

## Talking point

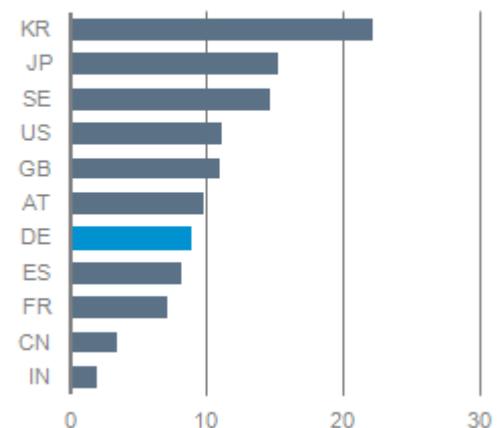
### Broadband: German government upping funding in view of worrying disparities in supply coverage

August 11, 2015

Given the merely average state of communications infrastructure in Germany today, this country could fall behind in the international competition to attract investment. This worry is exacerbated by the fact that even within Germany there is a risk of a significant gulf developing between the regions. However, while broadband expansion is indeed making progress in the densely populated regions, major challenges exist in rural regions with respect to return on investment. When it comes to bridging systemic profitability gaps, the government will have to step into the breach if such projects are also to progress. The funding additionally earmarked in the federal budget and the revenues currently generated from "Digital Dividend II" should provide stimuli for expansion. However, despite government aid it must always be clear that broadband expansion can only be profitable in the first place if modern networks are complemented with modern services.

High-performance communications infrastructure is steadily gaining importance alongside traditional transport and energy infrastructure in international competition to attract investment. The driver of this trend is the swiftly growing appeal of networked devices and data-intensive services surrounding the mega-topics of cloud computing, big data, smart home and industry 4.0. In this context, empirical analyses show that high-performance communications networks have a positive impact on economic output. This raises the question, though, of why Germany rates only average in international comparisons of broadband availability; for example, Germany lags far behind not only Korea and Japan but also Sweden and the UK (see chart). This merely average performance accordingly raises cause for concern about near-term economic potential and thus also potential societal developments in the national economy.

**Germany merely average**  
Average speed of internet connections, MBit/s



Source: Akamai State of the Internet Q4 2014 Report

These commercial and societal worries are exacerbated by the fact that even within Germany there is significant disparity between economically thriving urban regions and economically ailing rural regions as well as between the federal states of East and West Germany. In a comparison of the territorial states, all the western states are ahead of the eastern states in terms of availability of high-speed internet with a download speed of at least 50 MBit/s. The three western states of North Rhine-Westphalia, Schleswig-Holstein and Baden-Wuerttemberg are the leaders, while the three eastern states of Brandenburg, Saxony-Anhalt and Thuringia trail far behind the rest of the field (see chart).

This disparity is a significant locational disadvantage for the under-supplied regions and could reinforce the digital divide among the population as a whole. For this reason, the decision-makers at various levels of politics have grasped this societal and economic challenge and set out very ambitious targets for the expansion of broadband coverage across the board. The European Commission has committed to the target that by 2020 all households can be provided with a download speed of at least 30 Mbit/s, and 50% of households of no less than 100 Mbit/s. Furthermore, the German government wants to see all households in Germany enabled to obtain a connection offering at least 50 Mbit/s by 2018.



Huge investment – outside of conurbations in particular – will be required to achieve the political targets on broadband supply. A German technical inspection agency, TÜV Rheinland, estimates that this will cost no less than EUR 90 bn, depending on the technology implemented, with the lion's share of investment being funded by companies from the private sector. However, while expansion is coming along nicely under market conditions in the densely populated economically thriving regions, economically ailing rural regions are faced with major systemic challenges with respect to return on investment – especially in parts of Mecklenburg-Western Pomerania, Brandenburg and even the Oberpfalz region of Bavaria. When it comes to bridging the profitability gap, the government will have to step into the breach via investment stakes and subsidies if such projects are also to progress.

The funding additionally earmarked by the Federal Ministry of Transport and Digital Infrastructure via the federal budget (EUR 1.4 bn) and the current revenues from the "Digital Dividend II" (EUR 1.33 bn; split 50:50 between the federal and state governments) should give broadband expansion a further boost. Generally speaking, the subsidy programmes of the state governments are based on very differing concepts – especially with regard to the preferred project structure and funding volumes available. In order to achieve nationwide broadband coverage of at least 50 Mbit/s by 2018, Bavaria, for instance, is providing EUR 1.5 bn in state funding. Hesse, by contrast, has proclaimed its intention of reaching the same target on a demand-oriented and sustainable basis and says it will make available only EUR 350 m, though claiming it will make highly efficient use of taxpayers' money.

In essence it remains to be said that more government stimuli will be required in Germany to ensure that the politically stipulated broadband targets can actually be met. However, these stimuli should be coordinated and deployed with a sense of proportion in order to avoid irreversible intervention taken merely for the sake of appearances. Nonetheless, amidst calls for government aid to boost broadband expansion it must also always be clear that all the projects ultimately can only become profitable if the modern networks are complemented with modern services (ranging from continuing automation of value creation and building equipment right through to cloud computing, augmented reality and high-quality entertainment offers), which appeal also to customers in the currently under-supplied regions in particular. This is all the more true as customers are paying less and less attention to the technology itself but, understandably, focusing more and more on the services that are to be made possible by the technology. This aspect is usually often ignored in current debate, which mostly tends to focus on technology.

German original: July 21, 2015

See also:

Progress needs broadband: Private investment requires more government stimuli

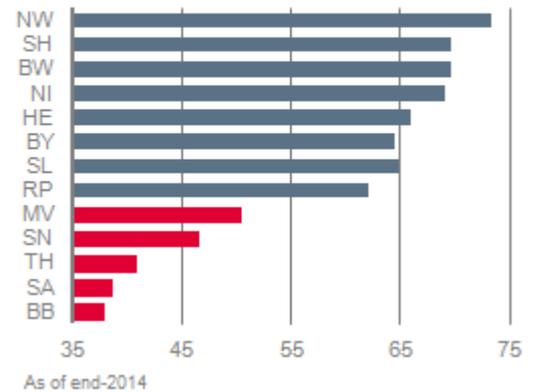
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Augmented reality: Fears should not completely overshadow the opportunities that beckon

Cloud computing for academia and science: Creative environments flying high

## East-West disparity on high-speed internet

Households with available connections  
≥ 50 MBit/s, %



As of end-2014

Sources: BMVI, TÜV Rheinland



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