

Bitstream, or unbundled broadband access, is a wholesale product that Deutsche Telekom AG (“DTAG”) must make available to requesting network operators once the RegTP orders it to do so. Bitstream Access is broadband access to end customers – bitstream access is synonymous with the phrase “unbundled broadband access” in the New German Telecommunications Act. Technically, this access within the “last mile” has usually been realized based on DSL technology. However, bitstream access via other broadband access technologies, such as cable, is not excluded.

Section 21 Para. 2 No. 1 of the new German Telecommunications Act (“TKG”) gives the National Regulation Authority (“RegTP”) the authority to impose the obligation on DTAG, as the market-dominating company, to provide unbundled broadband access.

As to how to implement this obligation in practice, the debate centers on whether the unbundled broadband access referred to in this Section must include an ATM (“Asynchronous Transfer Mode”) and / or an IP (“Internet Protocol”) interface. Both interfaces are technically feasible as bitstream transfer point: as soon as the data leaves the “last mile” (1st stage), it is routed and concentrated via an “ATM data network” (at a 2nd stage). At a subsequent 3rd stage, a system converts the data into Internet protocol (IP). The technical characteristics of ATM safeguard a transparent connection throughout the entire ATM network back to the end customer, and allows for a defined bandwidth at a level of quality, as agreed between the parties and ensured throughout and for the entire duration of the connection.

Companies requesting bitstream access prefer different versions depending on their individual business models and on their existing own infrastructure (size and design of their own networks). In particular, providers of Internet access and other online services prefer the IP interface because this is the primary choice for their business model (which primarily targets the mass market and services private customers) and is quickly implemented. By contrast, other companies require an additional ATM interface to realize their business model, which usually targets wholesale customers, to be able to offer certain quality standards more directly. Meanwhile, for alternative subscriber network carriers – who in turn are not likely to demand bitstream products – it is important that all bitstream products are consistently designed and do not devalue the infrastructure investments they have made to access end users.

Early this year, the RegTP held a public hearing for market participants on the regulatory treatment of bitstream access. Unfortunately, no evaluation of this market survey – or any regulatory conclusions by the RegTP – have been published to-date. This is astonishing considering the RegTP’s great interest in the topic throughout 2003 (e.g., during the Petersberg Conference on Jun 30, 2003) and the strong demand expressed by the market.

Therefore, the present position paper calls on the regulatory authority to take the necessary steps for compelling DTAG to provide bitstream access without delay. Against this backdrop, VATM’s position is as follows:

“The VATM advocates – both to the regulatory authority and in public debate – that “unbundled broadband access for wholesale customers” must be offered in Germany by companies with extensive market power, both based on IP and based on ATM network interconnection. The regulatory authority is urged to swiftly take all necessary steps to oblige Deutsche Telekom AG (DTAG) to offer this access. Section 21 Paragraph 2 No. 1 of the new German Telecommunications Act (TKG) explicitly stipulates DTAG’s obligation to grant bitstream access. However, DTAG has refused

to offer bitstream access that complies with market demands, with the aim to shield off its own broadband market shares. The obligation should include technical parameters for the interconnections (ATM and IP), quality parameters, delivery terms and commercial conditions for bitstream access products. This is essential in order to give the German telecommunication market the necessary boost for growth in the broadband sector.”

Although broadband access is already offered by alternative infrastructure providers, it is important for the nationwide expansion of broadband connectivity that competition will flourish in all currently available networks, on all levels of the value chain, and on fair terms and conditions. Therefore, the RegTP is required, as part of the obligation pursuant to Section 21 para. 2 No. 1 TKG, to open all major interfaces for bitstream access that competitors are demanding access to – i.e. both the IP and the ATM interfaces.

The following reasons support this claim:

- **Unbundling.** Unbundled broadband access means that RegTP must enable competitors to gain access reflecting the results of the market analysis, suited to the needs of the market and taking into account the network topology and the competitions for competition at various network interconnection points. Against this backdrop, both the IP and the ATM interface must be opened.
- **Promote competition.** The closer providers can get to end users, the larger the market sector grows where alternative infrastructures can be deployed. Bitstream thus promotes competition at different network levels, and diversity of choice for companies demanding wholesale access and for the end users. Hence, the ATM interface should be opened in addition to the IP interface.
- **Innovation.** Innovation benefits in existing networks may only be achieved if end customers can be connected with their provider’s network via high-quality connectivity that is managed individually by the network operators. Only the ATM interface is technically suited for this purpose – therefore, it should be made available in addition to the IP interface. Instead, DTAG currently tries to label its DSL resale offer as one version of bitstream access. This offer, however, does not promote innovation, as the resale of DSL lines always depends on DTAG’s offer to its end customers and is inextricably linked to an existing DTAG phone line. Thus competitors are forced to mirror DTAG’s product design, instead of being able to bring their own innovative products to the market.
- **Rapid satisfaction of the mass market demands.** For some of the competitors, the main idea is to use bitstream access to rapidly connect a large number of private end customers for purposes of Internet connectivity. The IP interface is suited for this purpose, as it offers the necessary quality for the mass market.
- **Bitstream is the European standard.** The effect of bitstream access on innovation and growth has empirically been proven through long-term experiences gained in other European countries (including France, Belgium, Spain, Portugal, the UK, Ireland, Italy, Norway, Austria, the Netherlands). The European Regulators Group (ERG) concludes that in these countries, access is possible at least at the ATM level (Source: ERG Common Position (03) 33 rev1, pp. 7-9, posted at www.erg.eu.int). IP-based bitstream is additionally available in some states. Deutsche Telekom is taking advantage of this flexibility abroad via its subsidiaries T-Systems and T-Online.

- **Wholesale competition brings benefits to the end users.** If an ATM-based bitstream product is available in addition to the IP interface, alternative network infrastructures parallel to the networks of the established company will be deployed; this will enhance competition in the wholesale markets as well. Thus, in the future Internet Service Providers will also be able to choose from whom they buy access to an end customer. This will lower their wholesale prices, which will indirectly benefit end users as well.

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More than 50 telecommunications and service provider companies with operations in the German market are active in the VATM. All of them are in direct competition with the ex-monopolist Deutsche Telekom AG. Our member's account for roughly 80 percent of the total revenue generated by private-sector providers in the German telecommunications market.