The German cable market 2005 will grow by 3.0% to 2,450 m€. While revenues for basic cable access will remain virtually unchanged, growth will increasingly be driven by internet & telephony offers and by digital pay TV packages.

With most cost restructuring efforts completed in 2004, cable operators will switch gears and focus on top-line growth by increasing RGUs (revenue generating units), where Germany still lags Europe by a wide margin.

Cable operators will concentrate on internet access/telephony bundles and digital pay TV, both to fend off increased competition from DVB-T and to tap into a booming broadband internet access market. Overall market impact of internet/telephony will, however, be limited by the small footprints of upgraded network.

Consolidation and ownership changes in German cable will continue in 2005. The big question: will anyone test the Cartel office’s willingness to accept Level3/Level 4 integration?
Overall cable market to grow by 3.0% in 2005

- The total market size 2005 of the German cable market is 2,450m€, split between Level 3 operators (1,610m€, excluding level 4 feeds) and Level 4 operators (840m€).

- Basic cable service (BCS) still dominates revenues (86.8%), feed in fees from TV and radio stations and other revenues account for the second largest slice of industry turnover (8.4%). However, digital pay TV (2.0%) internet access (1.5%) and telephony (0.3%) are beginning to make a mark after a first significant launch effort in 2004.

- While revenues from BCS (+0.1%) and feed in (-1.1%) are flat, new products like pay TV (+630%), internet (+125%) and telephony (+545%) are growing from a small base, adding 88m€ to the industry’s revenue line in 2005.

- Overall, cable operators should see growth of 3.0% in 2005 mainly driven by new services (+2.4%). Growth will increase, with a stronger outlook of 4 - 5% for 2006, not accounting for potential price increases for BCS, which could add another 2% to 3% of growth.

\[ \text{Revenue and RGU development of German cable operators 2004 and 2005e. Source: Solon} \]

The quest for RGUs: Starting in 2005, accelerating in 2006

- The potential for price increases in basic cable service is effectively limited by the roll-out of DVB-T, especially in the one-home segment. Yet, 2005 will probably see some minor price adjustments in selected tiers like smaller housing associations and old 1-WE customers. Overall, however, we see little upward pricing power of cable operators until the DVB-T introduction promotion has ebbed off.

- To grow, cable operators need to focus now on selling additional RGUs into their base. Large scale cooperation agreements such as those struck between TeleColumbus with KDG and ish in 2004 enable Level 3 operators to gain reach, while Level 4 operators get access to widely marketed packages they cannot replicate due to network topology and a lack of critical mass.

- On a European level, Germany lags most countries in RGU development (see below), and we believe there is indeed significant upward potential. The median RGU ratio (percentage of RGUs per basic subscriber) for European cable networks 2004 is at 120% (Basics: European Survey of 13 cable companies), with best practice at 150% (a network in Benelux). As most German cable operators are still working on introducing new services and upgrading their networks, the immediate diversification impact will be small, moving the industry average from 102% to 105% in 2005. In 2006 new service penetration finally will start to gain ground moving the RGU curve further up.
Digital TV: The upside is becoming visible

- 2004 saw a clear trend towards digitalization in the German cable market. More than 25 new TV channels were launched both on cable and sat, both free and pay, including channels by Disney, Sony, National Geographic and Discovery, but also low budget special interest channels like weather and cooking. Two leading print publications have already announced their TV channel launch for 2005 (Spiegel TV on KDG, Focus TV on Premiere). We believe this trend in the market will continue through 2005.

- KDG was first to broadly market a mid-tier German pay TV package on cable, significantly priced below Premiere. Other operators are set to follow suit in 2005, either by re-selling KDG offers or by building their own basic tier package. 2005 should see the addition of 400,000 to 450,000 non-Premiere digital pay TV subs in Germany.

- Foreign language packages will also continue to grow. We expect over 290,000 subscribers by yearend 2005 with ARPU levels in excess of 9€.

- 2005 should see a core agreement between cable operators and the two large free TV groups, RTL and Pro7Sat1. Both groups plan pay TV channels of their own, but should also give digital free TV a push by entering into a simulcast agreement.

- PVRs are set to enter the cable market in 2005. However, unlike in markets with operator-controlled set top boxes, it is unlikely there will be a revenue model for German cable companies.

- HDTV will not become a relevant factor before 2006, with the FIFA World Cup seen as the dominant launch event. 2005 will see cable operators trying develop a business model with content providers, including Premiere.

- Additional opportunities for higher priced pay TV offers exist, and could be introduced selectively (adult, PPV, etc.).

Internet Access: Proof of concept, but small marketable base and increasing competition from DSL

- The fundamental problem of cable operators remains the small footprint in which they can market their services. Without a large scale upgrade of their networks, cable operators will remain a minute competitor to DSL providers overall.

- Total market growth for internet access in Germany remains strong (+32%) and will continue to be high for at least another 3 to 5 years. Additionally, users request ever higher throughput speeds, with two thirds of demand in excess of 1Mbit/s by 2007.

- By the end of 2005, the German cable market should see 160,000 internet subscribers, with ARPU's in the 22 to 27€ range, averaging at 25€. Given market projections of 2.2 million new DSL customers, cable will only take 3.5% of new broadband customers, and 1.8% of the total base.
Kabel BW has been at the forefront of offering internet access over cable in 2004, and in our view will continue to lead the field in 2005. We expect Kabel BW to reach over 50,000 internet access customers by yearend, more than 11% of their marketable base at yearend 2005.

By developing a new road to market, Kabel BW has the ability to tune Capex spending to consumer demand, enabling a roll out of the network upgrade while minimizing cash outlays. At the same time, speed to market is optimized. Other operators, like KDG and ish, are now also adopting this model, but have been less aggressive.

Consumers appear to be happy with internet over cable: Research shows that roughly 30% of consumers taking internet access via cable have switched from DSL. Over 40% of DSL customers think about switching to cable, when available. Also, cable companies appear to have a USP versus DSL by offering affordable mid-speed, flat rate packages.

2004 saw the first deployment of an IP based telephony product in German cable, when Kabel BW and ish started bundling telephony services with internet access.

Consumer feedback is extremely positive, and the product seems to be scaleable on German coax networks. Just as with internet access, however, the main marketing problem is the small upgraded footprint, and the increasing competition from DSL providers and broadband ISPs starting to aggressively market their own VoIP products in bundle with DSL.

Bundling internet access and telephony could become the real cable killer app for Germany, where available: by being able to disconnect DTAG telephony (TAL), cable gets a significant price leverage over competing DSL offers. Kabel BW, for example, offers internet and telephony at a 42% discount to the comparable DTAG offer.

2005 should see the introduction of a telephony offer on a wider scale, and significant uptake rates of 8%-10% of marketable homes at least in Baden-Württemberg.

We expect at least 60,000 telephony customers on cable by yearend 2005, with numbers rising much faster in 2006.

Most DVB-T regions went live in 2004 and will see a complete analogue switch off in 2005. Consumers will continue to face significant media presence of DVB-T. As in Berlin in 2004, we expect the resulting DVB-T push to level off shortly after the full analogue switch off.

The largest 2005 launch is Bavaria (Munich / Nuremborg), which will be started on 31 May, with analogue distribution being switched off on 31 August.

The launch date for Eastern Germany still remains unclear. If launched, private broadcasters will not support the platform as no feed-in subsidies were made available to them.

No introduction of DVB-T in Baden-Wuerttemberg is planned so far.

Long term experience from Berlin Brandenburg indicates a zero sum game: cable wins some market share during stage of transformation, and looses the same after full implementation.

In 2004, European telcos and DSL providers started to enrich their product by adding TV services to defend triple play attacks from cable or to differentiate from pure DSL providers. With attractive, flexible product features such as VoD, interactivity or PVR functionalities, these carriers have already added approx. 700k triple play subscribers, especially in Italy and France.
In Germany, the potential for these services is limited by low BCS ARPs and a high penetration of sat. However, proven technologies both on backbone and CPE exist and business models are currently being tested.

We expect first broadcast TV over DSL services to be introduced in 2005 or 2006 by alternative carriers, focusing on metropolitan areas, but with little - if any - impact on BCS.

Industry consolidation: The FCO wildcard

After the Federal Cartel Office (FCO) effectively blocked the Level 3 merger led by KDG, any further L3 consolidation plans seem questionable, though the FCO’s position has not finally been laid out. Joining smaller Level 3 operators is theoretically a possibility, but it is unclear whether financial investors behind these assets are willing to undergo repeated FCO scrutiny, with break-up costs for failed transactions in the double-digit million Euro range. A potential sale of ish to isy-owners Apollo would be the first test.

Level 4 consolidation has reached a new peak by the ewt/Bosch transaction in December 2004, and we expect further consolidation in 2005. This is certainly true for the remaining smaller Level 4 operators, but also larger transactions appear a possibility.

The big question is whether anyone will test the FCO’s willingness to accept a level3/4 integration.

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