German Cable Market
2012

+7.4% p.a.
EXECUTIVE SUMMARY ................................................................. 4
GERMAN CABLE PICKS UP ........................................................ 5
BRAVE NEW TV WORLD ............................................................ 7
PARTICIPATION IN THE BROADBAND BOOM ............................. 10
TO DO LISTE: UPGRADE, CONSOLIDATE, CUSTOMER EXCELLENCE 13
A CHANGING INDUSTRY .............................................................. 17
ABBREVIATIONS ........................................................................ 19
EXECUTIVE SUMMARY

- By 2012, the revenues of German cable network operators will increase from today’s €3.0 billion to €3.8 billion. Growth drivers are, as in the past, digital Pay TV, internet and telephony. The share of these “new services” will expand from currently 19% to 33%.

- The share of digital TV households will triple to 70% by 2012, while the number of internet and telephony customers will grow by 2.5 times the current figure of 1.1 million and 0.9 to 2.8 million and 2.4 million, respectively.

- Prerequisites for further growth are the quickly advancing network upgrade and the increasing consolidation of cable network operators, specifically the organizational integration of city and building networks (network levels 3 and 4). Currently, about 2/3 of all cable customers in principle have access to internet and telephony services; in the long term this will even be more than 80%.

- The major challenge of cable network operators is, however, the reorientation from being product-centric to being customer-centric companies that excel in managing all customer processes.

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**Revenues of German Cable Network Operators 2006-2012**

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Source: Solon Cable Market Model
GERMAN CABLE PICKS UP

The often forecasted growth in the German cable television market has taken shape. In 2007, revenue will reach the €3 billion mark. By 2012, we expect an increase of the market volume to €3.8 billion. The average annual growth rate 2006-12 will be about 7.4%.

Growth drivers are, as in the past, digital Pay TV, internet and telephony. The growth rates for cable internet and telephony will continue to be on a high level until 2012, at an annual average of 37% and 27%, respectively. In 2012, already 15% of cable TV customers will also receive their internet access from their cable provider.

Pay TV revenues are also steadily growing – with an annual average of 15%. At present, especially mid-tier offers such as “Kabel Digital Home” (Kabel Deutschland) or “Digital TV Plus” (Unitymedia) are gaining. Both Video on Demand (VoD) and HDTV are of strategic importance, especially when it comes to competition with DSL providers. In the next 3 to 4 years, cable network operators will invest more than €1 billion into the construction of necessary infrastructures for those services.

Altogether, the share of “new services” will increase from currently 19% to 33% and the current ARPU, greatly driven by TV connections, from €10.54 in 2006 to €16.87 at the end of the forecast period (8.2% annually).

Average revenue per month and service per basic access
€ / month; # of services

Source: Solon Cable Market Model
The largest revenue and sales share will continue to be generated by the cable access itself. Although the number of connections will decrease annually at 0.5% from 19.4 million in 2007 to 18.9 million in 2012, this reduction will be overcompensated by price increases and a share of more expensive digital connections. In 2012, the share of the basic access business will attribute 62% of total revenues and thereby reach the current European ratio.

German cable operators will also close in with their European peers with regard to the share of subscribed services per connected customer – even though a real catchup is out of reach. While in Germany 1.14 services were sold per basic access subscription in 2006, the European ratio was already at 1.43. Only in 2012 will Germany have reached today's European average. Long-term forecasts show, however, some advanced Benelux providers that already sell more than 2 products per connected customer.

The reason for the decrease in access lines is, in particular, an increasing market share of the new, competitive IPTV product that is being marketed for the first time extensively by Deutsche Telekom, Arcor and Alice. The market share of cable network operators in the TV connection market will thereby decrease from today's 51% to 48%.

In the future, the product portfolio of network operators will continue to develop, be it through mobile applications, internet value-added services or offers for small and mid-sized companies. Since they have yet to play a decisive role in the plans of cable operators, these revenue potentials are not (yet) included in the forecast.

The German cable network operators thus have a few things coming at them. Nevertheless, with strengthened marketing of additional TV and communications products, they finally achieve what many European cable network operators have already been accomplishing for years: the development from being a TV utility towards being an entertainment and communications provider.
BRAVE NEW TV WORLD

The long-lasting expansion of the product offer of cable network operators has both offensive and defensive components. With the expansion of their networks and the offer of broadband internet and telephony, cable operators position themselves successfully as challengers to fixed-line operators. At the same time, cable operators must position themselves quickly with new TV services against the increasing TV competition.

Digitization as basis for new TV services

A quick expansion of the channel offer and the introduction of interactive, personalizable TV services are essential success factors in the active positioning of cable network operators, both against satellite and terrestrial TV as well as against TV over DSL. In order to further drive the expansion of the TV offer, cable operators must first of all quickly digitize their connections.

Digitization of the German cable network

So far, digitization has only advanced slowly. With a digitization level of only 15%, cable still lags behind satellite TV (65%) and, in particular, per se digital IPTV. In order to have sufficient capacity for a larger product offer, cable network operators are at present massively pushing digitization. As such, Kabel Deutschland, for example, principally connects new customers only digitally. Unitymedia goes one step further and has raised the price for an analog connection above the price for a digital connection (€16.90). Instead of paying €14.90, an analog customer then pays €17.90 and thus has a real incentive to digitize.

Simultaneously, network operators are considerably expanding their digital basic offer. Today, an average digital access package already offers 80 channels, i.e. twice as much as an analog access. In particular, network operators are not only accelerating migration of individual customers with this strategy but are also raising their access prices.
however, a significant share of German cable users are indirectly connected through the housing industry, the migration will initially happen at a slow rate.

Set top box distribution, which is increasing with digitization, promotes the acceptance of Pay TV since a growing customer base has the necessary hardware already at home. Within the context of an increased digital access fee, the set top box is made available “for free” to end customers by most network operators.

Digital Pay TV has established itself in the German cable market in the past years. The largest growth rates can currently be found in the mid-tier segment. By addressing this in the past neglected segment, cable operators have accelerated Pay TV market growth as a whole. Considering the comprehensive and attractive Free TV offer, additional Pay TV packages have to provide a lasting and significant added value. Additional channels are only interesting for the customer if they are either not at all presented in Free TV or if only insufficient content is available. In particular, the transmission of Fußball-Bundesliga (German National Soccer League) and current movies are therefore important drivers for the acceptance of digital Pay TV. Also, the expansion of the channel offer in Pay TV bouquets and the increasing number of niche channels will render their contribution to the market success of the cable Pay TV.

So far, 7% of basic cable customers in 2007 use Pay TV offers of a cable operator, while another 7% receive a Premiere subscription over cable. Soon, the number of mid-tier customers will surpass that of Premiere customers. In 2012, an estimated 12% of cable customers will use mid-tier offers and 10% a Premiere package. However, not all of these revenues will arrive at the doorsteps of cable operators: while they can book themselves the entire revenues from their mid-tier packages, they receive only a revenue share or feed-in fees for their Premiere packages in the amount of about 10% of the corresponding revenues.
Of major importance for the acceptance and competitiveness of Pay TV, and cable television as a whole, is the possibility of individual, interactive television consumption. Scenarios for the TV usage of the future show that, by 2012, at least 10% of the TV time budget will be spent on VoD and a further 10% for Time Shift offers.¹

Time-independent television is increasingly entering the conscience of the customer through the distribution of digital receivers with PVR function (Personal Video Recorder). They provide a comfortable means for recording and time-delayed playback of programs and are thereby a close substitute for Video on Demand. Set Top Boxes with PVR function are already successfully distributed by network operators in a retail or subscription model.

But devices with PVR function are only a first step. More important is the development of real VoD platforms that is gradually being approached by German network operators. According to our estimates, in 2012, 15% of cable customers will use VoD offers intensively and thereby generate €28 million in revenues. Not all VoD offers, however, are relevant for revenue. As such, teaser offers that are free of charge have already established themselves in the USA, alongside the transaction and subscription model. Also, it should be expected that some VoD offers will be a part of mid-tier Pay TV packages and thereby not generate any additional revenues. In order to be able to offer VoD service, cable network operators still have to execute significant investments. Next to backchannel capability of networks, the development of corresponding VoD platforms must also become a reality – and at €1 billion, they will be a major Capex driver in the next 3 to 4 years.

Another offer, which was already announced years ago, is that of HDTV channels. Until now, the very low distributions of HD-ready devices as well as the clearly limited program offer have hindered extensive market presence. This hurdle appears, however, to be overcome. A growing content offering in combination with decreasing prices for HD-ready devices gradually increases the acceptance of high-resolution digital technology in Germany. As such, the share of LCD and plasma devices in the first two quarters of 2007 was over 60% in the total market. Simultaneously, attractive HD content is entering the market. Premiere began transmitting HD channels in 2006, and further offers will follow quickly.

The Pay TV offer of German cable network operators will, after the failed Arena interlude, not be characterized by high premium Pay TV revenues. The ARPU of a Pay TV customer of cable network operators (excl. Premiere and Arena) will increase with the help of additional offers from currently about €8.20 to €12.75 (+8.7% annually). It, however, will still remain considerably below the average revenue of a Premiere customer (approx. €22-24).

PARTICIPATION IN THE BROADBAND BOOM

Communication services continue to be the main growth drivers of German cable network operators. With their internet connections, cable network operators are participating in the strong growth of the German broadband market.

Internet access over cable will soon surpass 1 million customers and thereby have reached the mass market. By 2012, 2.8 million cable customers will access the internet via their cable connection. With above-average growth rates, cable network operators will expand their market share in the broadband market from 5% to 9%. The continued upgrading of technical infrastructure as well as the start of comprehensive marketing activities both mark the end of a niche existence of this competitive product.

In 2008 the market for broadband internet access will see for the first time ever lower growth rates than in the year before. New market participants will have to differentiate themselves by an excellent price-performance ratio. Compared to DSL operators, cable providers have a decisive competitive advantage since they can offer high bandwidths at cheap prices because of their cost structure. Cable operators capitalize their cost and bandwidth advantage by offering significant higher bandwidths at the market price (at the end of 2007: €30 for a “dual flat” – an internet and telephony flat rate): while many DSL providers focus on marketing 4 Mbit/s offers, most cable operators offer at this price at least two times this bandwidth. Kabel Deutschland even offers up to 8 times the speed. Unitymedia, moreover, offers a package with the market-norm speed of 2 Mbit/s but with a price discount of about 17%.
The intense competition in the broadband market together with the expansion of VDSL networks by fixed-line operators will also result in a quick rise in marketed speeds in the coming years. German cable network operators estimate that in three years already a third of their internet customers will use connections of more than 10 Mbit/s.
At the same time, with the broadband market on the brink of saturation, a continuation of an intense price competition should be expected that can only be stopped by an increased consolidation of the DSL market. However, until this has been reached, internet ARPU will already have sunk from the current €21 to under €15.

Internet and telephony ARPU of a dual play customer
€ per month

Source: Solon Cable Market Model

Internet offers of cable operators are usually bundled with a telephone connection. Correspondingly, the growth from cable-telephony customers from today’s 0.9 million to 2.4 million in 2012 will progress in parallel to the development of internet connections.

The revenues of the telephony product originate from the offered flat rates as well as call minutes. A basic access fee is no longer common in the market. Rather, it is bundled together with the internet connection. The average revenue per telephony customer will decrease from today’s €21 to €14 in 2012 – largely driven by the growing share of flat rate customers. Due to the rapid growth of communication subscribers, cable operators will not just balance the APRU drop; rather, they will multiply their communication revenues from about €160 million in 2006 to about one billion euros in 2012.
TO DO LIST: UPGRADE, CONSOLIDATE, CUSTOMER EXCELLENCE

These growth rates can however only be realized if cable operators continue to drive their reorientation. The major challenge lies in the shift from product orientation to customer excellence. At the same time, structural problems of the German cable industry need to be resolved: the upgrade and the consolidation and restructuring of the current, complex German cable market.

Network expansion faster than expected, decreasing upgrade investments – especially after 2009

German cable operators, especially the large regional providers KabelBW, Kabel Deutschland and Unitymedia, are quickly upgrading their networks. At the end of 2007, already 2/3 of all German cable customers had, in principle, access to internet and telephony over cable – at KabelBW this ratio already hits the 90% mark. Within the next two years, 80% of all connections, at least in the area of the city networks (network level 3), will be upgraded, in part also all the way to the cable outlet in the building (network level 4). These investments dominated the Capex budget of network operators in the past years and resulted in a higher upgrade level than expected.

The remaining upgrade work amounts for altogether €300 million to €500 million with the assumption that upgrade investments on network level 3 comprise of up to €30 per connectable household and up to €250 for every upgraded household on network level 4.

For various reasons, however, not all households connected to city networks are effectively marketable:

- Many cable households are located within multi-tenant buildings. If the in-house upgrade must be performed by means of comprehensive work – for example, the refitting of a tree into a star network – then an agreement by the landlord must be acquired. In smaller units, this is relatively easy. However, if the owner is a housing authority, it may be necessary to first negotiate a licence agreement covering the complete modernization of all buildings before the upgrade and marketing of internet and telephony can commence.

- About a quarter of cable customers are served by Level 4 operators such as TeleColumbus or Primacom. Because of the business model that is based on long-term contracts with housing associations, only an upgrade of larger clusters (more than 6,000 units) with own satellite feed is economic for Level 4 operators. The upgrade of smaller objects still connected to the city networks of regional operators is often only secondarily executed.

- Ultimately, only an average of 60% of “homes passed” is actually served by cable television. In the past, these households were excluded from the marketing of internet and telephony services. Meanwhile, this additional marketing potential was, nevertheless, recognized and is being actively addressed. For example, Kabel Deutschland is explicitly offering those customers a broadband connection over cable who until recently did not

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2 Here, a strong divide between urban areas with a connection ratio of 80% and thinly populated areas with ratios of 20-40% should be assumed.
make use of cable TV services and is thereby generating a new, not insignificant share of its new broadband customers.

The expansive marketing of multimedia cable products is still hindered by the complex market structure of the German cable market. This “marketing gap” will, however, close with time: from currently 45% to 5% of upgraded households in 2012. Along side the increasing upgrade also of larger housing blocks, the continuing integration and consolidation of network levels 3 and 4 are especially contributing to the development of a modern, broadband and backchannel-ready network infrastructure.

Advancing consolidation of the German cable market eases efficient service marketing …

With various mergers and acquisitions, the still complex and innovation-deterrent market structure of the German cable market, especially the separation of city (network level 3) and building (network level 4) networks, will increasingly be removed. The most recent step in this direction is the take over of Primacom by Orion and the simultaneous sale of 1.2 million cable connections by Orion to Kabel Deutschland.
Market shares in the cable market before and after the KDG-Orion-Primacom transaction
% of cable households

The result of this transaction is, along side the increasing integration of customer relationships, in the growing regional focus of the top four network operators. As such, the new Orion (TeleColumbus and Primacom) shows its presence in the eastern part of Germany with further holdings in NRW, Hessen and Rhineland-Palatinate.

Regional focuses of the largest cable network operators

Source: Solon
The regional focus and the integration of customer relationships raises the efficiency of customer acquisition on all dimensions. Regionally comprehensive marketing campaigns will be possible, aggressive sales approaches such as door-to-door and shops can be reasonably implemented, and activation by a company technician can be realized – just to name a few examples. The cost advantages resulting from the increase in efficiency can eventually be passed on to the customer and thereby improve the competitiveness of cable network operators.

... but only with a changed marketing and customer service orientation will cable network operators create lasting growth

Although network upgrade and integration of customer relationships are fundamental prerequisites for the marketing of new product offers, it is the successful management of all customer-related processes by the cable network operator that is decisive for marketing success.

Unlike traditional cable television, the business with new services is an end-customer business. Both the amount and quality of end-customer relationships are increasing significantly. The professional management of these relationships over the entire lifecycle, from customer acquisition to deactivation of services, represents new challenges to German cable network operators.

### Strategic challenges of European cable network operators

*Ranking: 5 – very important, 1 – unimportant*

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Source: Solon European Cable Survey 2007

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3 Survey of 18 large western and central European cable network operators, among which 4 German operators.
The management of German cable network operators is well aware of these challenges. While two years ago especially the development and offering of new products was pushed, operators now focus on the optimization of marketing, sales and customer service processes. Together with these processes, customer service IT systems must be adapted to the challenges of a multi-service offer with extremely different commission and billing operations.

Actually, a significant need for catching up in “customer excellence” exists for German cable network operators:

- Brand recognition of cable network operators is still comparably low. The mergers and rebranding cases of the past years have certainly led to some confusion for the customer. Direct marketing, even without large budgets, will lead to improvements in the mid term
- Customer service: Call center reachability is relatively low compared to European peers. Yet, most inquiries are processed quickly within the first call
- Customer retention and win-back programs are just being introduced

Some things are, however, already well under way and show the potentials of the German cable industry: Within a very short time, German cable network operators have created comprehensive sales networks, and product development times and activation times for TV services belong to the shortest in Europe.

A CHANGING INDUSTRY

The German cable market is currently in a state of change. The product landscape in cable fundamentally changes with even more complex TV and communication services. Professional marketing and sales of this expanded product offer is a prerequisite for the long-lasting competitiveness of cable. With the increasing number of direct end-customer relationships, service, marketing and sales gain in importance. For German cable CEOs, the optimization of functions is a top priority. As such, the positioning of cable operators shifts from merely being TV program providers for housing authorities towards integrated “entertainment and communications providers” for the end customer.

Competition is increasing on all fronts. On the one hand Deutsche Telekom and its DSL competitors are starting to compete directly with cable operators via their IPTV offering. On the other hand, internet over cable, with its superior cost efficiency and bandwidth, is a strong competitor to the widely distributed DSL, which has been leading with some ground in Germany.

Eventually, the increased integration of network levels 3 and 4 will change the market structure: cable operators increasingly have direct customer access and thereby lastingly improve their marketing position. As such, network operators now cover the entire value chain – from signal delivery to end-customer management.

Although the provided forecast model in this study only features the product spectrum available on today’s market (cable connection, digital Pay TV, HDTV, internet and telephony), it should be expected that cable network operators will not limit their service offer
only to these products. Increasingly, these companies will also target markets that were so far out of reach in order to secure long-lasting competitiveness.
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<td>Average Revenue per User - average monthly fee</td>
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Dr. Dorothea von Wichert-Nick is a Managing Director of Solon Management Consulting. Her project work focuses on M&A support and New Business Development for cable network operators, telecommunications and media companies. Along side her project work, Ms. von Wichert-Nick developed the Solon European Cable Survey and has written various other surveys on the German cable market.

Georg Ruile is a consultant at Solon Management Consulting. He has supported various German cable network operators in the development of product and network strategies. Georg Ruile has also worked as a consultant in leading companies in the areas of telecommunications, media and entertainment.
Solon Management Consulting

Solon focuses its strategy consulting on the media, broadband cable and telecommunications industries. As the leading consultancy for the European broadband cable industry, Solon publishes the European Cable Survey. Projects comprise of the development and implementation of company strategies, the development of new businesses and the accompaniment of M&A plans – from market probing to the closing of the transaction. Solon works regularly for leading media and telecommunications companies as well as for banks and private equity investors.

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