



**Investor Day 2006**

**German Market Update**

# SES ASTRA - Facts and figures

- **Satellite Fleet**

- 13 ASTRA and 2 SIRIUS satellites for Europe, 1 for Africa & Intercontinental traffic
- 3 new satellites under procurement (ASTRA 1L, ASTRA 1M, SIRIUS 4)

- **Key Features**

- 19.2° and 28.2° East: Europe's prime orbital positions for Direct-to-Home (DTH)
- 23.5° East: Direct-to-Cable slot - development into DTH position
- 5° East: strong coverage of Nordic & CEE countries
- 37.5° West: Coverage of Africa

- **Customers**

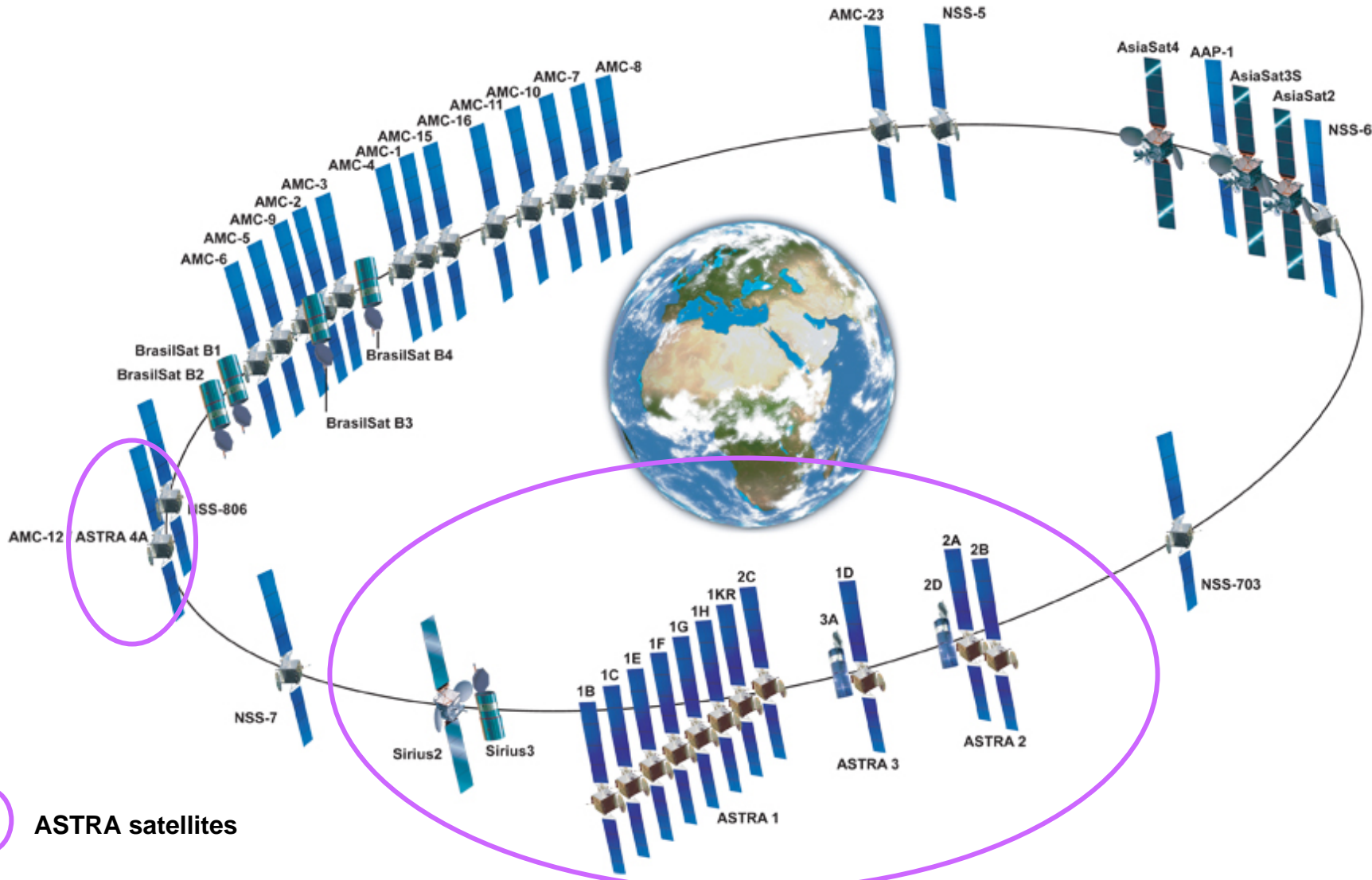
- Over 330 customers and more than 1600 channels & services

- **Financials (EMEA, 2005)**

- Revenues: 765 MEUR
- EBITDA: 604 MEUR
- Backlog: 4,045 MEUR

**SES ASTRA is part of SES, the world's leading satellite group.**

# SES ASTRA satellites within the SES fleet



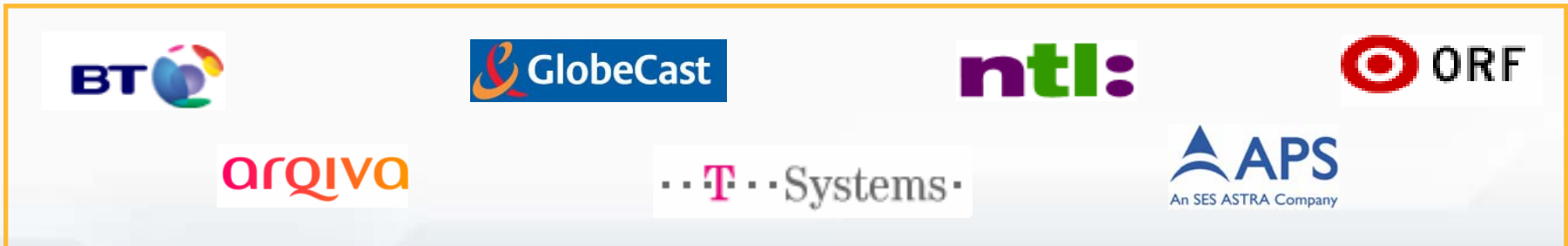
 ASTRA satellites

# SES ASTRA – Our main customers

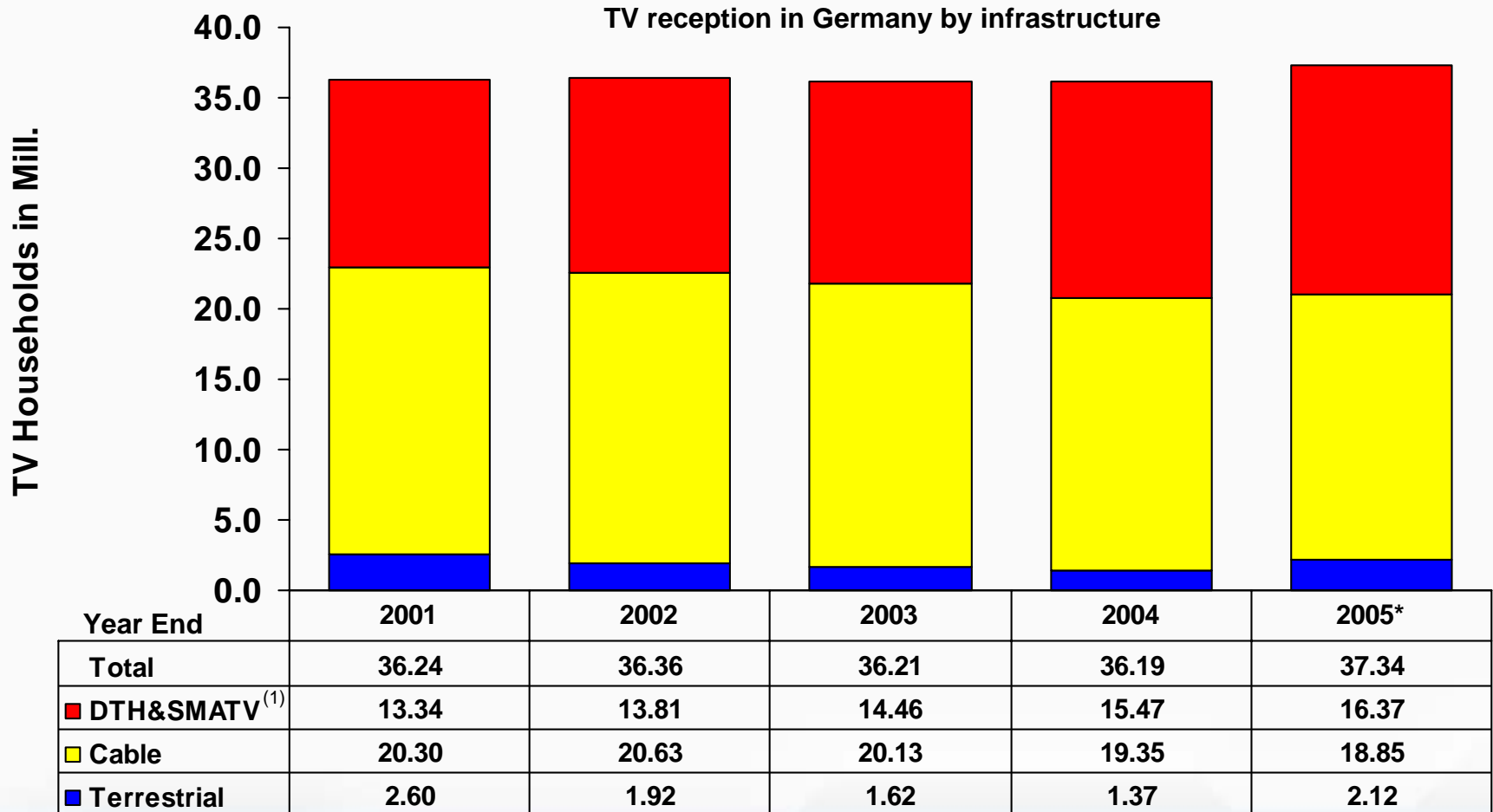
Europe's leading private and public television channels:



Europe's leading resellers are partners of ASTRA:



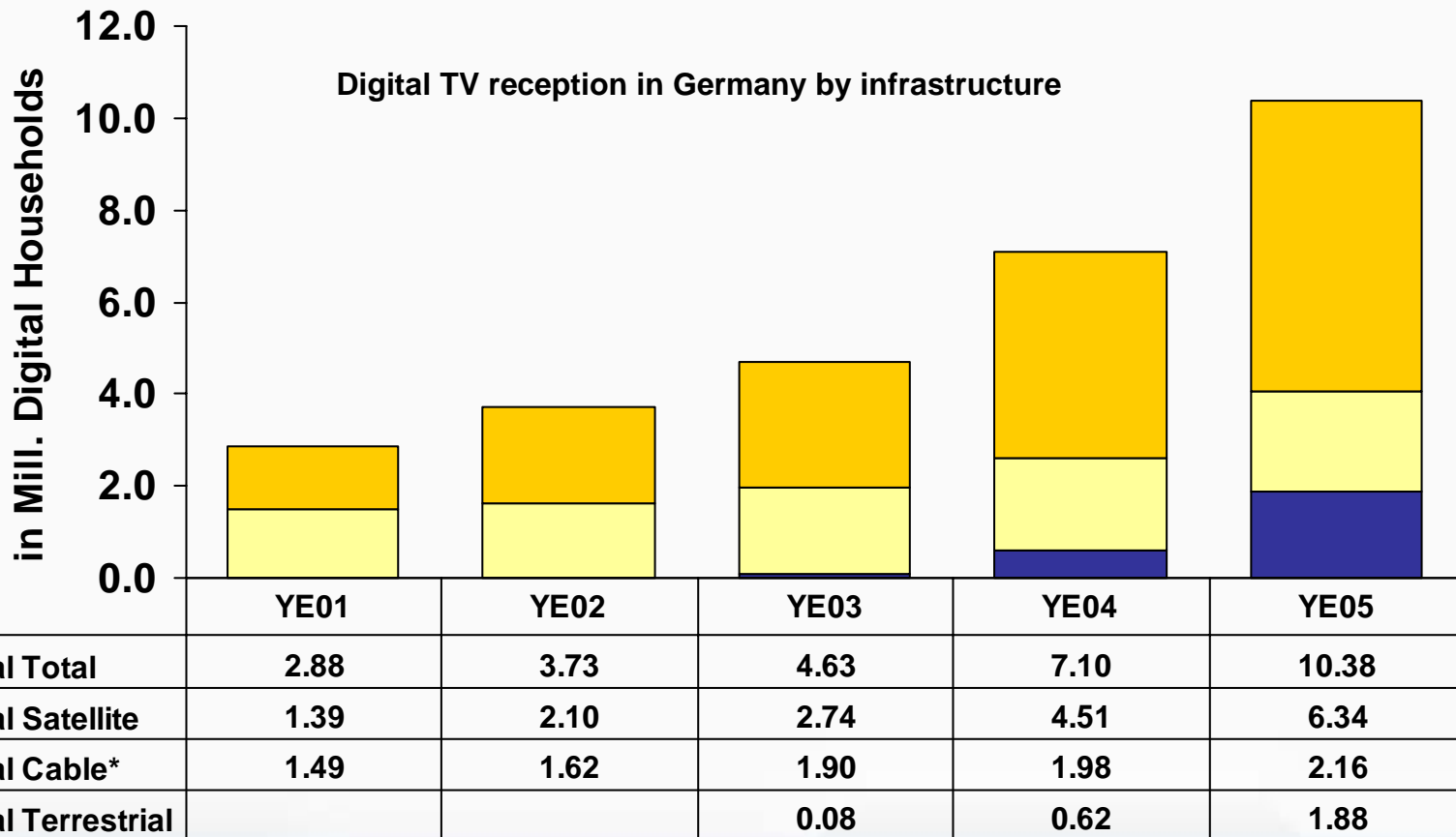
# The German market: TV reception modes



\*YE05, new projection to 37.3 (incl. foreign HH)  
 Source: SES ASTRA, German Satellite Monitor, TNS Infratest

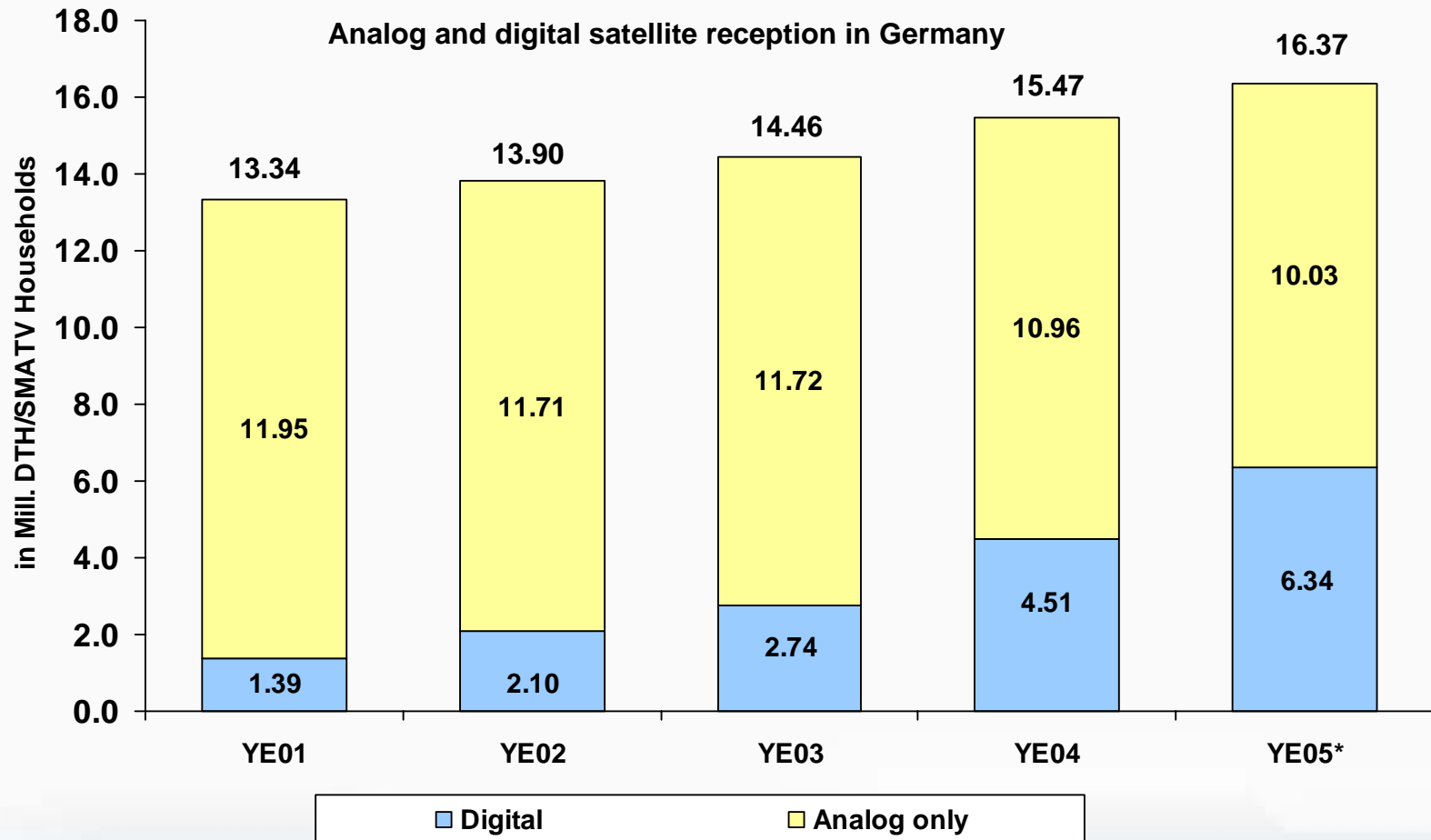
<sup>(1)</sup> DTH = Direct to home; SMATV = Satellite master antenna television (one antenna for more than one unit)

# Satellite is the leading digital TV infrastructure.



Since YE 2005, new projection to 37.3 mill. HH (incl. foreign HH)  
 \*including Digital Cable households with analogue Satellite reception  
 Sources: SES ASTRA, German Satellite Monitor, TNS Infratest

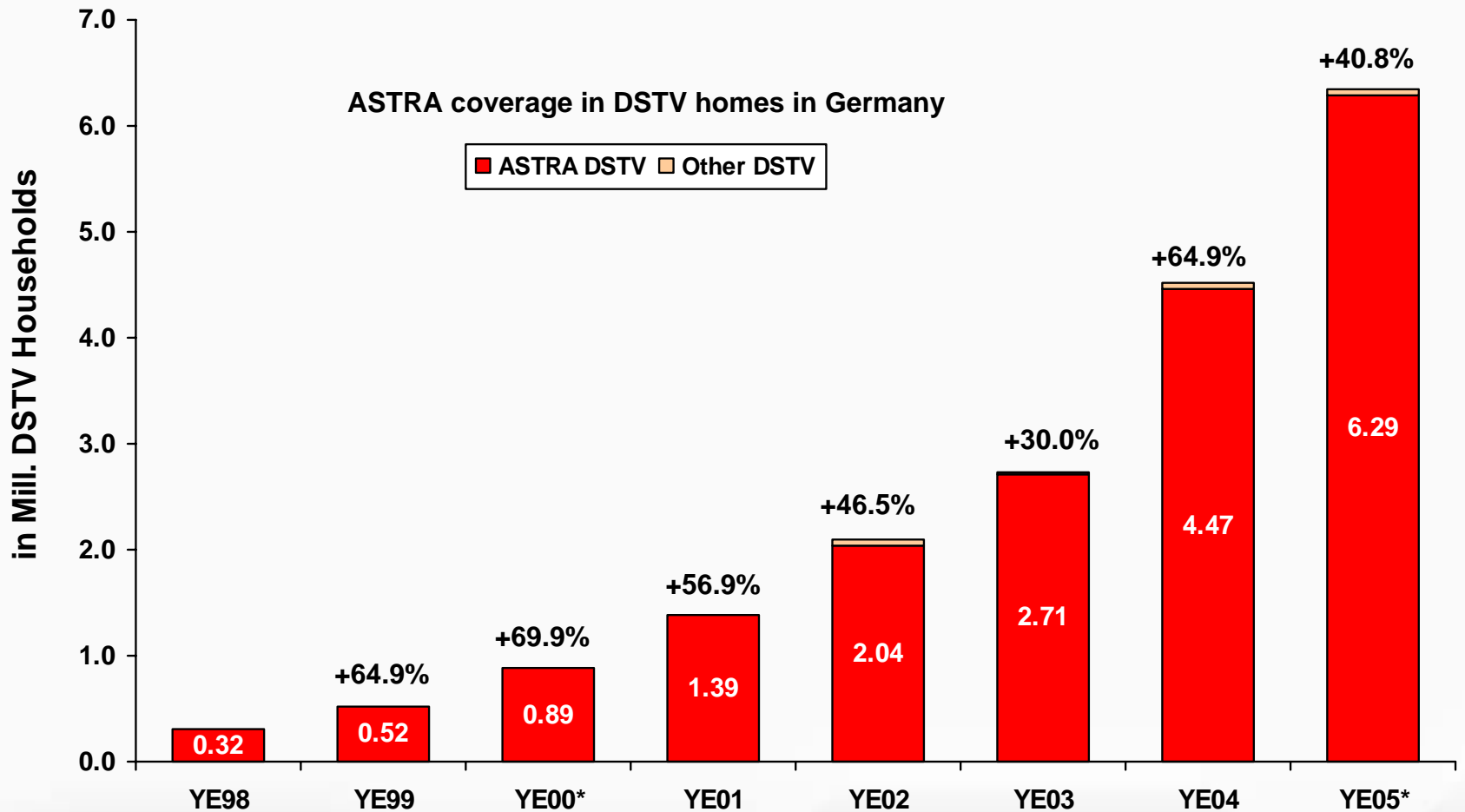
# Digital satellite is experiencing strong growth.



\*YE05, new projection to 37.3 (incl. foreign HH)

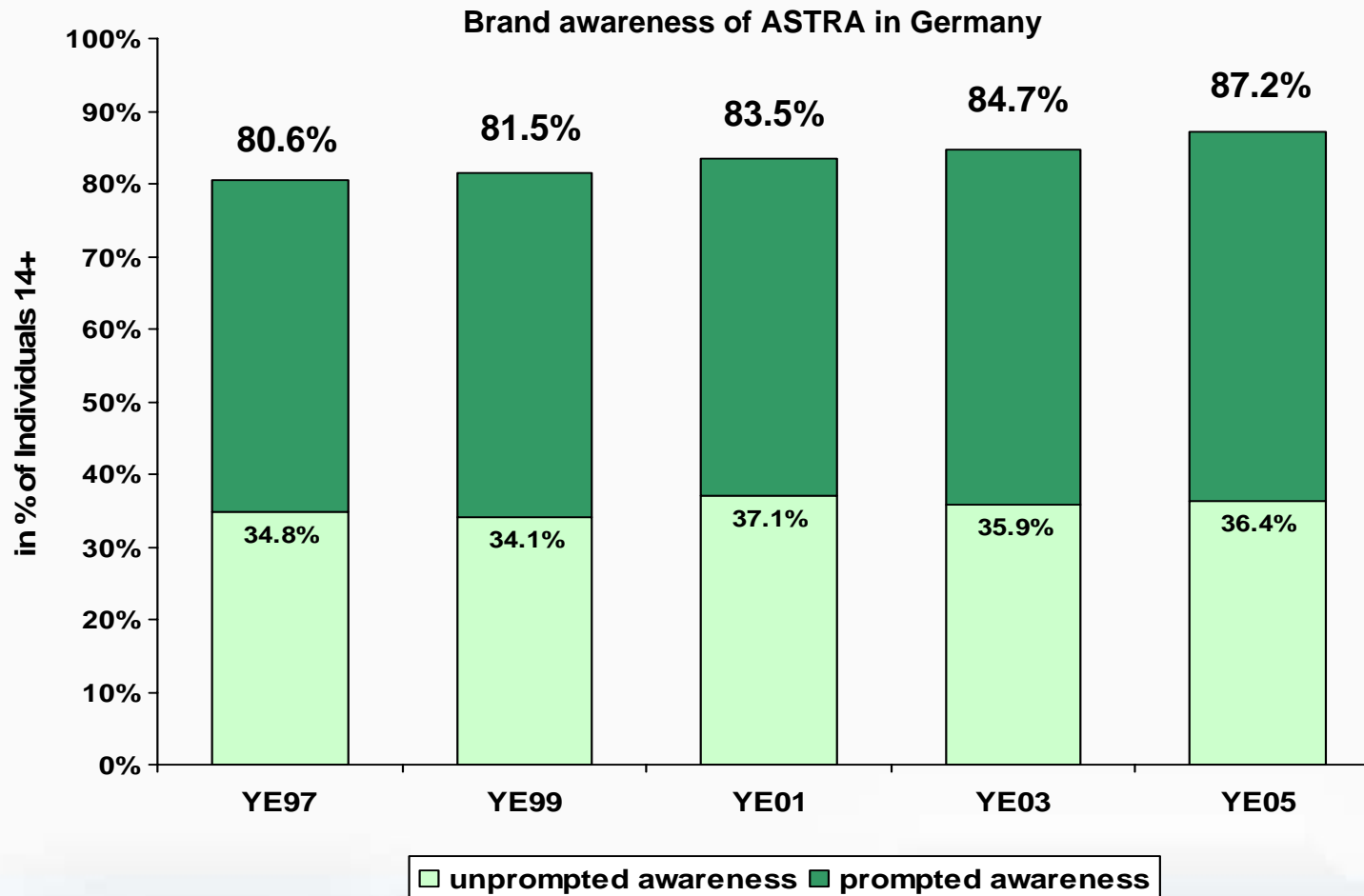
Source: SES ASTRA, German Satellite Monitor, TNS Infratest

# ASTRA: The leading satellite operator in Germany.



\*YE05, new projection to 37.3 (incl. foreign HH)  
 Sources: SES ASTRA, German Satellite Monitor, TNS Infratest

# The ASTRA brand is very well established.

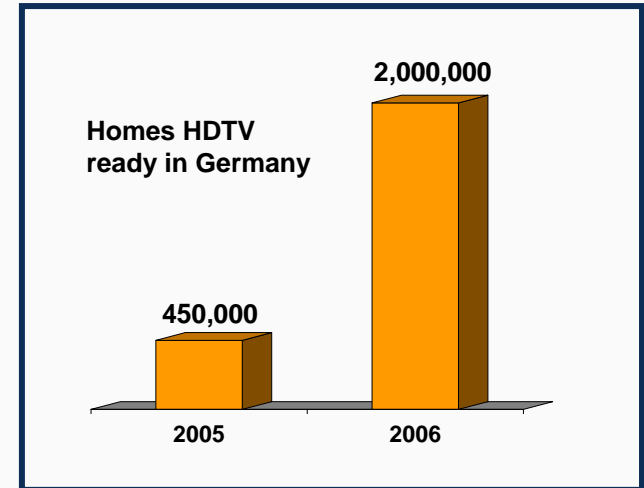


Base: Individuals 14+

Source: SES ASTRA, German Satellite Monitor, TNS Infratest

## HDTV is one of the main DTH market drivers.

- Majority of new TV productions will be in HD
- Most of movie, sports, documentary channels to be in HD
- 100+ HDTV channels will be available on ASTRA
- Transition to digital soon completed in all core markets
- Economically viable due to new compression technologies
- Satellite will be frontrunner for HDTV
  - Ubiquitous coverage
  - Fastest time to market
  - Immediate roll-out

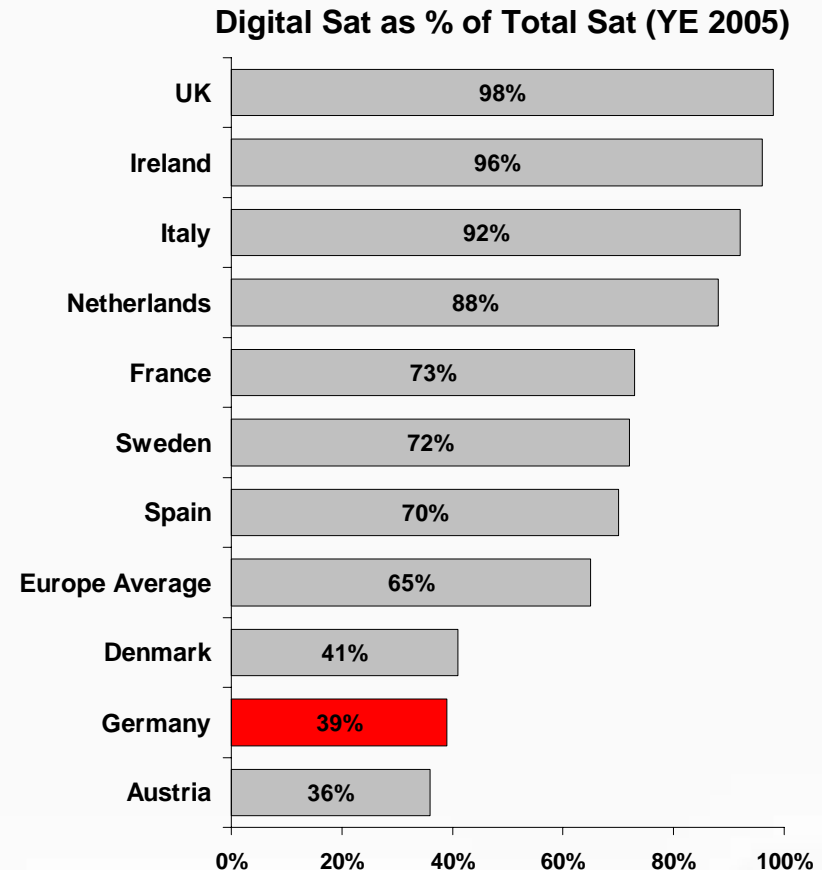


Source: Gesellschaft für Konsumforschung (GfK)



# German conversion to digital must be accelerated.

- Germany still has an exceptionally high amount of analog TV households across all traditional TV technologies: cable, satellite and terrestrial.
- Satellite has been driving the analog-to-digital conversion over the past years, achieving the highest rate of digitization of all three technologies.
- Benefits of digitization:
  - Significantly lower barriers to market entry for Free-TV, Pay-TV and radio broadcasters.
  - New interactive services, e.g. programme guides, transaction portals (betting, shopping).
  - New TV service offerings such as Video-On-Demand or push-services.



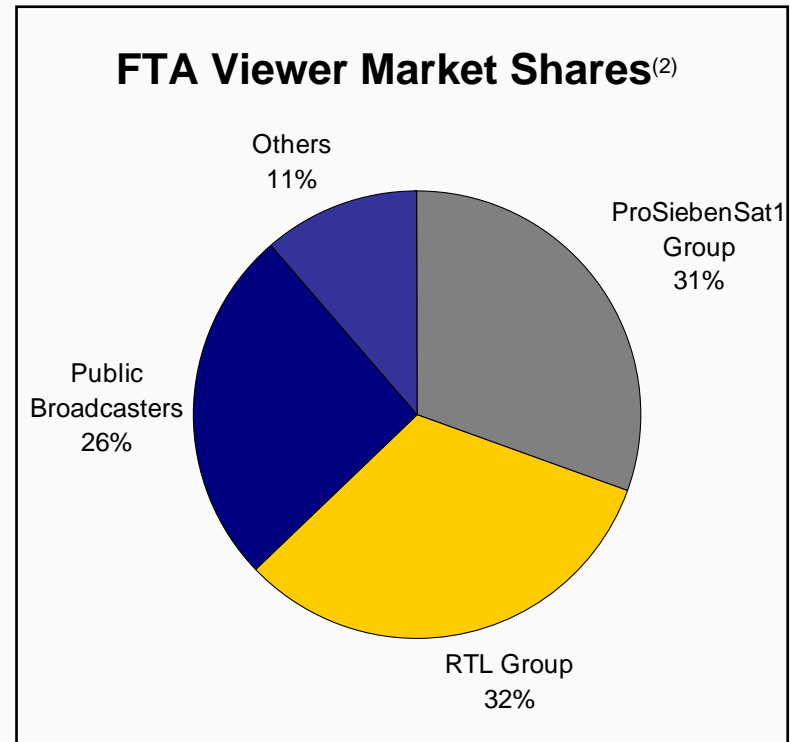
**Germany needs to accelerate the conversion from analog to digital. New business models and revenue streams and more choice for the viewer are the key benefits.**

# Free-to-Air channels and market shares in Germany.

1	1-2-3 TV	Analogue	Shopping		
2	3 sat	Analogue	Culture		
3	9 Live	Analogue	General Entertainment		
4	Arena	Analogue			
5	ARTE Deutsch	Analogue	Culture		
6	Astro TV	Analogue	General Entertainment		
7	Bayerisches Fernsehen Sat	1	1-2-3 TV	Digital	Shopping
8	Bloomberg TV Deutschland	2	3 sat	Digital	Culture
9	BR Alpha	3	9 Live	Digital	General Entertainment
10	CNBC Germany	4	Aah TV	Digital	Adults
11	CNN International Europe	5	Amore-TV	Digital	Adults
12	Das Erste	6	Arena	Digital	General Entertainment
13	Das Vierte	7	ARTE Deutsch	Digital	Culture
14	DSF	8	Astra HDTV promo	Digital	Promo
15	Eurosport Deutschland	9	Astro TV	Digital	General Entertainment
16	HR Fernsehen	10	Bahn TV	Digital	Business
17	HSE 24	11	Bayerisches Fernsehen Sat	Digital	General Entertainment
18	Kabel Eins Deutschland	12	Bestseller TV	Digital	Shopping
19		13	Bibel TV	Digital	Religious
		14	Bietbox	Digital	Shopping
		15	Bloomberg TV Deutschland	Digital	Business
		16	BR Alpha	Digital	Education
		17	Clear TV	Digital	General Entertainment
		18	Das Erste	Digital	General Entertainment
		19	Das Vierte	Digital	General Entertainment
		20		Digital	Music
				Digital	Sports
				Digital	General Entertainment

46 analog FTA channels<sup>(1)</sup>

125 digital FTA channels<sup>(1)</sup>



**Germany has a very high number of FTA channels with viewer market shares mainly distributed to the RTL group, ProSiebenSat1 group and the public broadcasters.**

<sup>(1)</sup> As of March 2006; Source: Lyngsat

<sup>(2)</sup> Year End 2005; Age Group 14-49; Source: AGF/GfK Fernsehforschung

# Encryption is a logical step for FTA broadcasters.

## Market Trends

- Viewers demand **additional and innovative services** (HDTV, interactivity, more Pay channels).
- Free TV broadcasters are under pressure from **content owners/ copyrights holders** to protect their signals.

## Consequences

- Viewers need to be **“addressable”** to establish the relationship (e.g. for interactive services).
- For rights management reasons broadcasters will need to **encrypt their channels** in order to sustain a business model without Pay TV.

## Need for Changes

- Receivers need **conditional access** functionalities to be addressable in a non-discriminatory manner.
- Free TV signals need to be **encrypted** although content will remain free.

**A technological platform for encryption of the digital signal and conditional access will enable broadcasters to increasingly benefit from digital television.**

# Users need innovative TV and standardized receivers.

## Current Situation

- ✘ Inability of **non-addressable** viewer base to benefit from innovative service offerings by broadcasters.
- ✘ Partly **dispersed, incompatible, proprietary** set-top-box/ smart card offerings prevent viewers to benefit from channel competition and **innovation**.

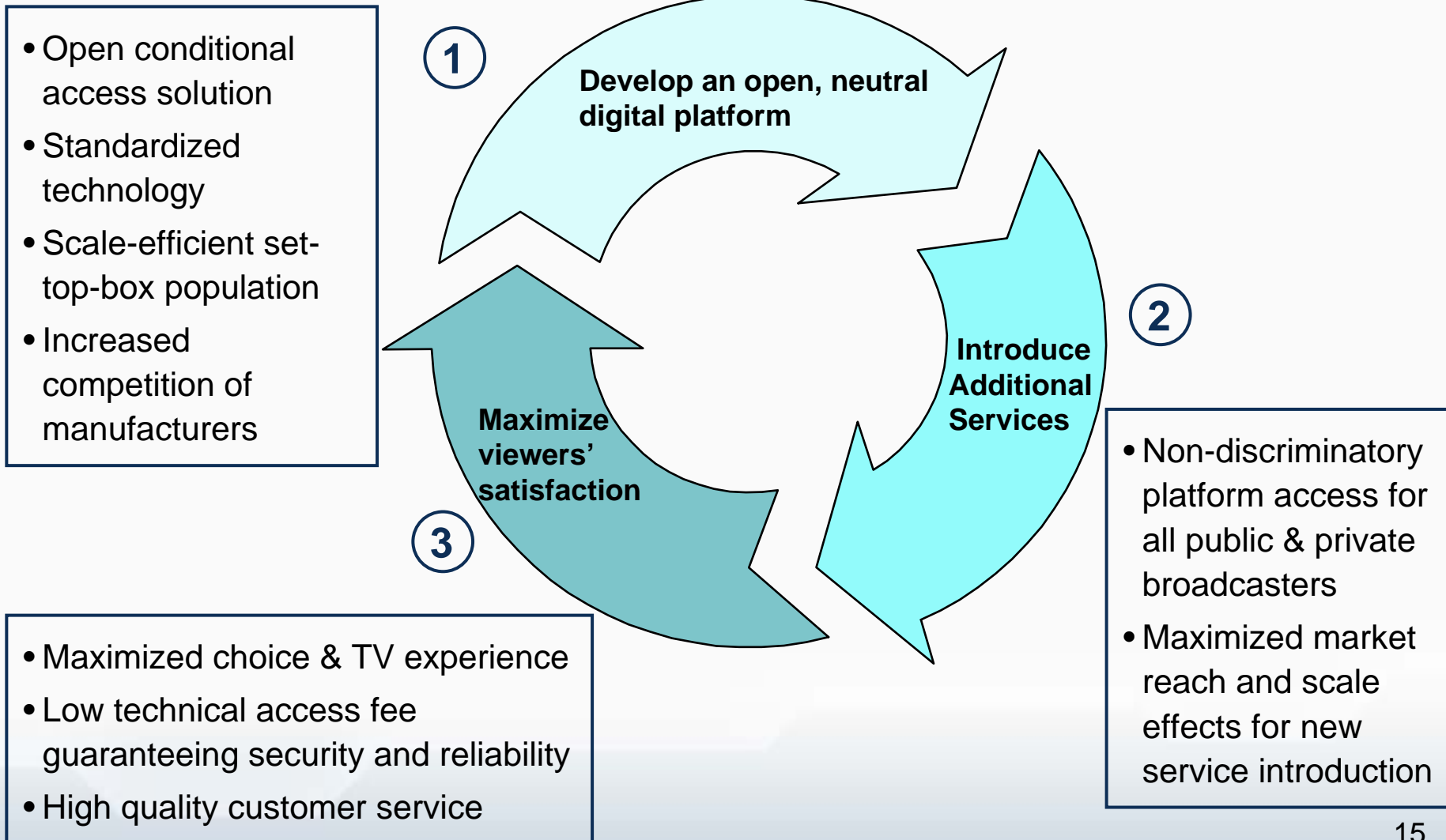


## End User Advantages

- **State-of-the-art TV services**, e.g. programme guides, transaction portals (betting, shopping), Video-On-Demand, push-services, etc.
- **Simplification** of the increasingly complex set-top-box market through introduction of widely available up-to-date standardized innovative set-top-boxes.

**A viewer-friendly technical solution has to include standardized innovative set-top-boxes that remove the problems of non-addressability and lack of compatibility.**

# Creating the virtuous circle of digital TV.



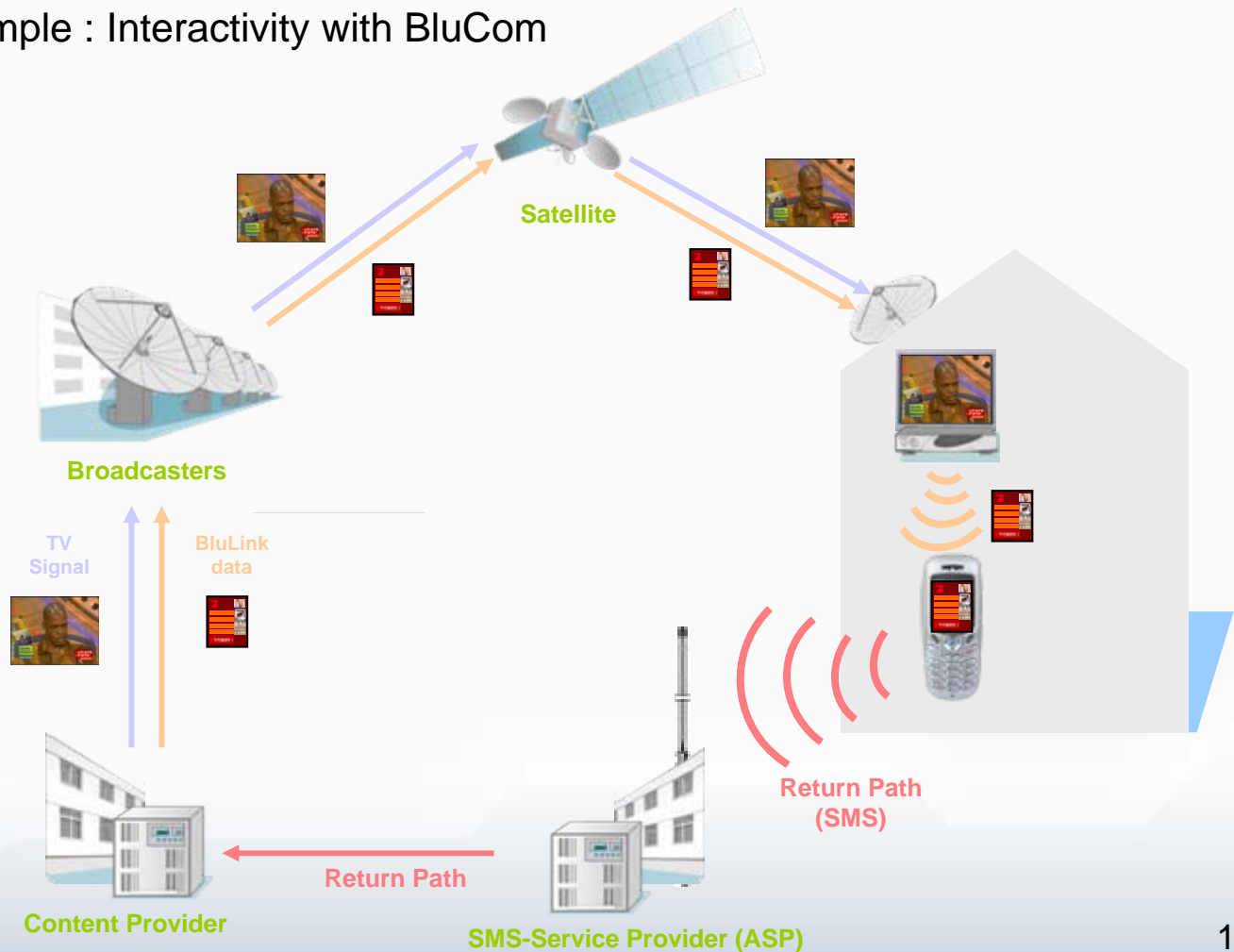
## Simple access to the new digital services.



- The Receiver
  - Open specifications and a large market will ensure competition between manufacturers and thus attractive prices and a wide choice of models for the end user
- The Smartcard
  - Approx. €3 per month flat fee for the technology and service costs
  - One-off registration fee of around €15
- Digital Value Added Services
  - Mosaic, EPG, Digital Videotext, Personal Video Recorder, Blucom Interactive, Access to Pay-TV, HDTV

# The platform is the basis for innovation.

- Innovative features will be embedded in the Digital Platform
- Example : Interactivity with BluCom



## Providing the technical infrastructure for our clients

- Through its German subsidiary Astra Platform Services (APS), SES provides uplinking, multiplexing, playout and conditional access services to broadcasters.
- To create an unfragmented market (conditional access/set-top-boxes), basic receiver specifications for a new digital platform have been set up.
- The platform is bound to meet growing demand of broadcasters to encrypt their satellite signal and will facilitate market access of smaller broadcasters.
- Non-core activities such as customer management will be operated by external partners.
- SES will market the platform under a new brand name and create a separate company.
- SES will not become involved in programming activities or the promotion of any particular channel or its content, but serve as a neutral and open technology platform provider.

## **SES ASTRA will create an open, neutral and non-discriminatory digital TV platform.**

- ⇒ The new digital platform will provide a stimulus for the development of digital TV in Germany ahead of the analog switch-off date of late-2010.**
- ⇒ SES diversifies by expanding into new services and underlines APS' strategic position as an open, neutral technology service provider.**
- ⇒ SES strengthens its position as leading satellite system in the fast growing digital DTH market.**