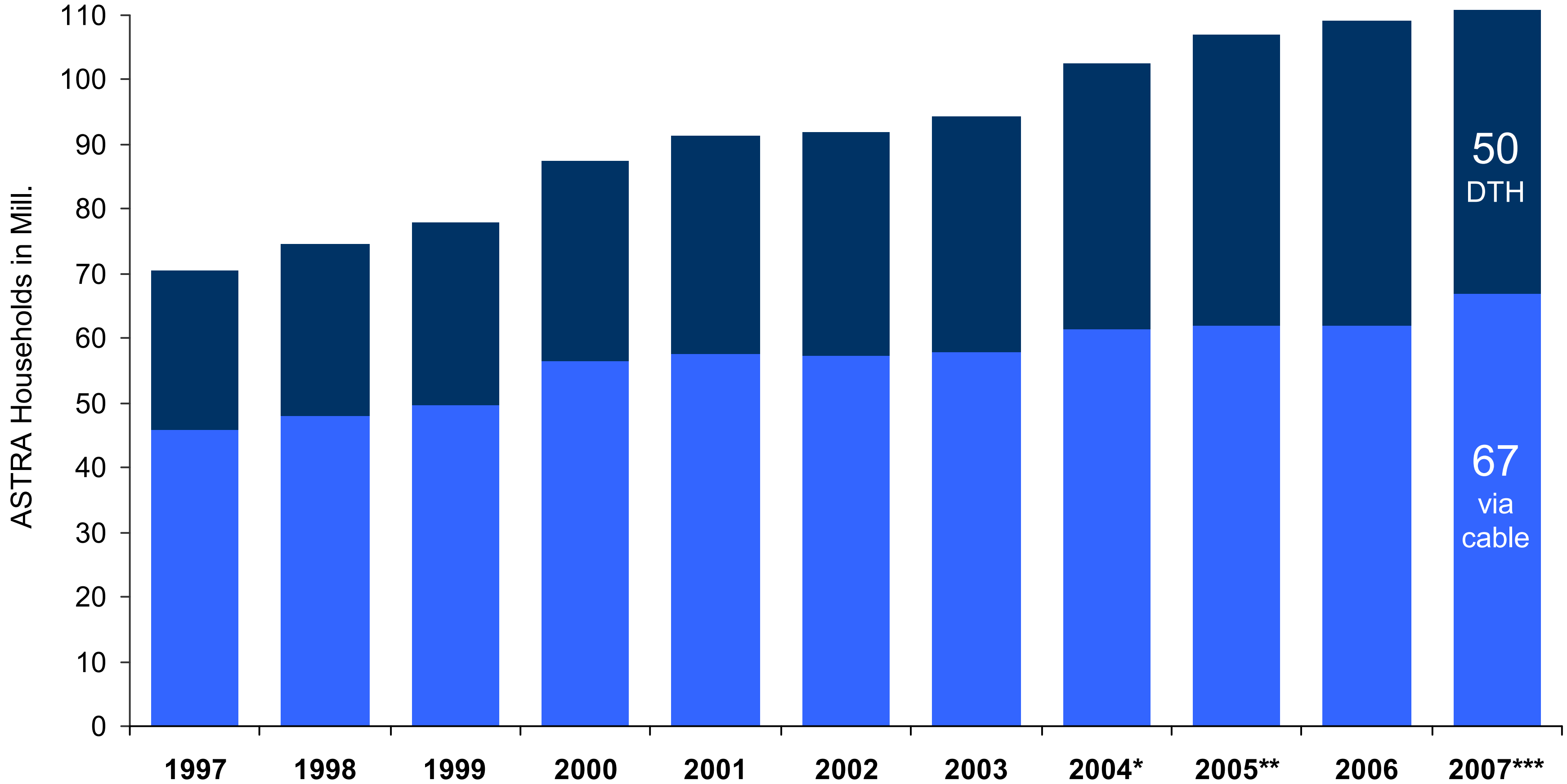
ASTRA customers

ASTRA

Europe’s leading broadcasters and resellers are ASTRA customers

ASTRA Group household coverage

ASTRA Group serves 117 mill. homes across Europe



	1997	1998	1999	2000	2001	2002	2003	2004*	2005**	2006	2007***
Total	70.5	74.5	77.9	87.5	91.3	91.9	94.4	102.7	107.0	109.2	117.2
DTH&SMATV	24.8	26.5	28.3	30.9	33.7	34.4	36.4	41.4	45.0	47.2	50.3
Cable	45.7	48.0	49.7	56.6	57.7	57.4	57.9	61.3	62.0	62.0	66.9

*including 4 more countries: Bosnia, Serbia, Morocco and Tunisia; **incl. 1 more country: Algeria; ***incl. SIRIUS

Source: SES ASTRA, Satellite Monitors

The Digital Market in Europe in 2008

ASTRA

Summary of main developments

- Out of 239 million TV homes within the ASTRA/SIRIUS footprint, almost 100 million are now receiving digital services: 40% of TV homes are digital

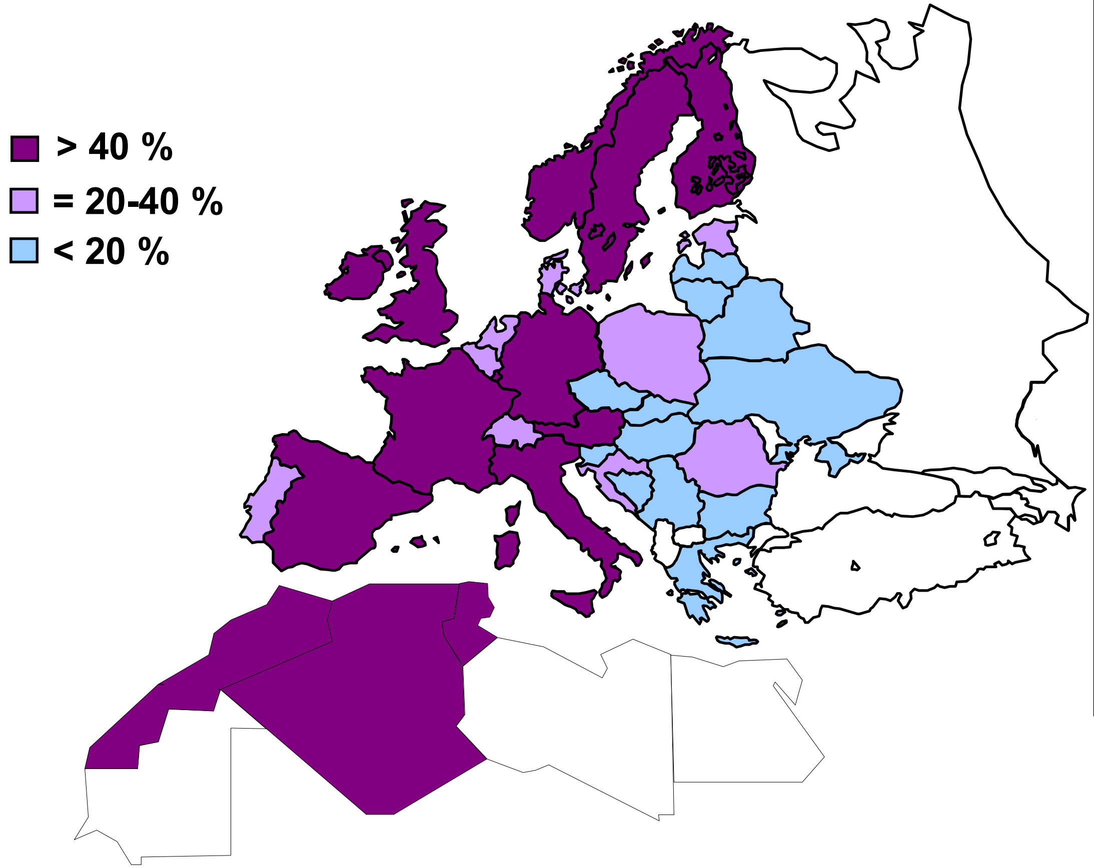
- Satellite continues to be the most popular digital reception mode, with a 58% share of the total digital market

- Also IPTV is still at an early stage, the infrastructure now also starts gaining some market share on an European level

- 41.1 million homes receive ASTRA or SIRIUS digital services. 9.1 million still receive exclusively analogue signals via ASTRA

Digitalization of TV households in Europe
Year end 2007

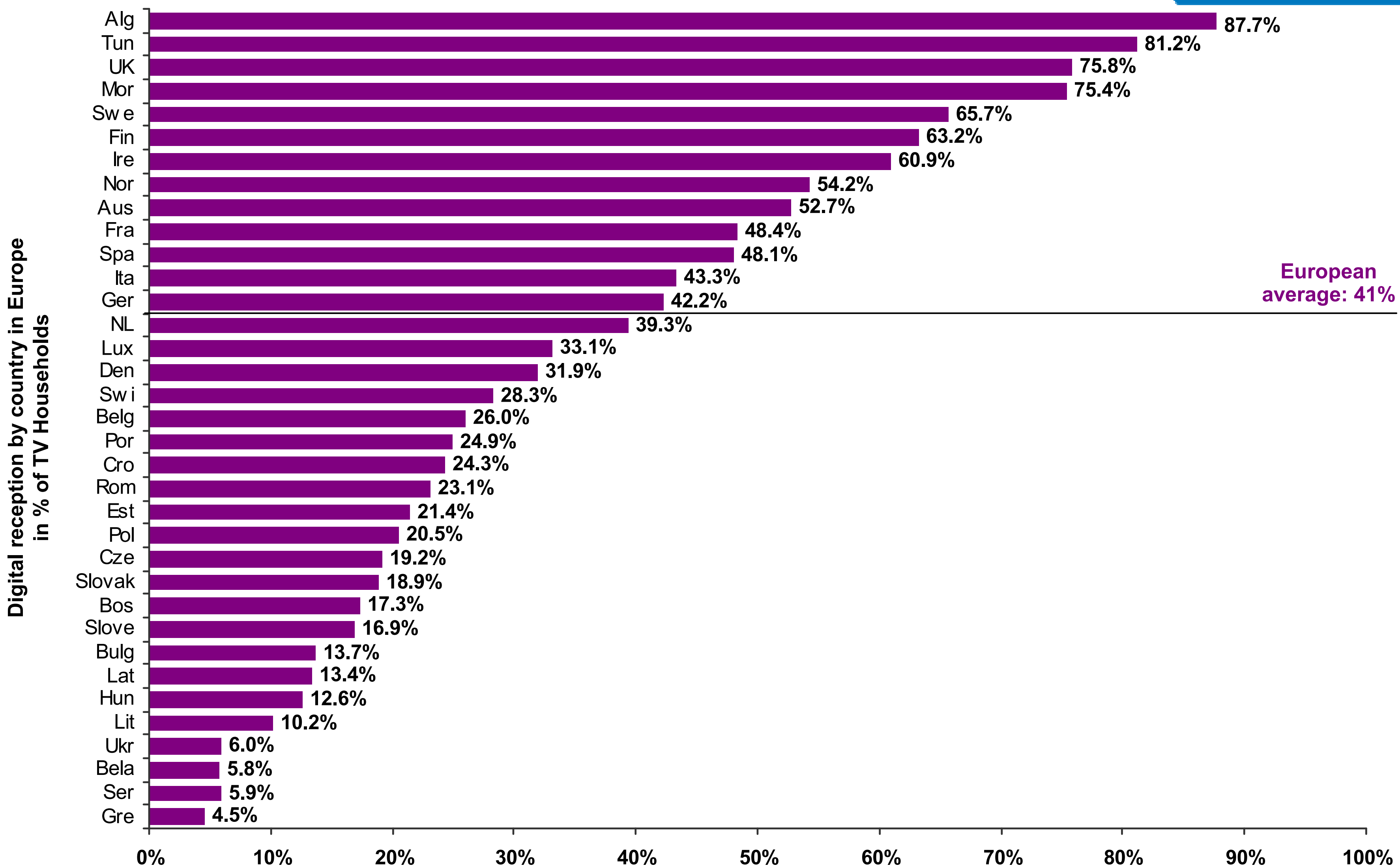
While digitalization is set as a key objective across Europe, digital penetration remains limited in particular in the Central and Eastern European markets



Key facts

- ►Digital penetration in Europe still low in most European markets
- ►Satellite DTH/SMATV drove growth in digital TV over the last 10 years – 83% being now digital
- ►Terrestrial TV today still 76% analogue
- ► Cable still 80% analogue
- ► IPTV is still in early stage but growing
- ►Switch-off will enrich the consumer's TV experience
- ►New business opportunities for TV channel operators:
  - ➢ More bandwidth becoming available
  - ➢ Reduction in distribution costs
  - ➢ Opportunity to launch more thematic/regional channels

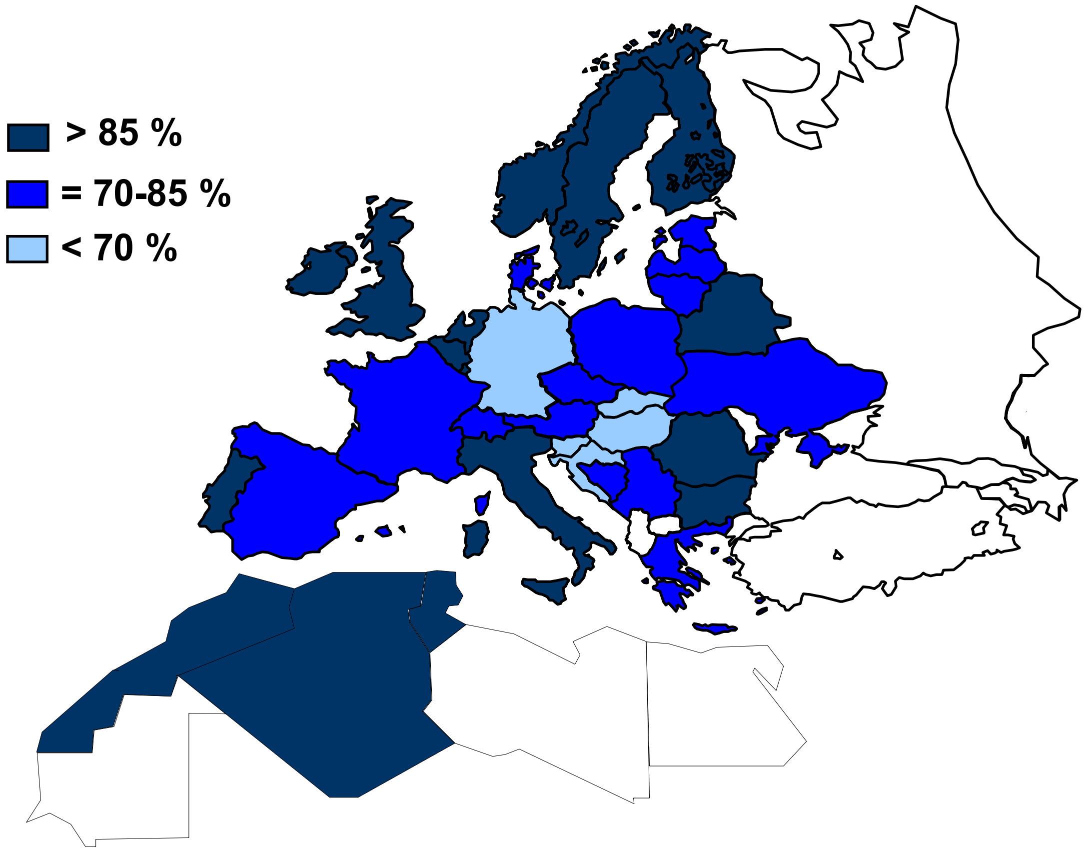
Level of digitalization in Europe
Year end 2007



Source: SES ASTRA, Satellite Monitors

Digitalization of satellite households in Europe
Year end 2007

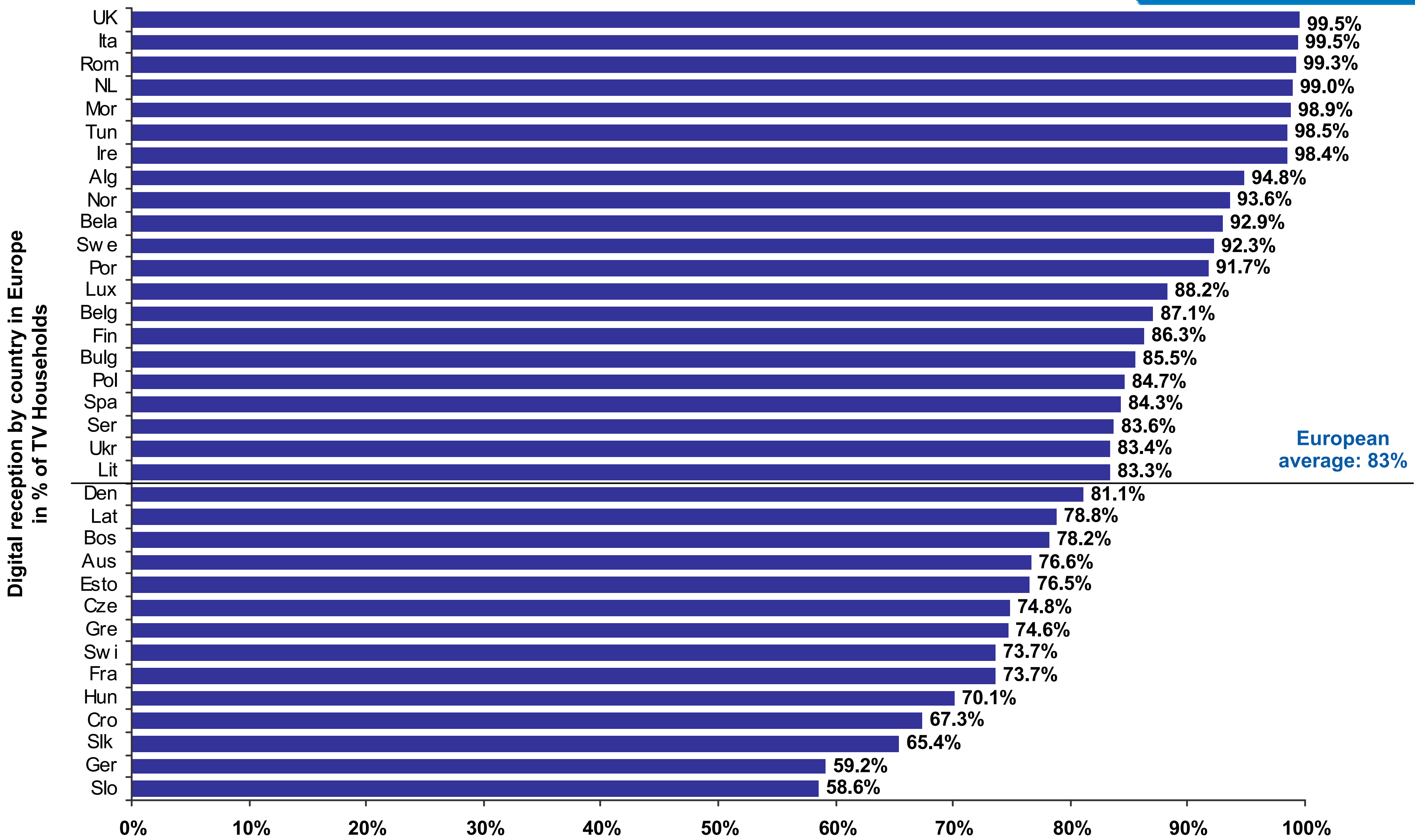
Satellite is leading digitalization across Europe



Key facts

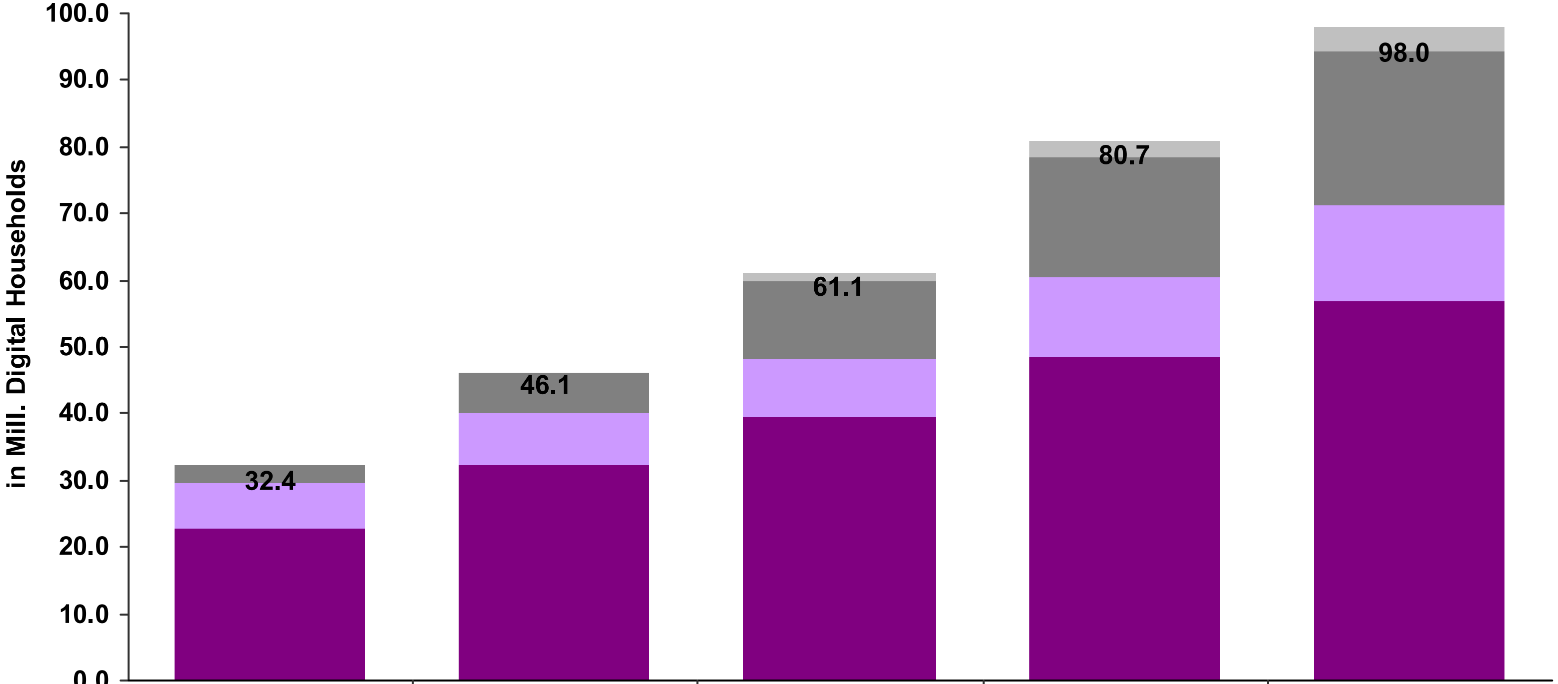
- Over 99 % of TV channels broadcasted over satellite in Europe are digital
- With the exception of Germany still transmitting also in analogue DTH, Western European countries with a high DTH penetration rank high in digitalization
- ASTRA/SIRIUS digital satellite platforms in Europe
  - Sky in the UK
  - CanalSat in France
  - Skylink, CS Link, UPC Direct in CEE
  - Digital + in Spain
  - Premiere in Germany
  - Viasat Nordics and Baltics
  - Canal Digitaal in the NL and TV Vlaanderen in Belgium
  - MaxTV in Romania

Level of digitalization of satellite in Europe
Year end 2007



Source: SES ASTRA, Satellite Monitors

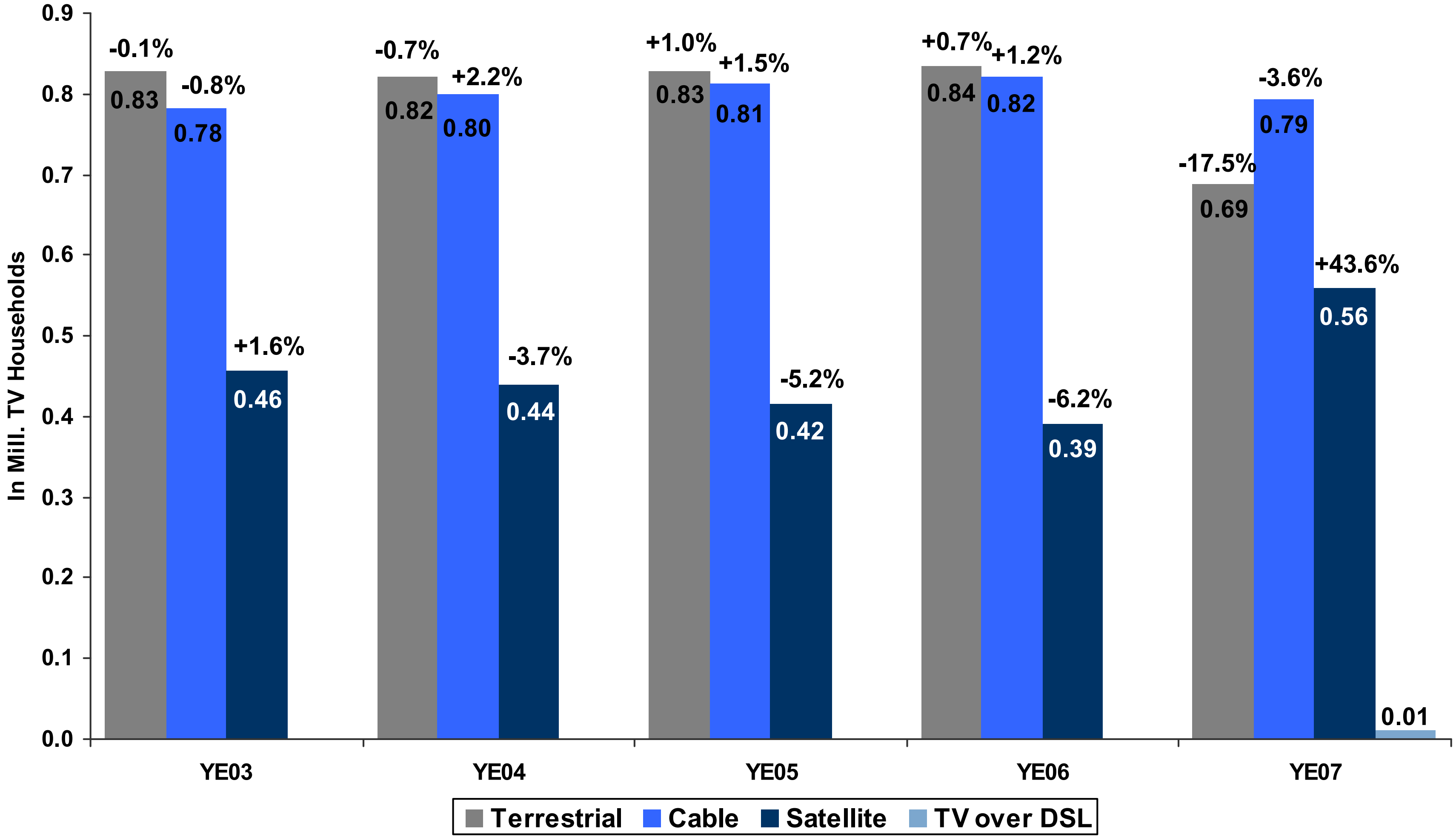
Satellite is the key driver of digital TV



	YE03	YE04*	YE05**	YE06	YE07
TVoDSL			1.1	2.4	3.8
DTT	2.8	6.0	11.9	17.7	23.0
Digital Cable	6.9	7.9	8.5	12.0	14.4
DSTV	22.8	32.2	39.6	48.6	56.8

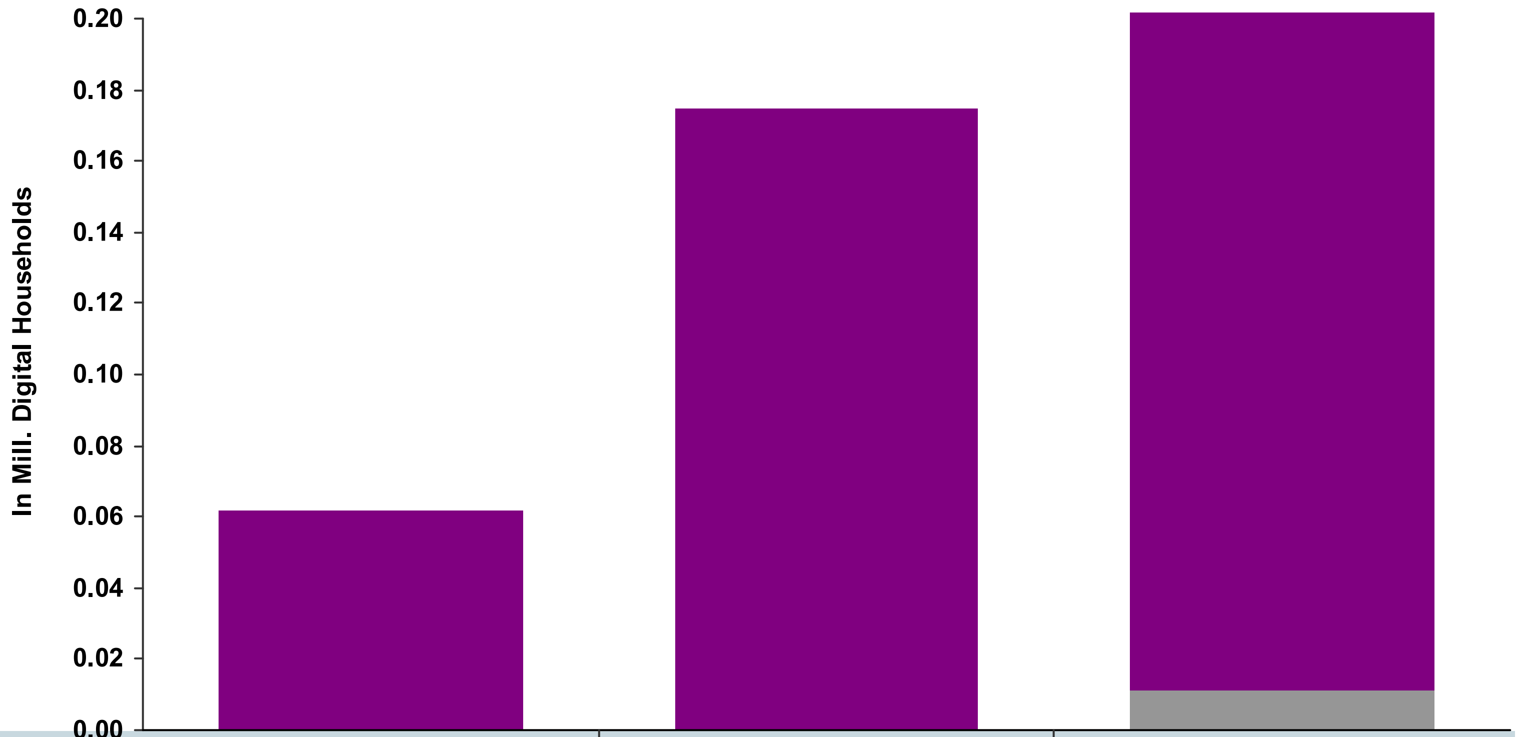
***incl. 4 additional countries: Bosnia, Serbia, Morocco and Tunisia; **incl. Algeria**
Sources: SES ASTRA, Satellite Monitors

Reception Modes in Slovak Republic
Year End 2003 to 2007



Source: SES ASTRA, Slovakian Satellite Monitors, GfK Slovakia

Digital TV in Slovak Republic
Year End 2005 to 2007



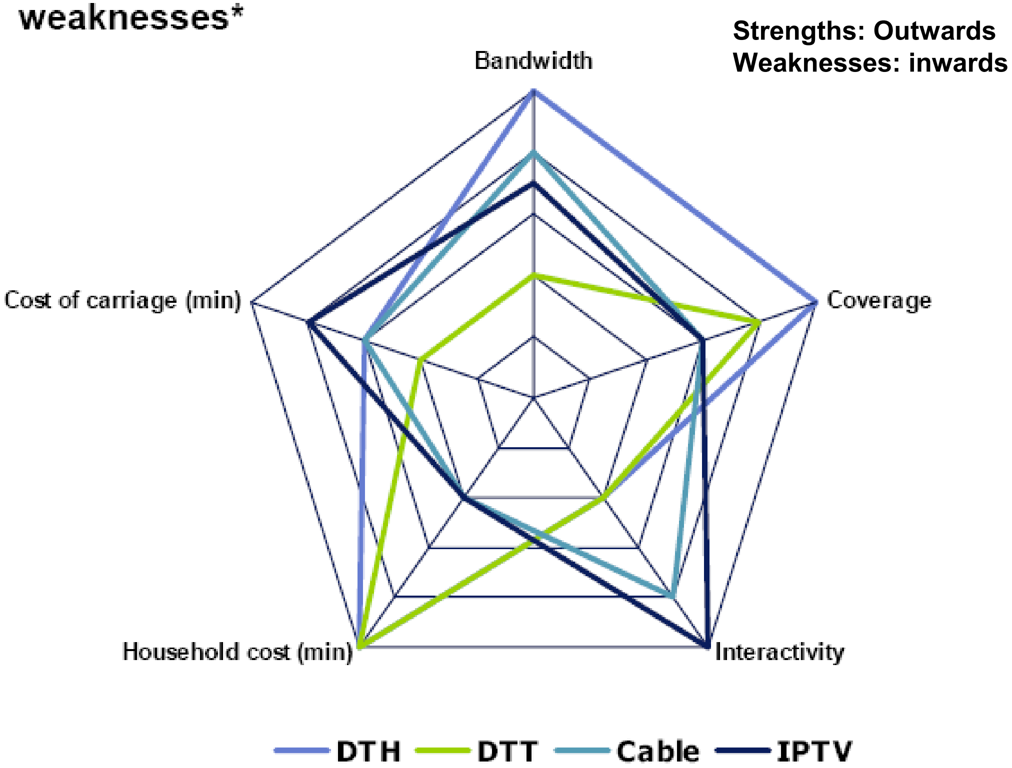
	YE05	YE06	YE07
Digital Total			0.39
Digital Satellite	0.06	0.18	0.37
Digital Terrestrial			0.01

Sources: SES ASTRA, Slovakian Satellite Monitor, GfK Slovakia

Distribution platforms for digitalization

ASTRA satellites are the ultimate digital TV distribution mode

Comparison of platforms in terms of strength and weaknesses*



Source: Deloitte UK 2007

Strengths & Weaknesses

ASTRA satellites (DTH/SMATV)
- 100% coverage of the country from day one
- High bandwidth availability
- Immediate time to market
- Low operating cost
- Simultaneous feed into cable networks and terrestrial transmitter
- Ideal distribution mean for HD channels
- Possibility of adding two way satellite broadband internet services, VoD, etc.
- Nearly unlimited choice of TV and radio channels

DTT
- Bandwidth limitations
- High coverage requires very high investments into infrastructure (digital terrestrial transmitters)
- Technical reach in rural areas limited
- Choice of Channels limited

Cable
- High bandwidth available
- High network investment
- Possibility of adding HD channels and internet

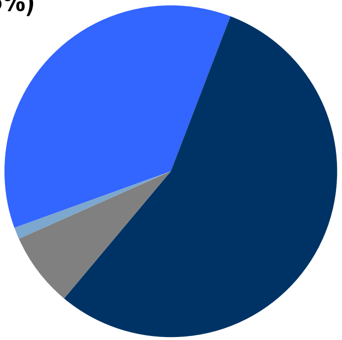
IPTV
- Coverage limited to urban areas
- High network investment

Digitalization via satellite: examples

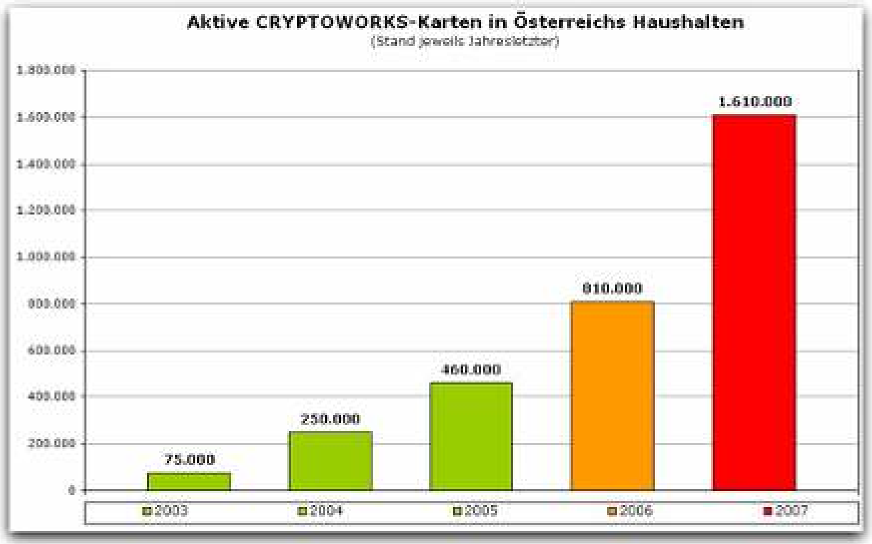
Case study: Austria

ASTRA

Reception modes in Austria, TVHH 3.44 mil YE2007



ORF



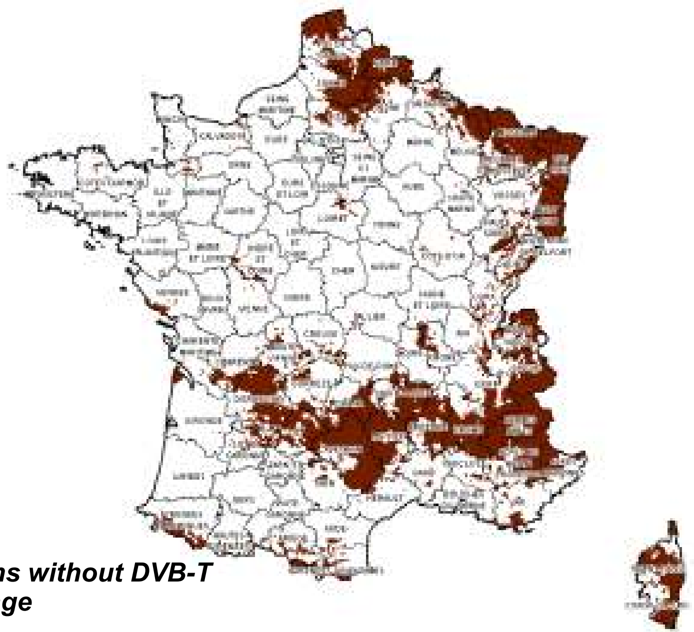
No of active ORF digital smart cards

ORF Platform

- Satellite reception is one of most popular way of digital reception in Austria
- Satellite platform ORF Digital (on ASTRA 19.2E) was used at the end of 2007 by more than 1.1 mil households (more than 1,6 mil activated smart cards)
- Number of households with digital satellite reception of ORF grew in Austria by 40% only last year.
- Austrian Council for Broadcasting decided to support (vouchers) not only DVB-T and DVB-C set top boxes but satellite's as well

Case study: France

TNT SAT



Regions without DVB-T coverage

National Satellite Platform TNT Sat

- **The new French audiovisual law passed last year made it an obligation for all DTT channels to be broadcast on satellite**

- **France launched a Free DTT on Satellite offer on Astra on June 15th 2007. This package is designed to offer the same 18 channels as terrrestrial DTT in areas that are not covered by digital terrestrial**

- **Out of a total of 24 million TVHH some 1 million will have no terrestrial DTT coverage & some 3.5 million will have only partial coverage (less than 18 channels)**

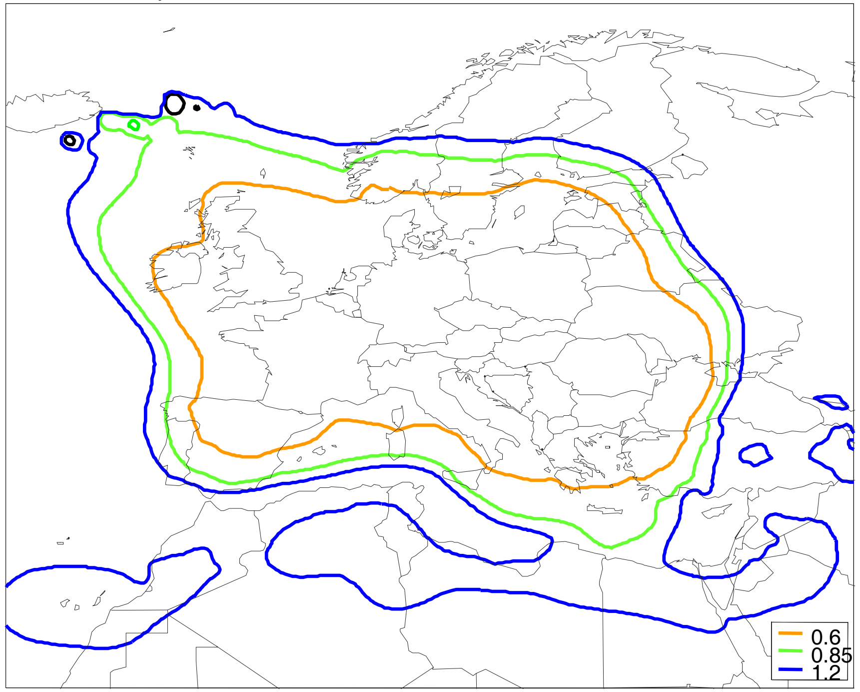
- **The service is encrypted for rights reasons using Viaccess 3.**

23.5E position as the prime orbital position for CEE region

SES ASTRA committed to invest in the CEE future digital Infrastructure

ASTRA

SES ASTRA develops 23.5E as DTH position for growth in the CEE markets



Product & Services

► Building up on the success of 19.2E, ASTRA's 23.5 East position is building as a new strong neighborhood for growth in the CEE markets

► Currently two satellites are operated at 23.5E position: ASTRA 3A & ASTRA1E

► Currently 3 DTH platforms on 23.5E, Czecho-Slovak Skylink with more than 470 000 activated smart cards, Czech CS Link with 250 000 active smart cards and Dutch Canal Digitaal with more than 1 mil subs

► More than 80% these homes receive programs from both positions 23.5E & 19.2E

►ASTRA Duo-LNB enables simultaneous reception of channels and services from ASTRA satellites at 19.2° and 23.5° East

► New satellite ASTRA 3B is under procurement and will be launched by YE 2009

►Today more than 330 TV and radio channels available from 23.5E

►Astra 23.5E position as a home to Astra2Connect – two way broadband service that delivers high-speed internet access

23.5E as the prime orbital position for CEE

Due to difficulties with implementation of DVB-T, Skylink platform is able to gain significant digital market share

Key facts

- Czecho-Slovak platform on 23.5E position (ASTRA 3A & 1E)
- 470 000 activated smart cards
- The first Czech HD channel NOVA HD (CME) launched in October exclusively on Skylink
- New HD channels Eurosport HD and Brava HD launched in October
- New thematic channels in CS Link bouquet - Nova Cinema (CME), news channel Z1, sports channel Sport5
- Carrying all Czech & Slovak public/commercial channels
- More than 40 TV and radio channels from 23.5 position plus 300 FTA TV/radio channels via

23.5E as the prime orbital position for CEE

Due to difficulties with implementation of DVB-T, CS Link platform is able to gain significant digital market share

Key facts

- Czech platform on 23.5E positions (ASTRA 3A & 1E)
- 250 000 activated smart cards
- New thematic channels in CS Link bouquet - Nova Cinema (CME), news channel Z1, sports channel Sport5
- Carrying all Czech & Slovak public/commercial channels
- More than 40 TV and radio channels from 23.5 position plus 300 FTA TV/radio channels via

23.5E as the prime orbital position for CEE

Key facts

- Canal Digitaal on ASTRA 19.2E and 23.5E
- 23.5: regional, thematic and HDTV channels
- Smooth transition of Dutch regional broadcasters from 19.2E to 23.5E in 2007
- Very successful trade & consumer 23.5 campaign in cooperation with Canal Digitaal
- Canal Digitaal has currently more than 1 mil active smartcards (800.000 homes)
- Within 12 months after introduction of ASTRA 23.5, already over 300 000 satellite homes in Benelux receive 23.5E by using ASTRA DUO LNB
- HDTV channels already on 23.5E: Discovery HD, National Geographic HD, Brava HD (soon Voom HD)
- Thematic channels on 23.5E includes NatGeo Wild, Discovery Science, Discovery Travel and Living, Playboy TV, E! International & NOS thematic channels.

HDTV on Astra

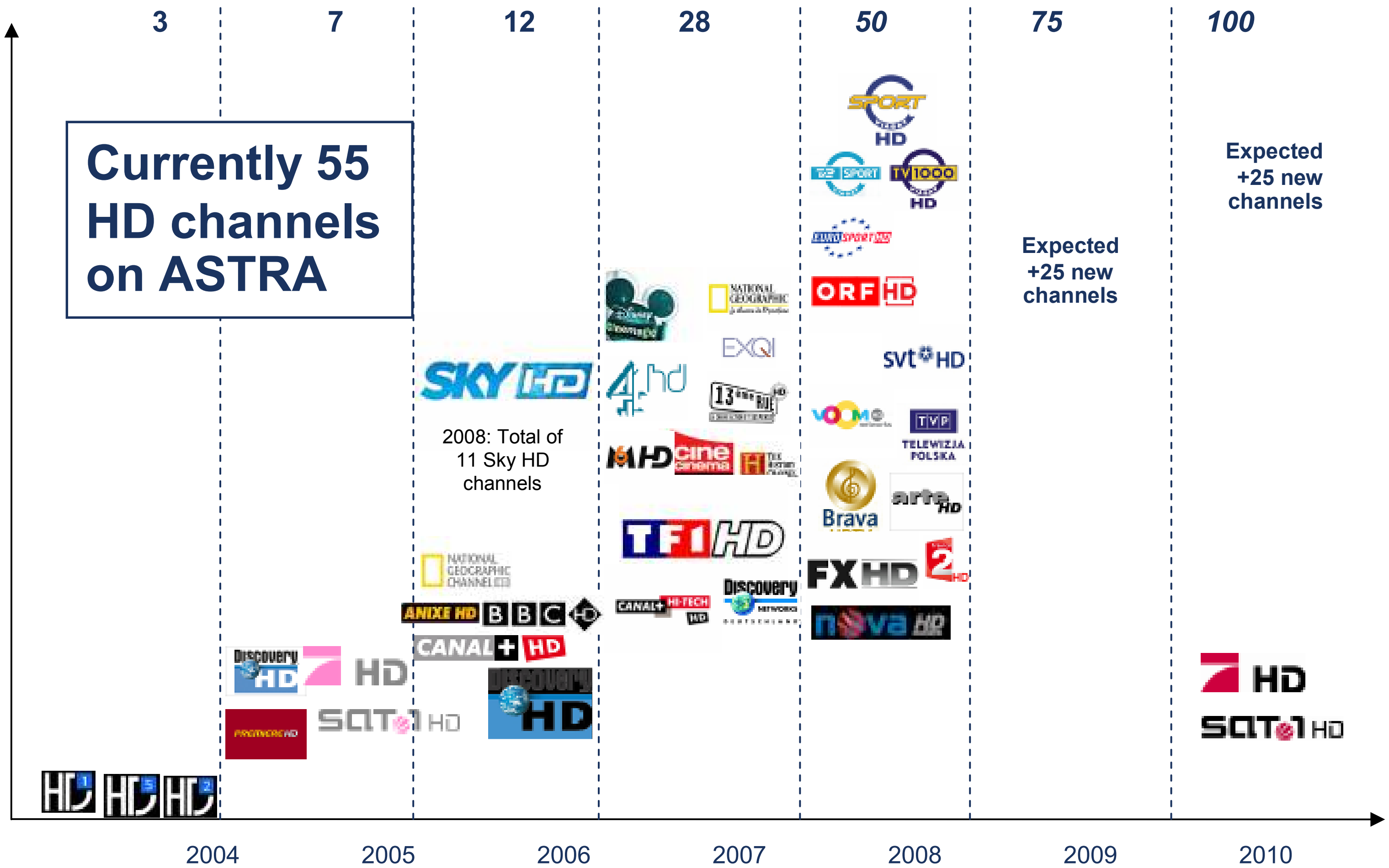
ASTRA - making Europe HD ready

- HDTV pioneer & driver in Europe
  - broadcast the first European HDTV channel in 2004
  - leads the drive for quality standards for HD consumer equipment
  - committed to maintaining the momentum of HDTV in Europe: ASTRA will carry 100+ HD channels by 2010
- HD standard facilitator
  - key role in the adoption of the EICTA* “HD ready” logo
  - ASTRA is the leading delivery platform for HDTV in Europe
  - new specifications for display devices with native 1920x1080 resolution that also handle 1080 progressive input signals.

*European Information & Communications Technology Industry Association

100 High Definition channels on ASTRA in 2010

Forecast year end 2004 - 2010



1.2 Million High Definition viewers on ASTRA

ASTRA

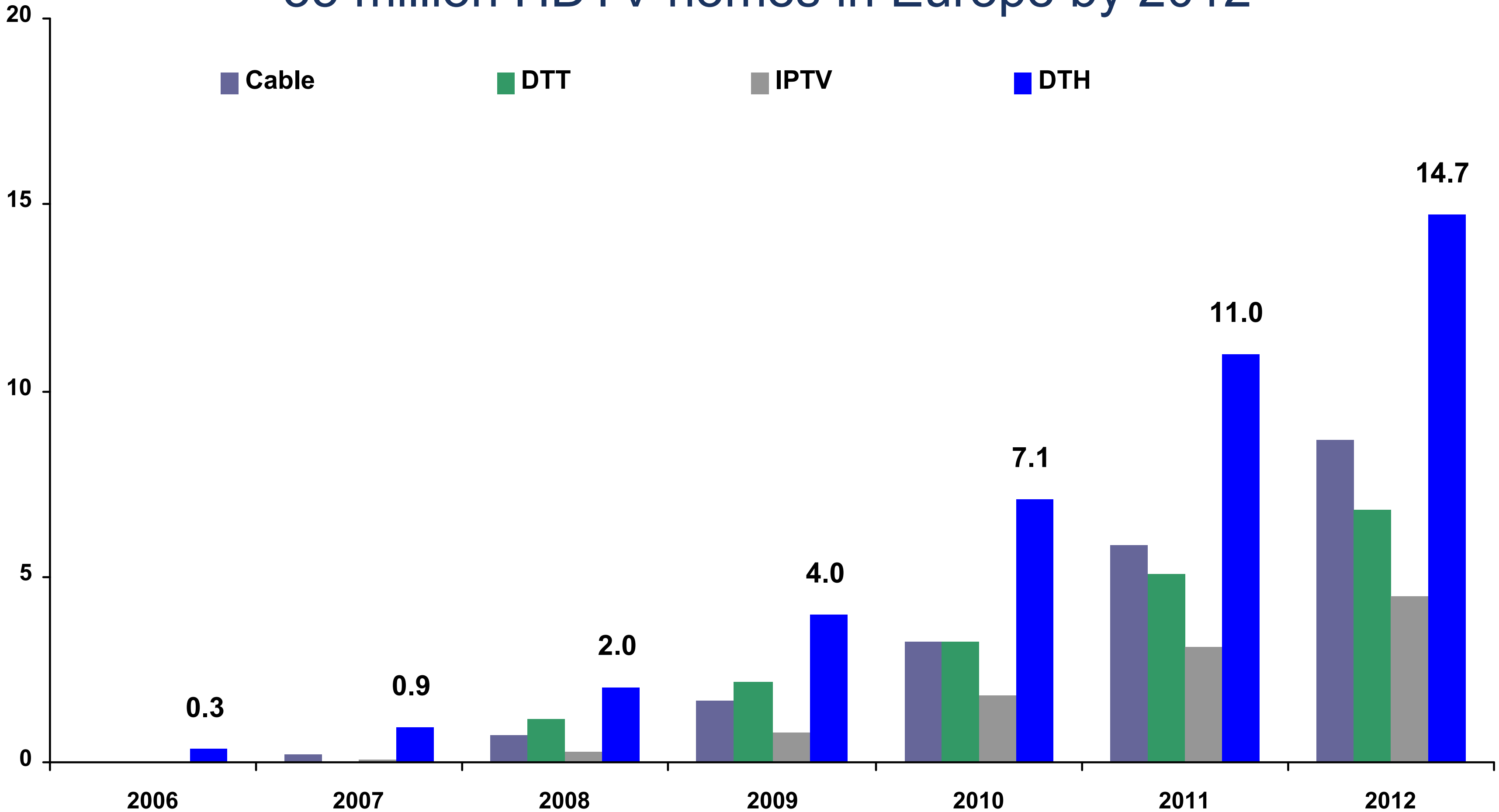
- United Kingdom
  - BSkyB: **498,000** subscribers (Q2 2008) - 13 HD channels
  - FreeSat: ~ **50,000** viewers
- Germany
  - Premiere: **120,000** subscribers (Q2 2008) - 2 HD channels
  - Free-to-air: **> 250,000** viewers (industry estimates)
- France
  - Canal+ Group: **120,000** subscribers (Q1 2008) - 7 HD channels
  - TNTSAT **50,000** HD (launch YE08)
- Other markets: **~150,000** HD subscribers and viewers in Austria, Benelux, Czech Republic, Nordic Countries, Poland, Spain

Sources: Dataxis, GfK Retail and Technology, Industry estimates (July 2008)

Figures for the European markets in Q2 2008

Satellite remains largest High Definition platform

35 million HDTV homes in Europe by 2012



Source: Screen Digest, July 2008
Countries: Europe excluding Russia and Turkey
DTH – Astra: AT, BE, DE, ES, FR, GB, IE, NL, EST, H, RO, SK, SLO, CZ, DEN, FIN, SWE
DTH – others: CH, IT, PL, PT

Overview of products and services

Overview of ASTRA services & solutions

- **TV and radio broadcasting capacity:** analogue, digital, HDTV
- **Associated technical services:** encryption, multiplexing, playout, uplink services
- **Two-way satellite broadband services:** ASTRA2*Connect*

- **Interactive TV with Blucom**: complementary 2-way communication between the TV and the mobile phone
- **SNG, Occasional Use, video contribution, cable feeds**
- **Marketing services:** co-marketing and penetration marketing on a local and European level, market researches and trend data

Benefits of digitalization via ASTRA satellites

A digitized and addressable TV environment via satellite is the ideal scenario for broadcasters to rapidly develop new growth

Advantages of ASTRA satellite reception

- 100% coverage of the country from day one
- High bandwidth availability
- Immediate time to market
- Low operating cost
- Simultaneous feed into cable networks and terrestrial transmitter
- Ideal distribution mean for HD channels
- Possibility of adding two way satellite broadband internet services, VoD, etc.
- Nearly unlimited choice of TV and radio channels
- Mixed model – DVB-T and DVB-S is an ideal solution throughout the whole digitalization process
- Technical excellence and inter-satellite back-up system

New services and revenue streams via digital

- Pay-TV
- Premium HDTV
- PPV & VoD
- Interactive services

Better address individual tastes of target audiences with dedicated channels

Easier operational execution

- Less transmission capacity required per channel and opportunity for expansion on digital satellite
- Addressability as key enabler for new revenue streams, e.g. via neutral platform
- Increased security and guarantees for rights holders through encryption

Implications

- **Analogue-to-Digital conversion is a must**
- **Addressability is key for creating value**
- **Digital satellite is uniquely positioned to deliver all benefits of digitization**

Ďakujem za pozornosť !

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