Key ARPU Drivers IPTV

- Moving from Video only to 3P / 4P
 - Adding communication services
 - E.g. Messaging / video conferencing
 - Fixed / Mobile convergance
 - E.g. accessing EPG from Mobile for PVR
- 2. Adding On Demand Services to Broadcast
 - VOD / SVOD: Prime & Catalogue Content
- 3. Enhance base digital broacast service
 - Premium channels
 - PVR / targetted advertising
 - PIP
 - Instant Channel Change
- => Focus on low cost STBs / Home Gateways, Network Service Delivery, and high security solution:
 - Allowing commercial content and private home sharing content on same devices (PV / STBs)

4P Example













Meeting runs late: program your VCR















watch the whole match at your convenience

in parallel, AmigoTV your pals

miss the end











watch the end on a business trip

discuss denied goal with colleagues

Regional Differences

North America

- Cable/Sat driven market
- IPTV needs to move beyond large number of channels and move goldpost with e.g.
 - · Instant channel change
 - Local & network PVR & VOD / SVOD

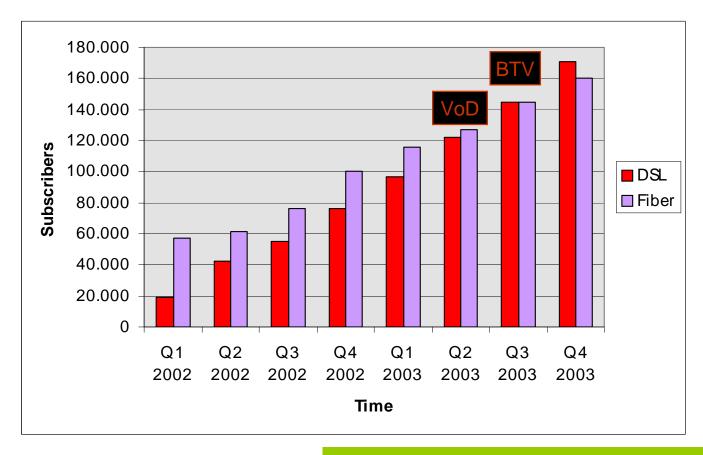
Europe

- Strong free TV in many countries
- DTT focus / support by governments
- Still strong business opportunity for premium broadcast channels
- PVR market still at its beginning as well as VOD / SVOD

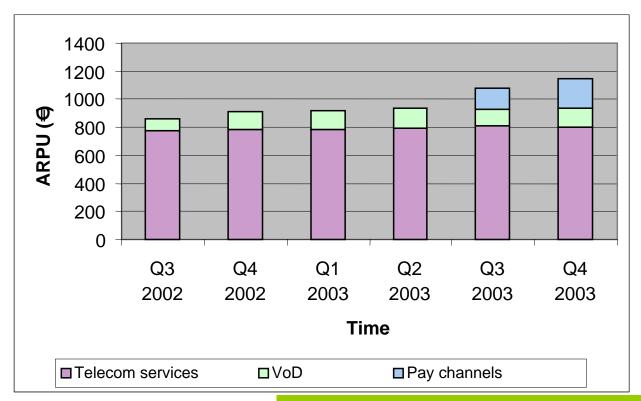
Asia

- Strongest investment in IPTV today because cable / sat not as strong as in other terretories
- IP broadband networks ready for IPTV
 - e.g. Korea, Japan, Taiwan, HongKong
- Focus on base & premium TV channels
- PVR market still at its beginning as well as VOD / SVOD

European Competitive Telco Example



European Competitive Telco Example



End 2004: VoD: 15€/month, 20% take rate

Pay TV: 15€/month

About 20% non PC Users