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Position Paper

An international agenda for the digital age

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Bitkom represents more than 2,300 companies in the digital sector, including 1,500 direct members. With more than 700,000 employees, our members generate a domestic turnover of 140 billion Euros a year, exporting high-tech goods and services worth another 50 billion Euros. Comprising 1,000 small and medium-sized businesses as well as 300 start-ups and nearly all global players, Bitkom' members offer a wide range of software technologies, IT-services, and telecommunications or internet services. They produce hardware and consumer electronics or operate in the sectors of digital media and the network industry. 78 percent of the companies' head-quarters are located in Germany with an additional amount of 9 percent in other countries of the EU and 9 percent in the USA as well as 4 percent in other regions. Bitkom supports an innovative economic policy by focusing the modernization of the education sector and a future-oriented network policy.

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Preamble

Digitization has become an essential part of our everyday life. In the past new digital products and services were primarily used for private matters. Through the digitization of the industrial value chain traditional sectors which in the past had no direct links to the digital world are impacted by this process. The digital transformation of business processes and models has already begun and will be a key factor to success for every company. This brings great opportunities to the international community along with great challenges.

Digital technologies can enhance our economic power and our quality of life if we are able to use them responsibly and deal with them confidently. Digital sovereignty and digital participation of people and businesses will be crucial to the future and prosperity of every country. In order to make digitization a worldwide success story the G20 should take the lead and address it in a joint action plan.

Digital participation has never been more important than today. Right-wing parties are gaining momentum all over the world. Their success at elections is frightening. Signs of separation and division have increased in societies over the past years. Integration and reconciliation is not promoted by these movements. We would never have thought that such deep divides would open up so quickly in our modern and educated societies. Digitization can overcome these trenches and bring us closer together. Digitization connects people and businesses; it transcends borders and encourages open-mindedness - when we ensure digital participation.

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1. Digital connectivity in every part of the world

As a result of the great advances in technology, it is now possible to connect with persons, places and things in a way that was unimaginable 20 years ago. The leverage effect for economic growth through internet access is enormous: according to the World Bank, an increase of high-speed internet connections by 10 percent leads to additional economic growth of 1.3 percent. Unfortunately this development is not yet true for all parts of the world. By the end of 2016 about 53 percent of the world's population will still have no access to the Internet.² Developing and emerging countries in particular benefit from access to fast internet because it makes possible access to international markets, sustainable economic growth, new jobs and an improved quality of life.

- Providing high-speed internet access in developing and emerging countries as well as rural areas should be a main priority in order to unlock hidden economic potential and increase quality of life.
- 5G will significantly increase the speed at which data is transferred. It will also improve response times and provide capacity for the numberless devices that will be connected in the internet of things. A worldwide rollout of 5G should be a joint priority.
- With regards to telecommunication frequencies Bitkom supports unlocking economies of scale through the means of spectrum harmonization. Such approaches allow for faster roll outs of equipment at reduced costs.

2. Trust through cyber security and privacy protection

Digitization means to map processes of everyday business and private life into data and to process these data. The question of whether and how data should be processed is therefore crucial for the success and design of digitization. There are concerns in parts of society about whether the right to privacy and protection of their personal data in the digitized society can be preserved. Fear of loss of privacy and self-determined action stands in contrast to the positive reception and acceptance of new technologies. This situation might trigger over-regulation of emerging technologies and business segments. The increasing digitization causes an increasing need for data security and protection of critical infrastructures. Cybercrimes or hacker attacks by foreign intelligence agencies present an urgent threat and must be prevented.

- Globally recognized data protection standards should be developed and by doing so promote harmonization.
- Standards for cybersecurity: Work towards the establishment of standards in cyberspace. These could include a
 commitment of ethical behavior for states in cyberspace and a self-commitment of how cyber-weapons will be
 used.
- Introduce effective self- and co-regulation measurements such as Codes of Conduct for a fast response on technical progress.

¹ http://siteresources.worldbank.org/EXTIC4D/Resources/IC4D_Broadband_35_50.pdf

² http://broadbandcommission.org/Documents/reports/bb-annualreport2016.pdf

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3. Digital education in every classroom

Mastery of digital skills is important to the future of every country. Digitization as a cross-sectoral issue depends on a broad general digital education in order to prevent a digital separation in professional and private areas. The transfer of educational institutions into the digital world serves the entire society: for the individual this includes long-term employment skills with a variety of professional development and career opportunities, and for the economy with respect to the attractiveness of the location, productivity and innovative capability.

- Digital media as a didactical instrument but also as an object of teaching and learning should arrive in every educational institution.
- The acquisition of digital skills in terms of competent handling of digital technologies and the development of fundamental IT-knowledge should be an integral part of today's educational goals.
- The development of digital skills as well as didactical-methodical skills need to be a permanent element in further training of teachers in schools, universities and training facilities.
- Computer sciences as a school subject should be mandatory in every country's school system.

4. New opportunities through digital trade

The rapid development of the digital economy over the last 10 years has also changed the existing trade and production structures. Previously, international trade was a privilege of large companies in industrialized countries. This is no longer true today. The internet gives companies of all sizes in industrial, emerging and developing countries easy access to international markets. The cross-border data traffic has increased by 45 times between 2005 and2014 and will continue to grow. In 2014, these data flows generated \$2.8 billion in economic value.³ Governments have tried to react to this development by introducing new national rules. An adaptation of international commercial law is urgently necessary to take advantage of the full potential of digital trade.

- Gaps should be closed in existing commercial law through increased cooperation at multilateral and plurilateral level. Digital commerce must be integrated as a horizontal part in all trade agreements.
- Free cross-border data flows must be enabled while respecting the applicable data protection standards and in accordance with Article 14 GATS. Data localization requirements should only be used in particularly sensitive areas, e.g. national security issues.
- Unique country specific technical regulations should only be used in situations where no other options (e.g., global standards/specifications) are available to achieve legitimate objectives, such as ensuring adequate protection of health, safety, or the environment.

 $^{^{3}\} http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-globalization-the-new-era-of-global-flows$

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5. Adapt working world to the digital age (Work 4.0)

The world of employment is undergoing a fundamental change. This affects forms of work, work contents and job profiles. Changing work contents induce different requirements for employees. In the future every worker will need digital skills and the ability to continuously adapt to technological development in order to succeed in the labor market. Therefore manifold measures should be put in place which take into account the variety of challenges of digital transformation. Relevant fields of actions are education and professional development, securing skilled personnel, labor law and work-life balance.

- Digital skills must be acquired in school and continuously developed over the entire professional lifetime. At the same time we must strengthen awareness of the essential character of lifelong learning to retain employment.
- With a view to ensure sufficient IT savvy workforce for the digital economy not only pupils should be inspired to join technical professions, but all existing potentials of the labor market should be unleashed: we must attract more women to IT professions, elderly IT specialists should be kept in and qualified migrants should get access to the job market.
- Labor law should enable flexible and individualized approaches notably with regard to working times and location.
- Adapting the world of work to the digital age requires regular exchange of views and constant cooperation among stakeholders in governments, economy and society.

6. Develop a charter for the digital world

A fundamental question of digitization is: to what extent can the fundamental rights of a pluralist, free democracy and a social market economy be transferred to the digital world with its laws, norms and lived patterns of behavior? For years, legislators have been working on countless laws and in individual countries to achieve exactly that. At the same time, court decisions help to interpret the law in disputed cases. From our point of view, however, this is not enough. In many cases, the changes triggered by digital technologies force us to think completely new and break up habitual behaviors.

 The G20 should start an initiative to discuss the core values that frame the digital transformation – a charter for the digital world. Digital fundamental rights, digital ethics - politics, industry, science and society all need to make their contribution to discussing and shaping the future of digitization.