

REMOVING E-BARRIERS

WAYS TO FACILITATE THE GROWTH OF THE INTERNET

by

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A. Introduction

The Internet is booming. It has long since become a global phenomenon, which even here in Germany is gaining increasing influence over the core areas of the life and work of every citizen. It changes the way in which we communicate with each other, the way we learn, the way we are trained and the way we work. In an era of electronic commerce, participation in economic activity is changing too. With e-government, political decision-making and democratic citizen participation are taking on new proportions. However, at the moment, not everyone is benefiting from the advantages of the Internet on an equal basis. The “mother of all networks” is currently a medium dominated – albeit to a decreasing extent – by young, well-trained and well-heeled professionals. The exclusion of many from cyberspace would be acceptable to an extent, if it were still the domain of scientists and brokers. However this situation is no longer acceptable when a steadily increasing number of services offered by the government or the economy are processed online. In order to utilise the emerging potential in the best possible ways and to prevent the estrangement of broad segments of our society from this development, the existing access barriers (e-barriers) must be broken down. Online media, for example, must be affordable and accessible in everyone’s direct environment and fulfil particular standard minimum requirements of comfortable use. Averting a “digital divide”, a division of society into one part that uses new digital technologies and another that does not or even disapproves of them, represents an important challenge to people in politics, economics and science.

B. Status Quo

I. Germany’s backwardness in Internet usage

At present, only 14% of the Federal Republic of Germany’s total population is online. With this rate of internet use, Germany achieves only an average position on an international scale, particularly when compared with a corresponding figure of 60% in the USA, 40% in Sweden, 22% in Great Britain and 18% in the Netherlands.

Of course, there are manifold reasons for this comparatively poor standing as we launch our campaign to attain a top position in what has been termed the New Economy. First of all, it can be attributed to the typical e-barrier of the by now proverbial existence of IT illiterates and technophobes in Germany. A survey by the Association of Information Technologists, Electric-

cal and Electronic Engineers (VDE) has just recently shown that some one third of all Germans do not want to have anything to do with the new media or do not even know what the concept entails. More-over, the interest in high tech and Internet applications is reported to have decreased by 12% in the past two years. Often, it is simply the case that people lack the necessary Internet know-how or they do not have the opportunity to acquire it without spending too much money or time. Therefore, many people are not in a position to realise the extent to which they might use online services effectively for their particular needs. Furthermore, the Internet is not (yet) used to the same extent in all social strata. In recent years, the group of first users consisted mainly of male university graduates under the age of 30 with the proportion of female users slowly increasing. People over the age of 45 with a low level of training have a lot of catching up to do.

Increased Internet usage is also hampered by a lack of confidence in the safety and reliability of online transactions as well as by the fear of personal data being "intercepted" and mis-used. The predominance of English as the prevailing language of the Net is certainly off-putting to many people here in Germany. Finally, an important aspect might also be the relatively high telephone costs charged for Internet usage at the moment. In a price comparison of Internet costs carried out by the OECD in 29 countries, the Federal Republic of Germany was shown to be a costly place to be online. Within Europe, only the Spanish online users have to dig deeper in their pockets.

II. The importance of a high Internet usage rate

The use of the Internet by wide sections of society would establish the necessary prerequisites to enable Germany to make the change from an industrial to a knowledge and information society and to prevent Germany from losing ground - which is very difficult to make up - with respect to the United States of America, Scandinavia and Great Britain. In the future, commercial transactions will be carried out on the Internet to a considerable extent. Germany, too, has witnessed a veritable outbreak of e-commerce euphoria. The latter is evident not only in the high stock exchange quotations of start-ups in the new economy but also in the speed at which products and services are offered and paid for on the Net. However, e-mail services, discussion forums and on-line elections and voting also offer perspectives on a new way of communicating within a democracy. The new information and communication technologies are gaining importance in this area and should be expanded in the medium term. E-government could thus become a remedy for the public's disenchantment with politics and political parties. Moreover, the new media can be immediately used for the urgently required modernisation of administrative structures. The completion of tax declarations, the registration of a new place of residence, the ordering of tickets for a local event can all be completed online.

A democracy depends on the fact that many, if not all, of its citizens participate in the introduction and use of new media. In the long term, society must be prevented from disintegrating into information haves and have nots. Such a separation would promote the rise of a new lower class of society, lacking information or under-supplied with information, who would then neither benefit from the advantages of e-commerce nor from those provided by e-government.

Such an exclusion from and disintegration of society would bode major risks for the political stability of a country. Additionally, it would lead to fatal consequences for the economy since investments in technological infrastructures and new services are only worthwhile when they are to be used by as many people as possible.

III. Current initiatives to increase the use of the Internet

In order to bring private households and enterprises into the global Internet era, national and European institutions have initiated a number of support programmes. They are to offer people initial access to the Internet but also to provide long-term access through subsidies or the acquisition of specific knowledge.

1. "Schulen ans Netz"

"Schulen ans Netz" was set up on 18 April 1996 as a joint initiative of the Federal Ministry of Education and Research and Deutsche Telekom AG. Its aim is to connect schools all over Germany to the Internet. This programme put approximately 12,300 schools online by end of 1999. The total number of schools connected to the Internet is even higher, reaching approximately 16,000 in number. Thus, the support of the "Schools on the Net" initiative was not necessary in all cases.

The funds granted to schools for technology promotion purposes vary. The so-called entrance-level schools are provided with a multimedia computer, the technical requirements for an Internet connection and telephone credit. In the so-called model schools, on the other hand, existing internal network environments are connected to the Internet via servers and upgraded with multimedia workstations. Additionally, the use of electronic and multimedia information sources is fostered here. Upon the expiry of the one-year projects, a follow-up promotion can be granted which is aimed at facilitating, supporting and broadening the integration of the new media into the classroom.

The Schools on the Net initiative has deliberately eschewed the implementation of comprehensive pilot projects in a handful of schools, preferring to create the impetus for self-responsible expansion and use of the new media by providing Internet connections to all schools. Establishing Internet connections in schools is supported by continuing education measures for teachers so that the introduction of the new media into the school is accompanied by professionally trained school staff. Furthermore, school servers, networks, etc., are installed to enable the users to benefit comprehensively from the new technologies. A support network and an online system especially for teachers are available for answering application-related questions.

2. The E-Commerce Initiative fostered by the BMWi

Within the framework of the "Electronic Commerce" initiative, the Federal Ministry of the Economy (BMWi) instituted 24 "competence centres" for regional information, counselling and training purposes in the area of e-commerce in 1997. This three-year support programme is to give a sustainable impetus towards increased use of the various processes of e-commerce in

medium-sized enterprises and in the craft sector. In this case, too, the initiative emerged from the observation that while such enterprises have of late shown a noticeably growing interest in using new information and communication technologies, the actual degree of application remained considerably below the level achieved in large enterprises and in enterprises of comparable size abroad, especially in the United States of America. Faced with the rapid and global development of e-commerce this project aims to counteract the risk that continuing reservations will impair the competitiveness of German medium-sized enterprises and that business opportunities which are being opened by the Internet will be missed. The BMWi measure is therefore aimed at medium-sized enterprises and craft businesses, which have not yet or only in a simple way, used the new communication technologies for e-commerce. The competence centres serve to motivate the enterprises to use the new business processes, increase their awareness of them, start them off and provide support in terms of their use. In the process, the participants not only acquire knowledge about the technology but they also learn about the legal and economic requirements and effects of e-commerce. In this context, the e-commerce project fostered by the German Federal Government is an important example of how Internet usage can be raised in the business sector by gradually overcoming existing inhibitions with respect to the new technologies.

3. Approaches on a European level

At a European level, too, there are attempts to stimulate the growth potential inherent in Internet use among people in the private sector and, in particular, among those in the business world. On 9 September 1999, the Council of Europe's Committee of Ministers adopted a recommendation describing non-binding principles and political measures for establishing a general basic supply of communication and information services at a certain minimum standard for the member states. In particular, this comprises the establishment and maintenance of "Public Access Points," making it possible for the general public to use the new media at specific central locations. The member states are urged to establish and promote this kind of access facility in public places, libraries and educational institutions and in other places which are accessible to the public, such as shopping centres, train stations, airports or hotels, but also in privately owned locations. Employers are also to be motivated to offer their company personnel similar access to Internet facilities. In addition, operators of private Internet access may, for example, be granted tax breaks as an incentive to open this private infrastructure to a wider public under certain circumstances.

The "eEurope" project launched in December 1999 by the EU commission, is another example of a European initiative aimed at supporting the "Information Society for Everyone". eEurope is to accelerate and assure the distribution of digital technology all over Europe so that all Europeans have the necessary know-how to use the new media successfully. Economic issues and the fact that the key factors for growth and employment in the digital "e-economy" lie in the Internet are at the base of this initiative. Therefore, the Commission's proposal is to set up a catalogue of measures comprising, *inter alia*, the comprehensive introduction of the Internet and multimedia tools into the educational sector, reduction of costs for Internet access by intensifying competition, promotion of e-commerce and e-government, consideration of the

needs of handicapped people in the development of the information society, and health care via the Internet. This initiative is run by the Commission in co-operation with the Member States, industry and the citizens of Europe. The latest EU summit at the end of March in Lisbon passed the eEurope programme. The special conference of the Council of Europe is a vehement proponent of the development of a "Europe of innovation and knowledge" in order to improve Europe's shortfall in the area of multimedia technologies when compared to the United States of America.

4. *The current situation in Great Britain*

A new study presented by the consultants Booz-Allen & Hamilton, which was carried out on behalf of the British government in March 2000, also recommends the implementation of government initiatives in order to foster increased use of the Internet. This study envisages Internet access for 70% of the British population by 2003. Great Britain already has the best preconditions to achieve this aim. The study showed, for example, that the United Kingdom currently represents the largest e-commerce market within Europe. The goal of increasing Internet use is to be achieved by "universal access", a universal Internet service for the entire populace. However, this ambitious objective cannot be realised without government fostering. Booz-Allen & Hamilton have recommended, e.g., tax breaks for enterprises providing the public with Internet access or technologies. Another proposal involves government subsidies for a cost effective usage infrastructure (flat rate) or the establishment of virtual administrative structures (e-government) for citizens and enterprises.

C. National possibilities for regulation and control

II. Assuring blanket e-coverage

Western democracies have a long tradition of supplying their populations with communication services and the necessary infrastructure. Thus, the German Federal Constitutional Court claims in its permanent judiciary that the essential basic supply of broadcasting services must be assumed by those stations under public law. This task comprises not only technical aspects but also the "pricing schedule" and quality of program content. In the area of telecommunications, the German government is obliged to an Agreement of Infrastructure Provision, with which it is obliged to comply under German constitutional law (Art. 87 f. Basic Law). This law primarily comprises the obligation to offer voice telephony and transmission lines all over Germany to a particular standard of technical quality.

In order to counteract the disintegration of society into the "Information Rich" and the "Information Poor" the guidelines of these Agreements on Service Provision need to be transferred to the digital era. The establishment of such a concept is, however, still in its infancy. It seems that a functional approach allowing for further dynamic development is preferable. This approach must define those services that are essential for society and must not be restricted to certain fixed transmission technologies or provider groups. Policy makers devoted and obliged to creating an information society for everyone must therefore consider the following principles:

Availability

The required services must be available in any corner of the country. Citizens should have the best possible choice of various transmission lines and terminals. In this context, government initiatives might also promote technical systems (terminals, set-top boxes, transmission platforms) which are “open” for services from any competitor. This would not only foster competition but also facilitate access for all to the new media.

Affordability

The services must be available at affordable prices. To achieve this standard, it may be necessary to lower Internet costs disproportionately in order to maximise access rates for certain groups in society.

Quality assurance

It is already shown by the stipulations for basic supply of broadcasting services or by the universal service supply obligation in the sector of voice telephony that e-supply must also have a quality dimension. This not only applies to high-quality interactive services (e.g., from the educational, health, and public safety sectors), but also to the speed and bandwidth of transmission lines. Additionally, the secure settlement of online transactions must be guaranteed while complying with the provisions of data protection law.

Media competence

The aforementioned principles must be implemented in tandem with the creation and improvement of media competence. It is also necessary to increase awareness of the new possibilities inherent in the Internet by means of high profile campaigns.

III. Innovative measures for an easier access

1. Public Access Points

In accordance with the recommendations of the Council of Europe’s Committee of Ministers, the new information services could be made more accessible, particularly to the socially disadvantaged sectors of the populace in the Federal Republic of Germany, through the provision of so-called “Public Access Points”, public places providing Internet access to private individuals. It would, for example, be possible to install Internet-ready PCs in libraries, senior citizens’ homes, labour offices, town halls and other public places and offer them for use at reduced cost. Private Internet cafés could be granted financial incentives if they were situated in areas where the level of Internet use is particularly low and they offered these services at reasonable prices.

In this context we have to ask ourselves whether the government is legally obligated, within the meaning of the agreement on service provision, to grant its citizens the opportunity to use the Internet. This could be concluded from Art. 87 f., para. 1 of the German Basic Law according to which the Federal Government is legally obliged to provide appropriate and suffi-

cient services in the area of postal services and telecommunications throughout Germany. The qualifier "appropriate" refers here to quality, i. e., the type of services. This agreement on infrastructure provision under German constitutional law is described in detail by Section 17 of the German Telecommunications Act. This section defines universal services as a minimum provision of telecommunication services to the public, for which a specific level of quality is determined and to which all users must have access at a reasonable price, irrespective of where they live or work. Under Section 17, Para. 1 of the German Telecommunications Act, universal services of this type are defined as those areas of telecommunication services which refer in particular to voice telephony services and the operation of transmission routes. The actual services to be offered in the Federal Republic of Germany within the framework of universal services are set out in the Decree on Universal Telecommunication Services issued on the basis of Section 17, Para. 2 of the German Telecommunications Act. Art. 1 of the Decree refers to voice telephone services in a digital network with a particular bandwidth in the subscriber's connection area as well as the corresponding ISDN features. Apart from this, various telecommunication services are to be offered, which are directly related to voice telephone services, such as information services, telephone directory inquiries and public telephone locations. Furthermore, the supply of certain guided transmission lines is also to be considered as universal services.

Internet services are not included in this framework. It is therefore doubtful whether the minimum availability codified in the Decree on Universal Telecommunication Services is still sufficient today. It is possible that the qualitative requirements to be placed on a universal service have changed such that new information and communication services, such as Internet access, fall under the government agreement on service provision. In view of the increasing importance of the Internet, it is worth considering *de lege ferenda* the inclusion of "Public Access Points" within the scope of the government agreement on infrastructure provision as these may be compared with the universal provision of telephones at places that are open to the public at any time. In the medium term, advanced services like DSL technology (Digital Subscriber Line – explained below) might likewise fall under the definition of the term "universal services".

2. Training measures and further incentives for Internet use

Internet know-how needs to be increased among the population at large. The Schools on the Net initiative has already been discussed. In the future, public broadcasting services and adult education programmes will assume a key role in imparting knowledge on how to deal with this new media. For this purpose, the curricula must also be adapted to the needs of an older generation. Another way of encouraging people to use the Internet might include, for example, the granting of bonuses for a tax declaration sent via the Internet or for tickets for municipal events that are ordered on-line. Even buying a lottery ticket with a mouse-click could be rewarded with a price reduction. It is also possible to conceive of allowing tax breaks to computer manufacturers that offer PCs, which are especially customised to the needs of the handicapped and the elderly. Finally, society's awareness of Internet issues could be increased by the introduction of a national "Internet Day". The establishment of a fund (Digital Citizen Fund) might be considered in order to finance access to particular services (e.g., health care) for selected groups in society.

The setting up of so-called **Public Access Points** is essential to open up the use of the new information and telecommunication services and technologies to wide sections of society at central locations in each region. Additionally, **Internet know-how** must be fostered by suitable training measures and incentives offered by the government that might include, for example, financial rewards for the completion of certain activities on the Net.

IV. Lowering the usage costs, i.e. by introducing a flat rate

Decreasing the access costs is another means of increasing the online activities of the populace. The Internet is no longer the privileged playground of scientific institutions and certain private individuals; it has long since become a social necessity. In order to enable everyone to benefit from its positive overall economic effects and to accelerate the growth of the Internet economy itself, the use of the Internet must be affordable for everyone.

1. Actual framework conditions

Internet costs can be lowered by means of an alternative invoicing and bonus system. A quantitative increase and a qualitative amelioration of Internet use by private and business people can be achieved by abolishing cost calculations that are based on the duration of the connection, i.e., metered charge units. The flat rate is now being considered as a contender for the new charging model. Flat rates are fixed monthly connection charges, that are independent of the time spent connected. Once this fee is paid, the customer can use the Internet for an unlimited in time, i.e., without incurring clock-based telephone costs for each connection. Experience in the United States of America has shown that the introduction of a flat rate significantly intensifies Internet use. In Germany, too, attempts have been made to initiate such price models, but the idea has not yet gained real acceptance. Either the monthly costs are still too high or the services are tied to further obligations, such as the contracting of other services with the same service provider (fixed network lines or the like). Apart from that, these services tend to be available only in few regions of Germany. Regulatory or at least political measures on the part of the government might therefore be necessary in order to set up better framework conditions for such an alternative pricing model. Furthermore, flat rates can also be offered on a selective basis, e.g., for particular periods of time, for particular services or special groups in society (pupils, students) and institutions (schools, universities).

2. Legal framework conditions: price control

It is doubtful whether the services offered by Internet service providers will be subject to the price control of the German Telecommunications Act. According to Section 24, Para. 1 of this Act, the connection charges paid in Germany, i.e., the money paid in return for the use of services supplied by the telecommunications company, must always be based on the actual costs of efficiently supplying such a service. Paragraph 2 of this regulation sets further standards with

which the connection charges must correspond or which have to be taken into consideration by the service providers when calculating their prices. The National Regulatory Authority for Telecommunication and Postal Services may only intervene, however, in certain cases and under certain circumstances. This is because the Regulatory Authority controls only the connection charges for transmission lines and voice telephone services (licence classes 3 and 4) *ex ante*, i.e., before market introduction. Connection charges to be paid for other telecommunication services offered by market leaders are, in contrast, subject only to subsequent control by the Authority.

Voice telephone services are defined as the commercial provision to the public of direct transport and transmission of speech in real time from and to network terminating points of the public transmission network. However, the most important feature of voice telephone services, i.e., "speech" is not even a feature of the Internet accesses under consideration here. Internet services do not establish communication between people on an acoustic basis in real time; this is especially true of the supply and use of the information and services supplied by the World Wide Web. This is why an *ex ante* fee regulation cannot be considered. Apart from voice telephony, a preliminary authorisation is still needed only for transmission line charges. Transmission lines are telecommunication facilities consisting of cable and radio connections with the corresponding transmission technology. They comprise, therefore, only the technical-physical functions of a network, but they do not refer to the supply of Internet services and content itself. These are, instead, broadcast and distributed via these actual transmission lines. This means that, from this point of view also, the issue of Internet flat rates does not fall under the *ex ante* competence of the National Regulatory Authority (RegTP).

Internet use must be affordable for the general public. Therefore, we must move away from charging fees on the basis of time spent on the telephone network. The potential for the overall economy inherent in the mass consumption of the Internet can only be utilised if individuals can avail of unlimited access at a suitable fixed price (**flat rate**). This innovative pricing model will also open the possibility of differentiating among special services, times or groups of people (e.g., pupils and students).

V. Competing networks

The dismantling of technical barriers is also an important aspect in increasing the popularity of the Internet in Germany. At present, data is almost exclusively downloaded from the Internet using analogue narrow band telephone networks or digital data transmission via ISDN. Transmission thus takes a considerable length of time due to the restricted bandwidth. Apart from this, there is a lack of competition among different infrastructures.

1. DSL

Quality and quantity of Internet use can be improved through the universal expansion and upgrading of the traditional telephone network by establishing "always-on" Internet access on the existing telephone lines using DSL technology (Digital Subscriber Line). In this way, it is possible to increase the transmission capacity of the ordinary telephone copper-cable to far exceed the current ISDN bandwidth of 64 kilobytes. ADSL (Asymmetric Digital Subscriber Line) thus already offers, for example, a downstream speed of up to eight megabits per second which corresponds to 125 times the speed of a single ISDN connection. DSLs are designed as all-inclusive dedicated lines rendering the dial-in process superfluous. This alternative form of access for online users demands minimal investment, while offering very high data transmission rates due to digital technology. In Germany, the development of this broadband access facility is at present hampered by the time-pulse-based invoicing system used by Deutsche Telekom AG, which is relatively expensive and uncommon on an international level.

2. UMTS

An important contribution to competition among the networks could be made by the Universal Mobile Telecommunications System (UMTS), the so-called third generation mobile radio telephone service, which is to be introduced in Europe by the year 2002. The new standard for mobile phones shall ideally transmit data at speeds of up to two megabits per second and can therefore be considered as an opportunity for convenient wireless high-speed Internet access. UMTS is set to replace gradually the current GSM system and to become a global standard for cordless telephony and data transmission.

3. Internet over cable

A very efficient alternative to data transmission via analogue or digital telephone networks lies in distributing the Internet via the broadband (TV) cable network. Thanks to the minimisation of transmission times by the broadband network, Internet services can be used in a much more comfortable way. In addition, it will also be possible to provide innovative services based on higher capacities and greater speeds. Furthermore, tariffs in this Net are not time-pulse-dependent but are charged on a monthly, all-inclusive basis, and this would pave the way for a significant increase in Internet usage as observed abroad when cable net providers were used. In this respect, the Federal Republic of Germany is in a very good starting position, as 60% of households are already connected to the cable net. In order to use this infrastructure efficiently, the Net should be designed as an open platform, available without discrimination. Internet distribution via cable needs only a return channel in order to provide for bi-directional data transmission. Above all, the network performance must be increased. However, it is possible, in technical terms, to achieve such an upgrade without difficulty once a certain amount of investment is made. Problems may arise from the fact that the entire German broadband cable network was initially owned by Deutsche Telekom AG. In order to foster investment and competition gradually the broadband cable network has been splintered off and transformed into a subsidiary of Deutsche Telekom AG as a result of directives issued by the European Commission. However true competition with other Internet-capable networks can only become a reality once

it is sold further to third party network providers; this would be the only way to cut the ties of broadband cables and the telephone network from one source of politico-economic control. Political decision-makers are urged to force the further sale of the cable network.

4. Powerline Communications (PLC)

Data transmission via the power supply network is still at the development stage. Initial trials showed excellent results in terms of transmission speed and reliability. If work on the development of such an alternative access and the creation of a marketable product continues at an intensive pace, Internet access via the power supply network, which is available in every home, will represent a precious alternative to the present means of access.

The sale of regional segments of the broadband cable network and the universal expansion of “always-on” access via DSL technology must be pushed ahead. Data transmission via the power supply network must likewise be developed, and the UMTS standard for the Mobile Radio Telephone Service must be established as soon as possible. The **competition among the different network infrastructures** resulting from these activities will in the long run provide for a user-friendly price structure and foster universal Internet usage.

5. Bundling of measures in a Task Force “Information Society For All: Visions 21”

Thus, numerous government initiatives already exist with the aim of increasing Internet usage and creating an information society for all. Unfortunately these activities are in most cases insufficiently co-ordinated. In Germany there is a particular need for co-ordination due to the different responsibilities of the State and Federal governments. This is why it would appear useful to seek the answers to these questions in a pan-ministerial task force entitled “Information Society for All: Visions 21”. This is to be an open working group where the core problems are tackled in a joint effort with scientists. It could have its seat at the offices of a person commissioned by the Federal Government for e-matters. Such a committee would also have to determine the extent to which intensive co-operation between Germany and other European States should be sought in this area. The role of the task force “Information Society for All” would, in addition to the short and medium-term implementation of a certain package of measures, also comprise the formulation of long-term visions and strategies for the further development of the information society in order to avert the risk of Germany falling behind in this area in the future. The task force for a “National Information Infrastructure” instituted by U.S. Vice President Al Gore at the beginning of the 1990 would represent a role model.

D. Policy Recommendations

- 1) In order to fully utilise the social and economic potential of the Internet, its use must be expanded to all groups of society. Government and private enterprise are urged to create reasonable, user-friendly access facilities.
- 2) In the short term, public access points, i.e., Internet terminals accessible to the public, could be set up in libraries, train stations and airports, for example.
- 3) Internet access, which is today primarily provided via the telephone network, shall become cheaper and more attractive on a short-term basis. The introduction of a so-called flat rate should be considered. For this purpose, the user would pay a monthly, unmetered, all-inclusive connection charge to be able to surf the Net without time restrictions or additional costs.
- 4) In the medium term, competition among different infrastructures could be increased. In this context, alternative Internet access via DSL, UMTS or broadband cable should form a core focus and should be fostered selectively.
- 5) Access to Internet via the traditional power supply network opens interesting opportunities for further development. This would enforce competition between the different network infrastructures, and this would in turn have a positive effect on the creation of reasonable, universal Internet access.
- 6) A task force called "Information Society For All" should be formed where the Commissioners of the responsible Ministries would tackle the core problems in close co-operation with expert scientists. This task force could be located at the offices of a Federal Commissioner for e-Affairs. Its tasks would include bundling all activities required to improve Internet usage, focusing on certain political issues in the short and medium terms and formulating visions and strategies for the further development of Germany into an information society in the long run. It might also elaborate proposals for a closer co-operation between Germany and Great Britain in this area.