

France Telecom's move into VoD & IPTV

Orange TV

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France Telecom - Content Division - September 2006



Googling last night

- Google result for MPEGIF & joke
 - ... that would indeed be an uproariously funny **joke** for anyone who enjoys irony and ... The HTML pages take 4.7MB (out of 372MB total for **mpegif**).
- Google result for IBC & joke
 - Thankfully, the International Board of Comedy, better known as the **IBC**, ... claimed responsibility for over 600 bad-**joke**-related arrests in 2004 alone. ...



Agenda

- Who is FT and what is our content Vision
- Where we are at with TVoDSL
- Service presentation
- International TVoDSL rollouts
- Constraints & opportunities pushing MPEG through DSL
- Some Lessons

The Key differentiator

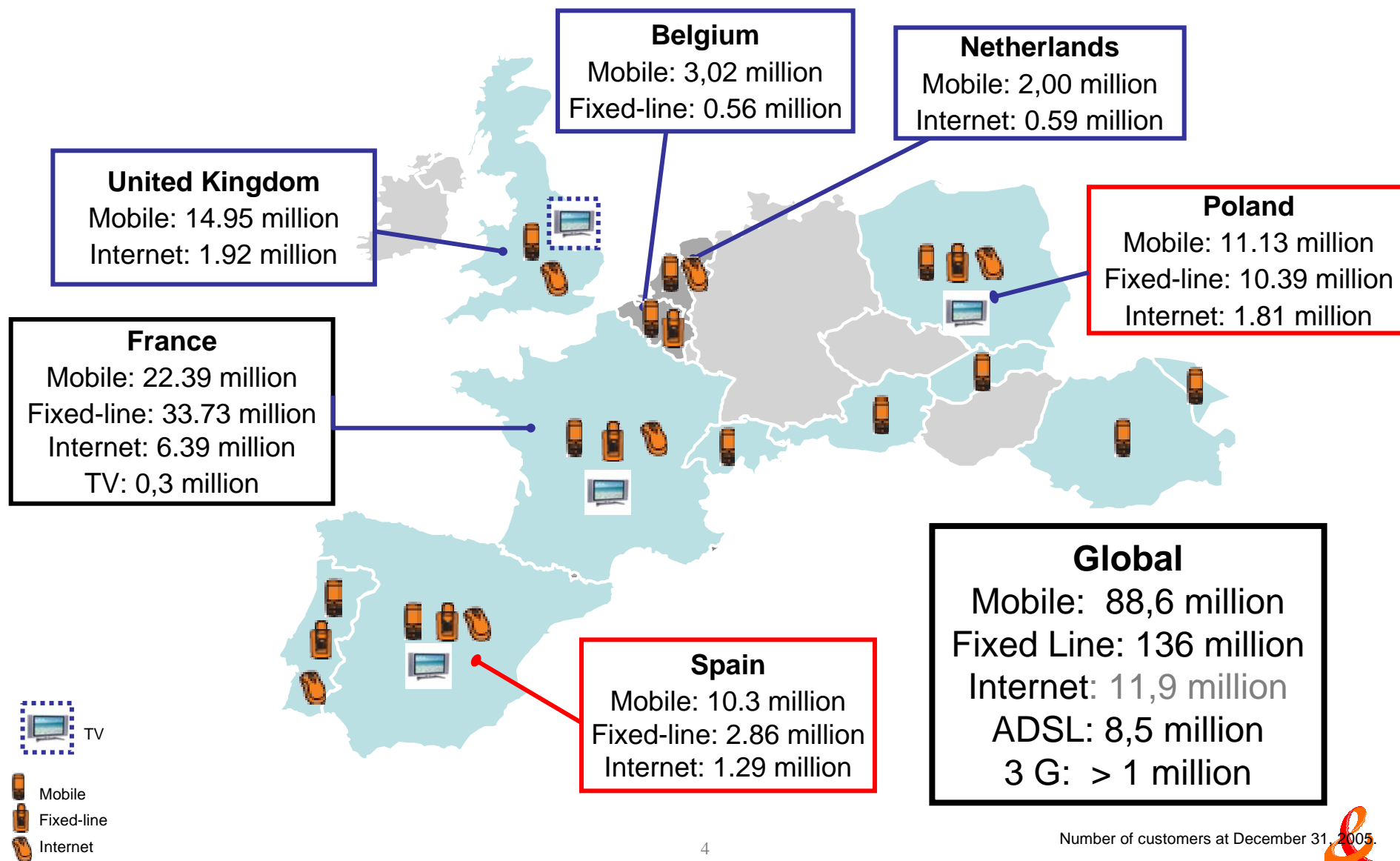
Return Link:

- Real VoD
- Interactivity
- Community
- nPVR

New QoS & scalability parameters



FT in Europe



Agenda

- Strategic & business considerations for moving into content => 6
- Service presentation
- International TVoDSL rollouts
- Technical TVoDSL Issues
- Some Lessons

Some Key differentiators

Return Link:

- Real VoD
- Interactivity
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New QoS & scalability
parameters



Strategic issues for Telcos

- **Opportunities**

- Turn broadband access into a mass market
- Break free Internet model
- *Home gateways* as a first step to domestic network
- Develop multi-play services to become an **integrated** operator
- Consumer demand for instant access to digital content

- **Challenges**

- Unclear regulation
- Merging Communications & Entertainment devices
- Telco legitimacy on new devices, particularly TV
- Develop **partnerships** with content providers looking for new distribution channels



Business & market opportunity 2003

- 17/24 M HH accessing only 6 Channels
- Weak satellite penetration in towns (< 1%)
- Cable failure (only 3.4 M customers)
- 2 competing satellite bouquets on the market
- Launch with challenger TPS: co-financed deployment
- France Telecom strategy & Business model in 2003:
 - Distribute Pay TV Bouquets
 - VoD/SVoD: Revenue sharing with creators & rights owners
 - Retain customer relationship (sell subscription, own STB)
 - Manage complete technical chain for High QoS
 - Innovate (aggregation & VoD/SVoD)



Key drivers for FT's security strategy

- The most **secure** environment gets the most premium **content**.
- 1. Content Acquisition must be protected
- 2. Authentication and traceability are not enough
- 3. Security must be upgradeable and renewable
- 4. Pure software DRM technologies
 - Have little exposure to organised hacking
 - No track record on live TV
- 5. A trusted environment at client end can help



Our vision of 'Content Everywhere'

E.g. TV programs available on multiple terminals



E.g. setup playlist at home, listen on the move. Tracks bought on the move listened to at home



Personalization
eg. TV



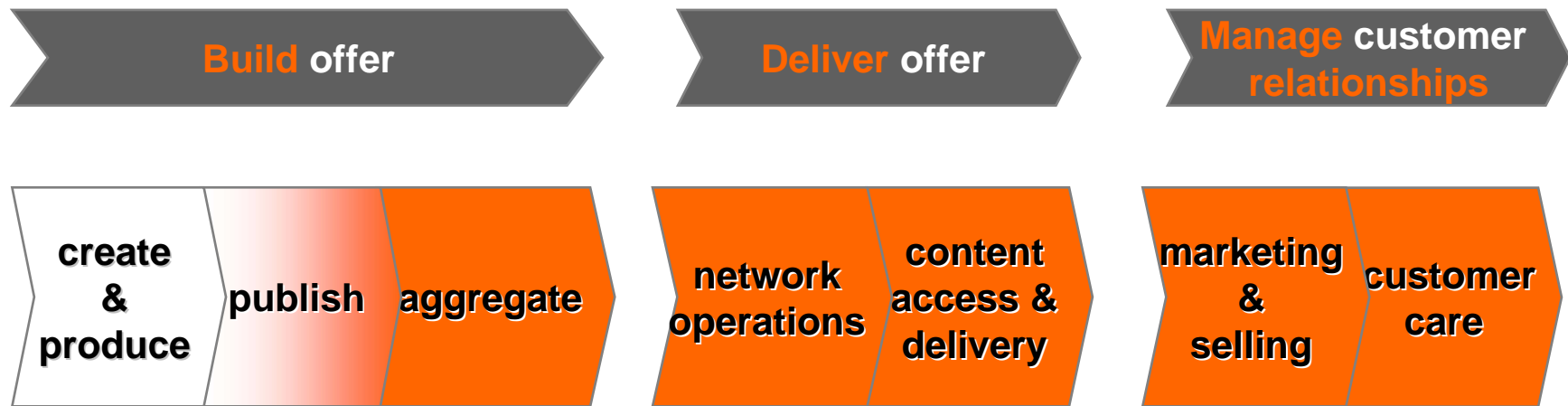
E.g. online game extended to mobile by receiving alerts on mobile and being able to react

AAC

MPEG2 MPEG4



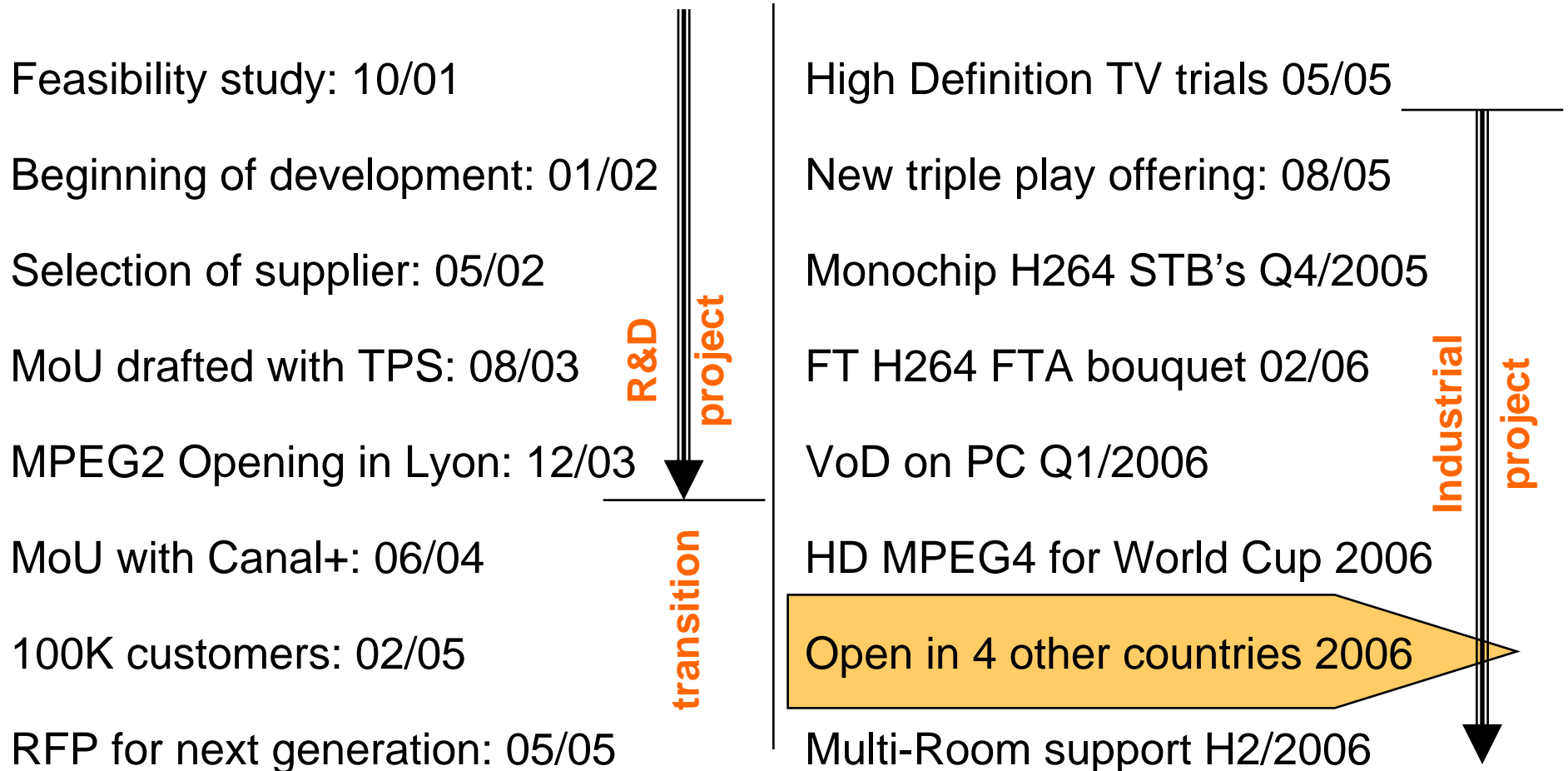
Our position in the value chain



- **We are leveraging existing assets**
 - retail, brand, network, Customer management
- **While developing new skills in content partnerships and content management to offer our customers innovative services**



Some key Milestones 2001 to 2006



Agenda

- Strategic & business considerations for moving into content

Service presentation => 2

- International TVoDSL rollouts
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Orange TVoDSL in France 06/2006

- A/V service delivered to STB over DSL comprised of Live TV & VoD using MPEG2 & H264
- 230+ premium TV channels; ~40 FTA MPEG4 Channels
- ~1000 on demand films and programs
- Agreements with major TV & film studios
- 306 000+ customers

Orange TV



CANAL SATDSL

A promotional banner for Orange TV. The background is a sunset with a silhouette of a person holding a long object. The text reads: '3 mois offerts jusqu'au 18 août 2005'. Below this, there are two purple rounded rectangles. The left one says 'à Maligne tv et à TOUT TPS' with the TPS logo. The right one says 'à l'offre Internet, Télévision et à TOUT TPS' with the TPS logo. At the bottom right, it says 'Les chaînes TPS arrivent par la ligne téléphonique' with a small icon of a telephone handset.



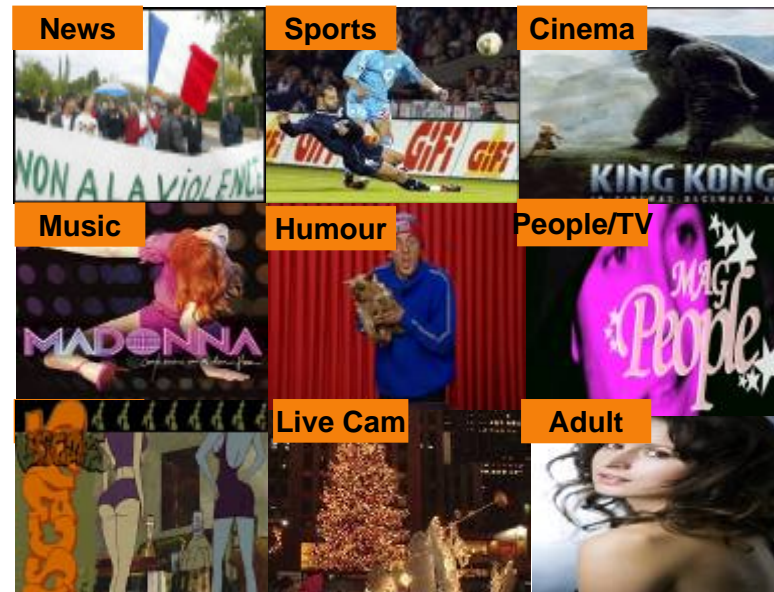
OrangeWorld Mobile TV offering in France

TV 55 MPEG4 TV Channels



VOD

- 3 000 videos
- 500 new videos per week
- 9 themes



• Exclusives

(Ligue 1 Orange, Top 14, Tour de France, Roland Garros, Madonna, King Kong)



Agenda

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- Service presentation

International TVoDSL rollouts => 2

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Country footprint

- Open Markets

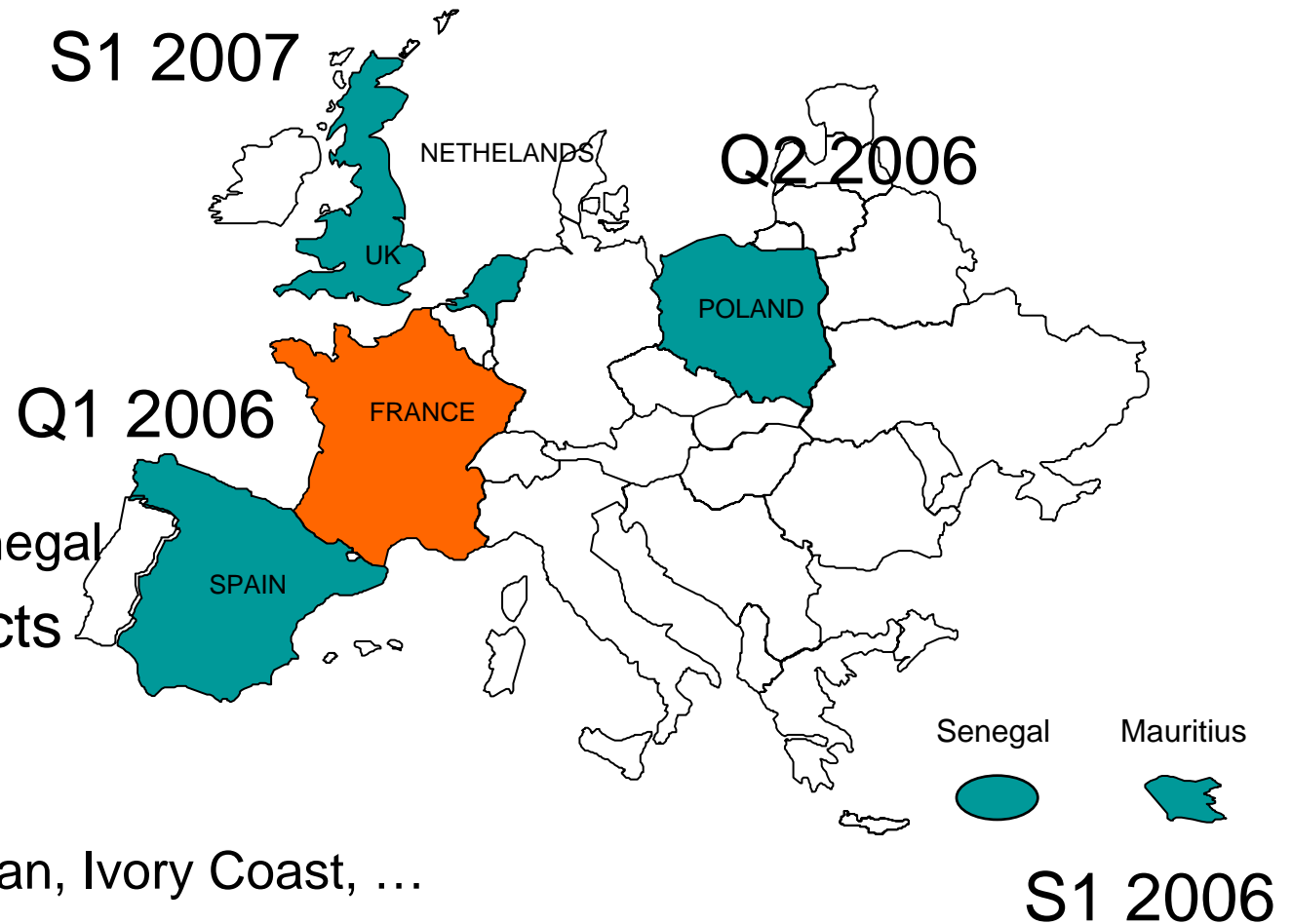
- France,
- Spain,
- Poland,
- Mauritius, Senegal

- Ongoing projects

- UK, Holland

- Others

- Portugal, Jordan, Ivory Coast, ...
- Mobile only presence: Switzerland, Slovakia, Belgium, ...
- Countries with no FT presence handled with Sofrecom
- China



Typical project issues for int'l rollout

- ULL rollout or Network readiness
- Readiness of content deals with TV channels
- Readiness of content deals with VoD partners
- STB and/or network equipment provision
- How much customisation of standard solution?
- Support & Call centre readiness
- Logistics for delivering STB, Modem/Router & Smartcard
- Training of sales forces
- Deals with distributors (point of sale)



Agenda

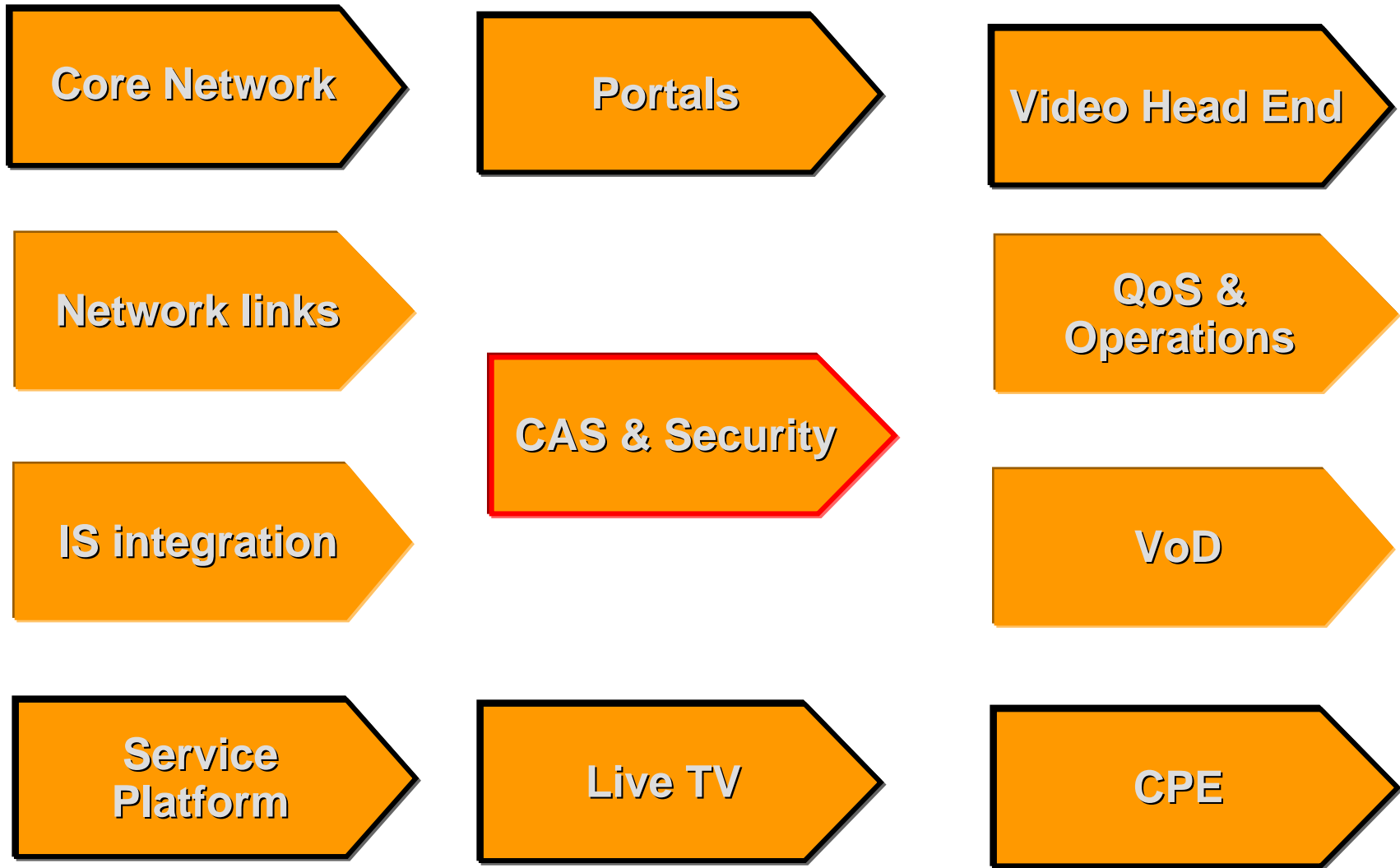
- Strategic & business considerations for moving into content
- Service presentation
- International TVoDSL rollouts

Technical TVoDSL Issues => 10

- Some Lessons



11 technical work streams during Build



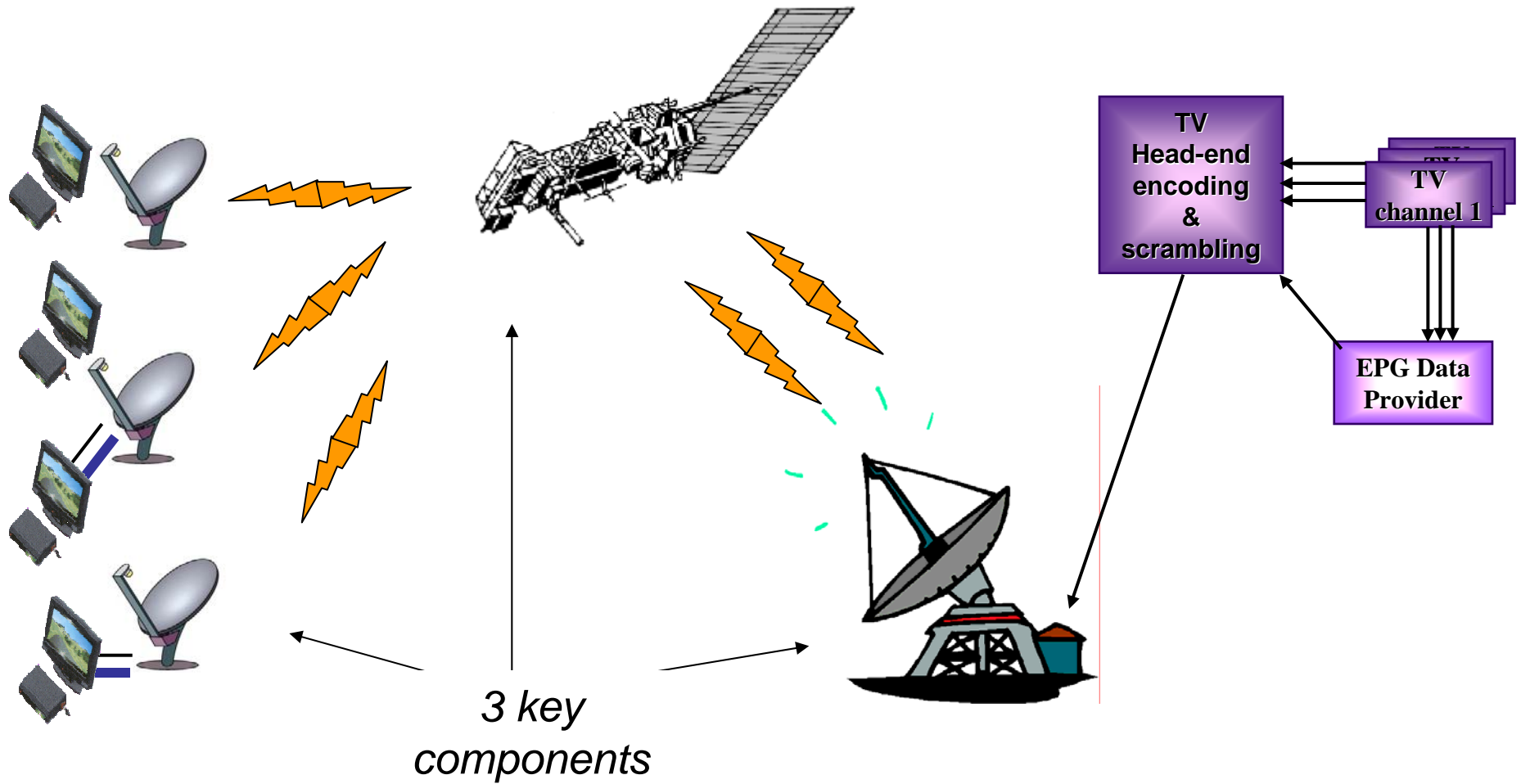
Technical work stream during Run



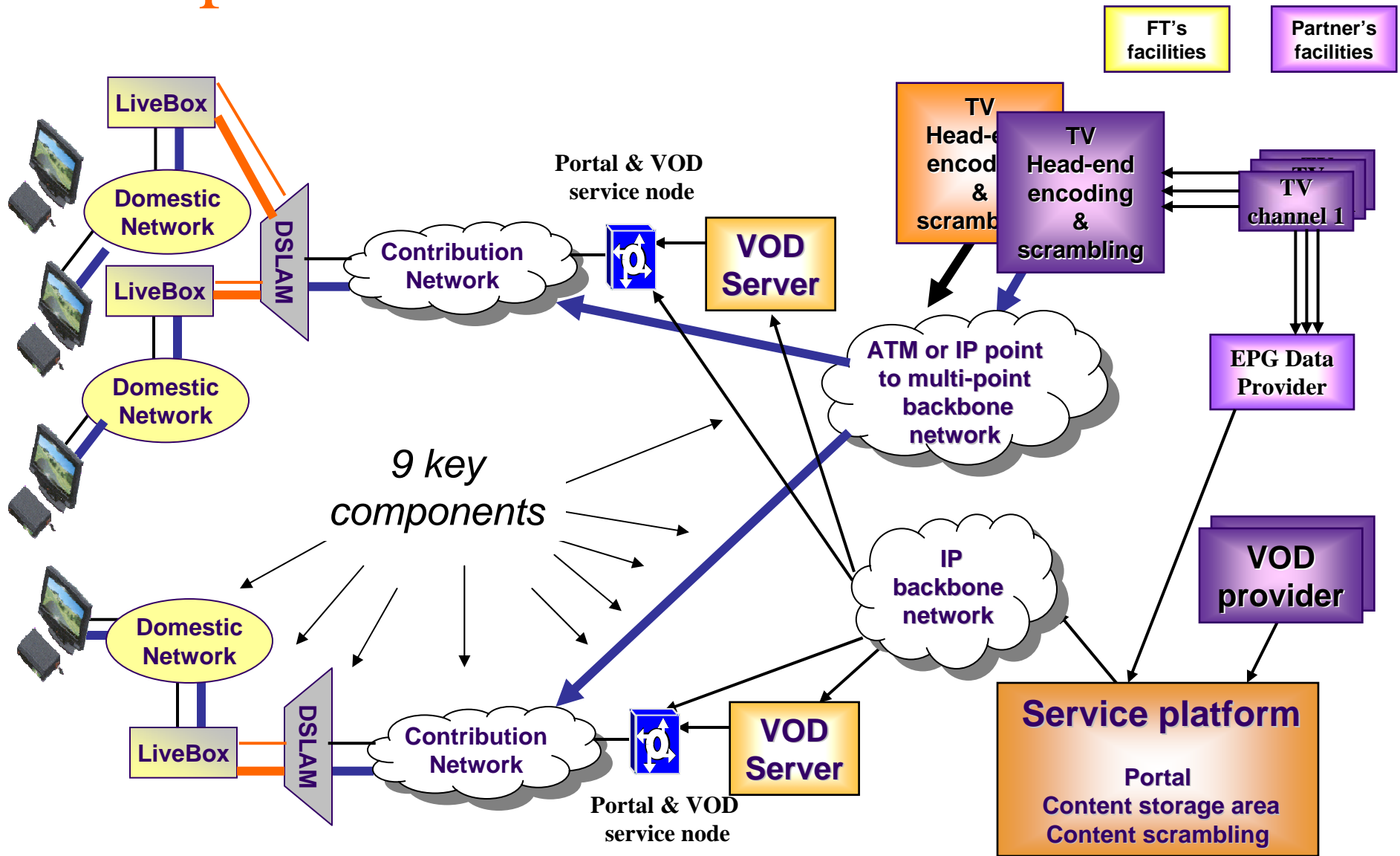
Operations



Satellite distribution & scalability



Simplified TVoDSL architecture

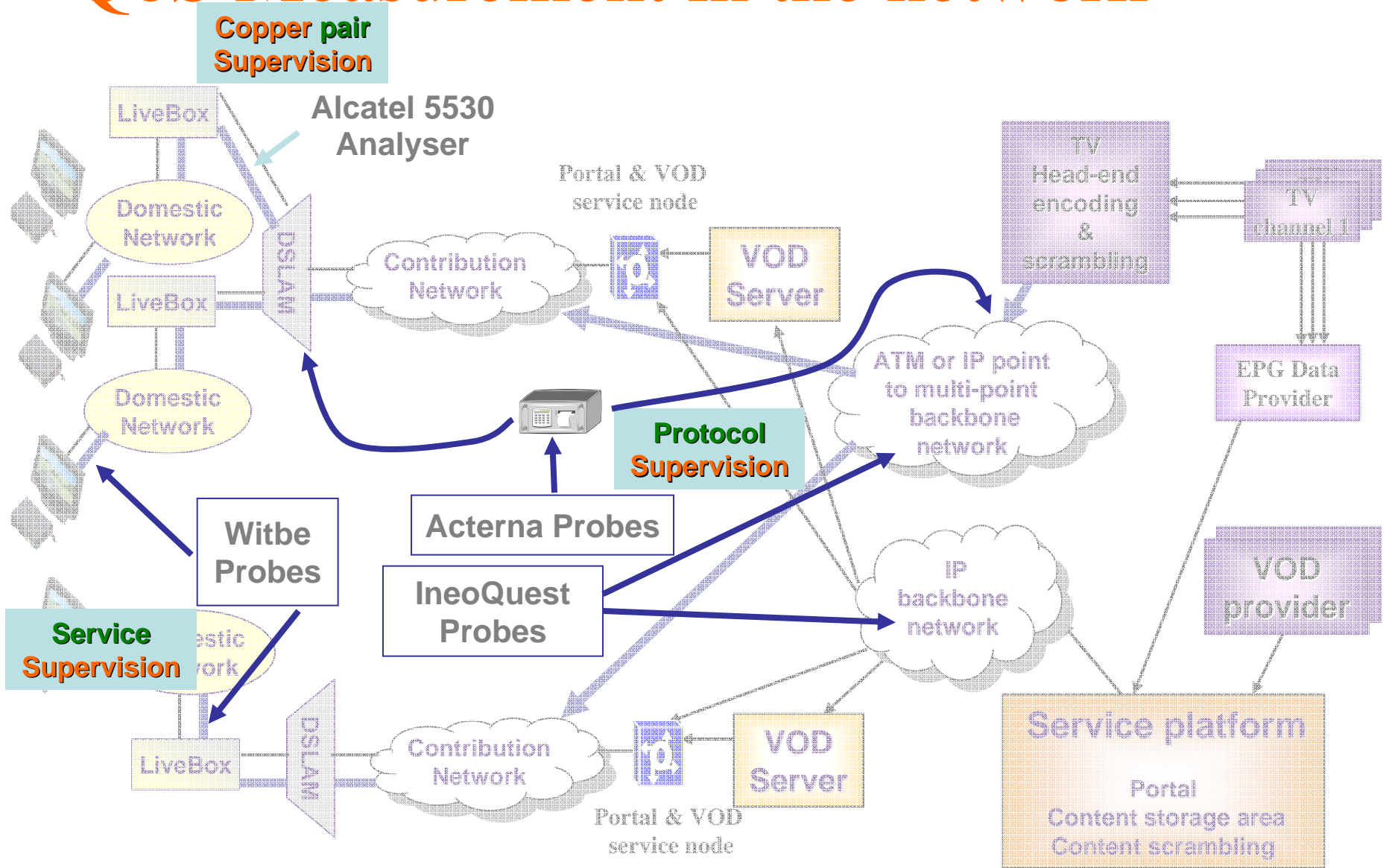


TVoDSL brings a QoS Challenge

- Most IP applications correct network errors at the application level.
 - TVoDSL is mostly based on non-connected UDP protocols with few embedded corrective features.
 - It is very sensitive to IP traffic disruption (delays & jitter) and errors (packets loss) seen by customer (freeze,...).
 - Customer tolerance on the TV is very low.
 - MPEG4 is not very mature for such rough terrain.
- ➔ Need a new set of tools & techniques to measure the quality of the IP signal across the end to end network.



QoS Measurement in the network



The challenge of this new technology brings great opportunities

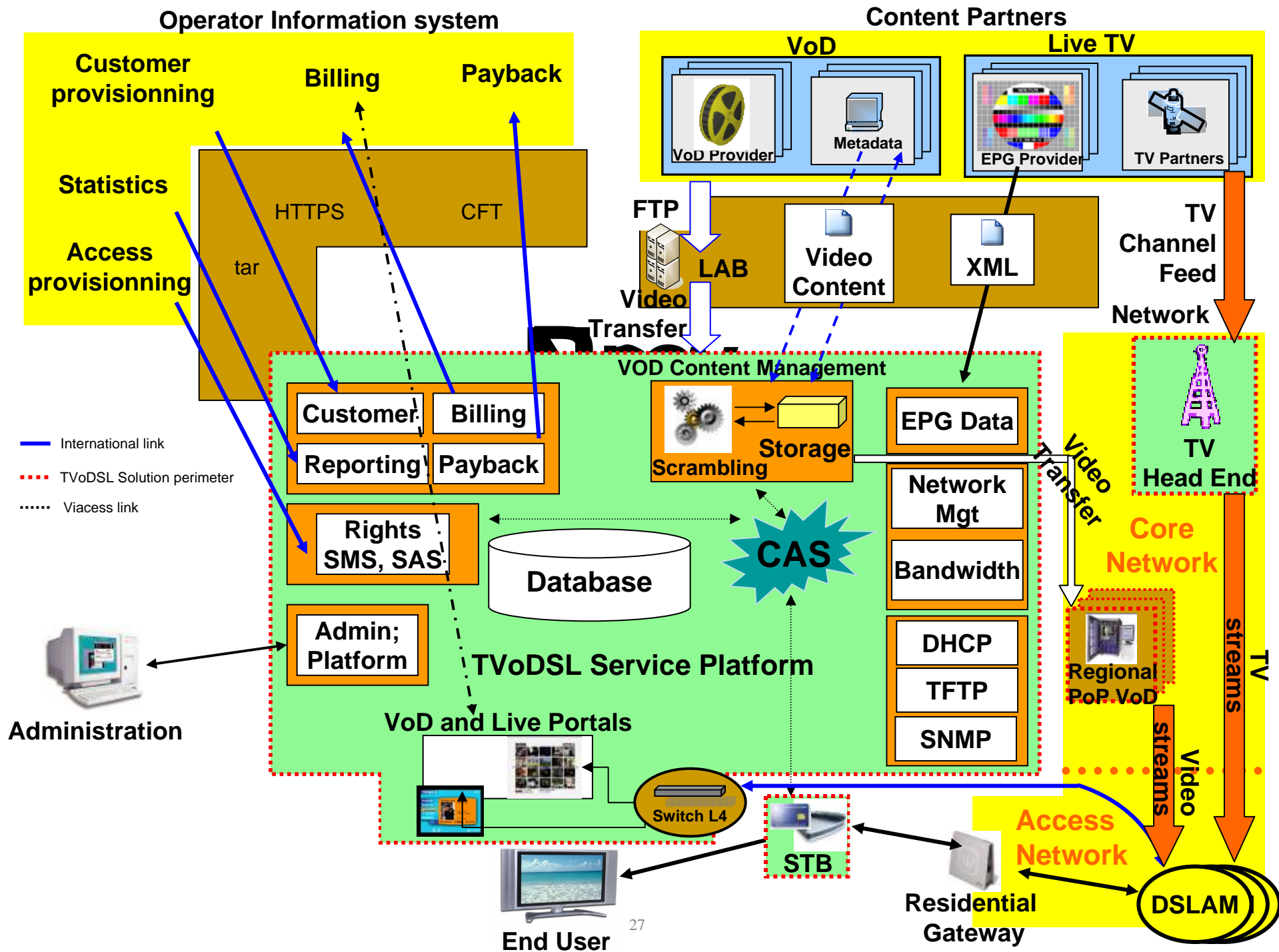
- New narrowcast business models
 - Community content
 - Self produced content
 - Long tail content
- The enrichment of services at different network levels
 - Hierarchical intelligent CDNs
 - True personalisation
- Many to many applications
- Video encoding is just the beginning of MPEG4
- More on the way ...



Some Network & Service QoS targets Q1/2005

- From Video Head End to DSLAM, network division guarantees
 - 99.99% in France, tbd in other countries
- Current service (end-to-end) up-time target for live TV
 - 99.99% during peak hours, 99.95% overall
- Currently FT SLA is to content supplier not to customer
- Current main targets being met include:
 - processing customer order: 1 day
 - building customer line: 1 day
 - shipping to customer: 5 days
 - from initial order to watching TVoDSL: 7 days
 - customer satisfaction from support centre





Our TVoDSL ecosystem

Security



Middleware Platform



STB



Head-End



DSLAM



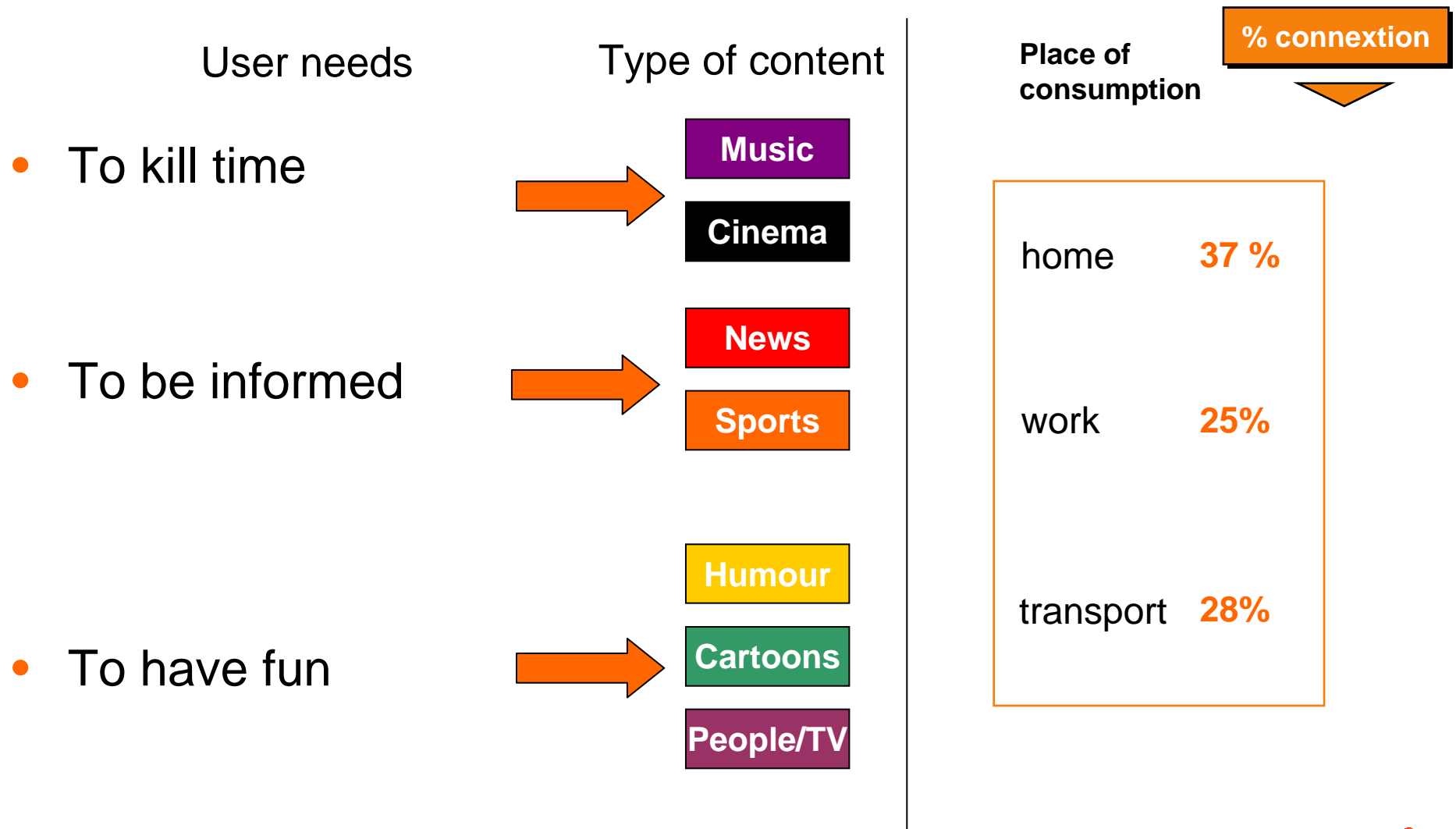
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Some Lessons => 4



Customer usage habits and needs



Improving customer experience is key

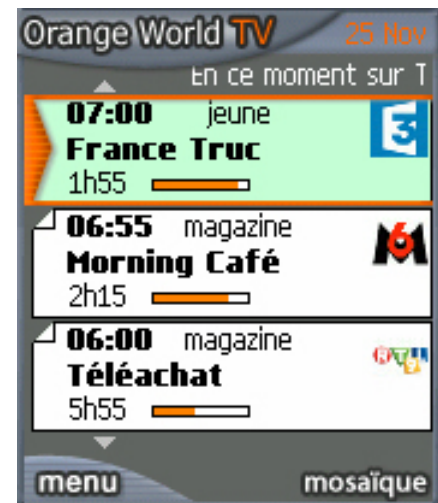
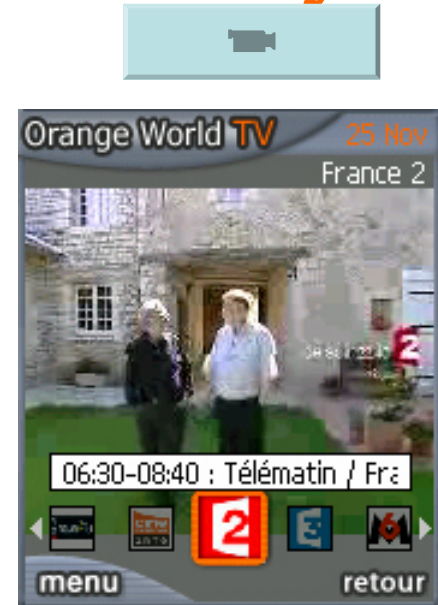
- Introduction of a rich media application that streamlines the Mobile TV experience :
 - Fast launch and fast access to the TV channels
 - Fast channel switching
 - Integrated program guide
 - Use of the handset keys as a remote control

**An idea for MPEG-IF:
Work on reducing 3G zapping time!**

- 3 compatible handsets : Nokia 6630, 6680 and N70

- Downloadable through the portal :
Orange World > Vidéo / Chaînes TV

- A promising launch : 10k downloads after the first 10 days without any promotion



Some FT lessons

- 306,000+ TVoDSL customers; 2 ½ years commercially
- New skills to learn for all Telco employees
 - Customer facing, A/V skills
- Impact on organization => creation of Content Division
 - Centralise content acquisition to be delivered **anywhere** on any device at **any time**
- Strong focus on Time To Market => learn and implement at the same time.
 - FT Content division will share experience to help promote chosen solutions.
 - Detailed know-how transfer to other Telcos available through Sofrecom.



SC1

Les challenges de l'opérateur à moyen terme: se positionner au coeur des communications de demain

Bataille avec les industries de l'électronique grand public, le monde du PC, Microsoft, les éditeurs de contenus

Sebastien CUIEC, 6/1/2005

Thank you!

- **Proven** technical TVoDSL solution available since 2003
- 1 stop shop for **best in class** interoperable components
- Industry leading widely accredited **security** solution.
- Global Orange **brand**.

- Any questions?
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A message to MPEG-IF:
Keep up the good work,
but please let us get some
ROI so not too fast!

