



the voice of business

**COMMON STANDARDS
FOR THE DIGITAL ECONOMY**

**B20 COALITION RECOMMENDATIONS
ON ICT STANDARDIZATION TO G20 GOVERNMENTS**

Issued on: 26.11.2015

CONTEXT

The B20 Coalition has made the Digital Economy its priority for 2015 and has identified three areas of action:

IT Security – because it is one of the biggest concerns in implementing the digital agenda;

Common Standards – because in an increasingly interconnected world the base cannot be built upon without Common Standards; and

Smart Cities – because our future lies in making our cities more sustainable, efficient and responsive.

To report on the main challenges identified by the companies that it represents, the Coalition's digital agenda was introduced in June 2015 with the publication of a series of recommendations to the G20 governments – **Digital Economy: The Driver for Growth**.

Finally, with the goal of fostering the integration of Digital Economy into the G20 leaders' agenda, the B20 Coalition co-organized with B20 Turkey, a conference on Digital Economy, called **The Third Wave: Digital Economy and The Industrial Internet**. This first-of-its-kind initiative took place on October 06, 2015, in Istanbul, in parallel to the G20 Trade Ministers' meeting.

ABSTRACT

The continued innovation and success of the Digital Economy hinges on the availability of globally coherent Standards that enable communication among devices, networks, and services.

Common Information and Communication Technology (ICT) Standards are a prerequisite for global interoperability and compatibility of products that increase industrial productivity and customer benefits.

Especially with the emergence of the Internet of Things (IoT), all industrial sectors are increasingly affected by the design of ICT Standards.

Because ICT Standards need to be coherent and compatible with other Standards, global ICT standardization must be inclusive, taking into account the needs of all stakeholders and focusing on cooperation.

A globally coherent use of ICT Standards can bring enormous benefits to businesses, customers, and the public at large.

All governments should thus foster the development and implementation of Common Standards.

The development of common disciplines for standardization and technical regulation, as well as increased regulatory cooperation, can foster global coherence of ICT Standards and thereby sustain economic growth and customer value.

Table of Contents

| | |
|---|----|
| ABSTRACT | 3 |
| INTRODUCTION..... | 5 |
| CHALLENGES TO ACHIEVING GLOBAL STANDARDIZATION | 9 |
| Global Standardization Fora..... | 9 |
| International Standards-Development Organizations..... | 9 |
| Industry-driven Standardization Bodies | 10 |
| Cooperation in Global Standardization..... | 10 |
| The Role of Governments in the Implementation of Common Standards | 11 |
| National Standardization | 11 |
| Public Procurement..... | 12 |
| Regulatory Policy..... | 13 |
| Regulatory Cooperation in Free Trade Agreements | 13 |
| RECOMMENDATIONS | 13 |
| Global Standardization Fora..... | 13 |
| Role of Governments | 14 |
| Common Principles | 14 |
| Procurement Guidelines | 15 |
| Technical Requirements and Regulatory Cooperation | 15 |
| Fostering Common ICT Standards through Free Trade Agreements..... | 16 |

INTRODUCTION

The IoT offers enormous opportunities for the world economy: driverless cars and smart roads can reduce the number of accidents, fuel consumption, and traffic jams. Smart grids can significantly increase energy efficiency and the reliability of power supplies.

It is estimated that Industry 4.0 could raise industrial productivity by 30 per cent within the next ten years.¹

Altogether, the IoT has the potential to add USD 6.2 trillion annually to the world economy by 2025 – more than the current nominal gross domestic product (GDP) of Germany and India combined.²

In order to realize these tremendous benefits, initial ICT requirements are:

1. Fostering the creation of the Digital Economy on a global-scale and facilitating the expansion of the markets by building a widespread, strong, and future-ready broadband infrastructure.

The Governments need to act to convert the digital potential into growth, across all sectors of the economy, by creating the right conditions for businesses to invest. For instance, the regulatory authorities play an essential role in ensuring a stable regulatory and legal framework to foster and incentivize ICT investments.

As the first step of digitalization, building a strong ICT infrastructure and providing high-speed broadband is vital for enabling the use of digital technologies. A country's mobile infrastructure is as important in driving and supporting growth as its energy grid or transportation network. Therefore, the main issues with regard to high-speed broadband, such as providing a widespread fiber footprint, spectrum for mobile broadband and competitiveness of the markets should be given priority by the public authorities. High-speed broadband penetration and quality should be increased for both residential and business use of digital technologies. For instance, 134 countries have a National Broadband Plan, which is considered the most important growth strategy for the ICT sector.

The relevant authorities need to create a level playing field among the different actors present in the market. An adequate spectrum policy should be determined, and long-term sustainable competition should be ensured.

¹ Roland Berger Strategy Consultants, *Industry 4.0 – Interview with the Experts*, July 2014, p. 3, <https://www.rolandberger.com/media/pdf/Roland_Berger_Interview_Rinn_Kube_20140729.pdf> (accessed on 02.09.2015).

² McKinsey Global Institute, *Disruptive Technologies: Advances that will transform Life, Business, and the Global Economy*, May 2013, p. 12, <http://www.mckinsey.com/~media/McKinsey/dotcom/Insights%20and%20pubs/MGI/Research/Technology%20and%20Innovation/Disruptive%20technologies/MGI_Disruptive_technologies_Full_report_May2013.ashx> (accessed on 02.09.2015).

As seen in the developed markets, different business models should be investigated, such as the public and private partnership models for incentivizing investments. National strategic visions to be developed should include these models in order to accelerate fixed and mobile network investments.

2. The interoperability, easy access, security and control of the 50 billion connected devices that are foreseen to exist by the year 2020.

About 90 percent of the value of an IoT device relies on its network effect: the capability to communicate with other devices and processes.³ In order to connect networks, devices, and processes, common ICT Standards and specifications are needed. They provide interoperability, compatibility, and effective operations on a global scale.

Standards provide requirements, specifications, guidelines and characteristics that, when used in a consistent manner, ensure that materials, products, processes, and services are fit for their purpose.⁴

A globally coherent use of Standards can result in considerable benefits for businesses, customers, and the public. Common Standards enable interoperability and interconnectivity, which are prerequisites for efficient international trade. By avoiding the need to substantially modify products for every individual market, Common Standards help create economies of scale, foster innovation, and result in lower prices for customers while at the same time increasing product diversity. In particular, globally coherent ICT Standards increase product and investment value by enabling compatibility with other goods and services as well as sustaining ease of use.

Without common ICT Standards and communications protocols, networks as well as hard- and software could not be easily interconnected on a global scale: The Internet – which is ultimately a global network of networks – and all the benefits and innovation that come with it, would not exist as we know it. When travelling abroad, our mobile phones could not connect to cellular networks and our laptops' Wi-Fi connections would not work. Markets would be fragmented, resulting in companies having to adjust each product's design and production for every individual region.

A world with incoherent, region-specific Standards would be a significant drag on productivity and innovation. It would result in increased costs and reduce the variety of choice and product benefits for customers.

³ McKinsey, *Making Connections: An Industry Perspective on the Internet of Things*, December 2014, <http://www.mckinsey.com/insights/high_tech_telecoms_internet/making_connections_an_industry_perspective_on_the_internet_of_things> (accessed on 02.09.2015).

⁴ ISO, *Standards*, <<http://www.iso.org/iso/home/standards.htm>> (accessed on 06.10.2015).

Benefits of Globally Coherent ICT Standards

Internet

The success of the Internet would not have been possible without a global data communication Standard. TCP/IP protocols developed in open global specification processes detail how connected devices communicate with each other. Unlike many other proprietary protocols that have come and gone over the years, TCP/IP is a set of open communication protocols that can be used free of charge in every operating system and on every hardware platform.

Cloud Computing

Common ICT Standards specify interoperability and portability mechanisms to connect distributed processing clouds, resulting in faster deployment of end-user solutions, lower costs, higher efficiency, and better customer value.

Bar Codes and RFID

Technologies such as bar coding and radio-frequency identification (RFID) provide a reliable means to identify and track items. Common ICT Standards can ensure the global application of these technologies. They offer interoperability, fast and accurate processing speeds, and consistent data capture.

Source: JTC 1, *The Force Multiplier for ICT Innovation*, 2012, <http://www.iso.org/iso/ict_innovation.pdf> (accessed on 04.09.2015).

Beyond the particular importance of globally coherent Standards for the Digital Economy, ICT standardization arguably has distinct needs that differentiate it from other standardization processes.

For one, the Digital Economy is increasingly becoming part of the business model of virtually every economic sector – be it through the use of big data in production, IT-solutions for supply chain management (SCM), the distribution of products through e-commerce, or the use of cloud services for the coordination of global research and development (R&D). Already in 2011, 75 percent of all economic benefits engendered by the Internet accrued to companies in ‘traditional’ industries.⁵ Furthermore, with the emergence of the IoT, many ICT Standards will need to be compatible and combinable with other Standards. For example, common reference architectures that integrate distinct technologies are at the foundation of machine-to-machine (M2M) communications, e-health solutions, and smart cities.

⁵ McKinsey Global Institute, *Internet Matters: The Net’s Sweeping Impact on Growth, Jobs, and Prosperity*, May 2011, p. 1, <http://www.mckinsey.com/~media/McKinsey/dotcom/Insights%20and%20pubs/MGI/Research/Technology%20and%20Innovation/Internet%20matters%20-%20Nets%20sweeping%20impact/MGI_internet_matters_full_report.ashx> (accessed on 02.09.2015).

As a result, the impact of ICT standardization beyond its own sector will increase. Compatibility of ICT Standards is thus not only essential across regions, but also with other Standards. Consequently, closer collaboration between different sectors will be needed for efficient requirements gathering, use-case design, and development of implementation guidelines and other such activities.

A second distinct feature of ICT standardization is the great need for timeliness. The Digital Economy is characterized by rapid innovation, which leads to a relatively short lifespan of digital products. For innovation to continue and in order to encourage sufficient investment in R&D, timeliness in the development of Common Standards and specifications is essential. However, a point of vital importance remains - the quality of Standards that can be fostered by a broad consensus. Therefore, the quality of standardization must not be subjugated to its speed.

Security is also a key factor that must be taken into account when creating Standards for IoT. There has been significant publicity around exposure of personal data when internet-based systems have been hacked. The IoT will require an even greater attention to security to ensure that the vast numbers of 'Things' are not taken over and controlled by malicious parties with potentially devastating effects.

Common ICT Standards need to be:

- **open**, so that all interested parties can participate in the development process;
- **technically sound**, so that their use results in higher quality products and processes;
- **coherent and compatible**, with other Standards to ensure true economy-wide interoperability;
- **market-appropriate** and **relevant**, so that they ensure interoperable and cost-effective products;
- **implementable**, both technically and with regard to legal requirements so that national or regional specifications can be avoided;
- **technologically neutral**, wherever feasible;
- **designed in a way that ensures security**, so that developers, the public and governments can be assured that the huge benefits of IoT can be widely integrated without major risks of malicious hacking;
- If **fees or licenses** for intellectual property are requested when using a Standard, these should be **fair, reasonable and non-discriminatory**.

CHALLENGES TO ACHIEVING GLOBAL STANDARDIZATION

Global Standardization Fora

A distinct ICT standardization ecosystem has developed over the past three decades. At the global level, common ICT Standards are being developed in both international standards-development organizations (SDOs) and open, global, industry-driven standardization bodies. The global processes for developing common ICT Standards have proven to be capable of producing highly innovative Standards in a timely fashion. The ICT standardization ecosystem has been adapting to changing market needs and must continue to do so in order to address the increasing dependence of all economic sectors on ICT Standards. Inclusiveness, quality, and consensus-based decision-making processes are crucial elements of an effective global ICT standardization.

The balance and openness of global ICT standardization is not only about the fairness and impartiality that ensures legitimacy and user acceptance, it is also a vital requirement for the coherent implementation of Common Standards. Openness entails the equitable participation of all stakeholders, which helps in designing the Standards in such a way that they are applicable globally. Domination of certain stakeholders in global ICT standardization processes can lead to Standards designed in a way that does not take into account the requirements of all affected parties. Consequently, interoperability is hampered if Standards and specifications then need to be modified substantially to be implementable.

International Standards-Development Organizations

Traditionally, formal global SDOs such as the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and the International Telecommunication Union (ITU) have been at the forefront of global standardization processes. Alongside them have been the major regional SDOs such as the European Telecommunications Standards Institute (ETSI), the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) in Europe; Telecommunications Industry Association (TIA) and Alliance for Telecommunications Industry Solutions (ATIS) in North America; Association of Radio Industries and Businesses (ARIB) and Telecommunication Technology Committee (TTC) in Japan; Telecommunications Technology Association (TTA) in Korea and China Communications Standards Association (CCSA) in China.

The consensus-based decision-making in international SDOs ensures that the interests of all stakeholders – irrespective of their sector-affiliation or size – are adequately represented and no one region or economic actor dominates the process. A consensus-based and balanced ICT standardization is of the utmost importance to ensure that the needs and interests of all stakeholders are taken into account.

Industry-driven Standardization Bodies

The ICT standardization ecosystem consists not only of formally recognized SDOs but also of a number of open, global, and industry-driven standardization bodies (SBs) that have been leading ICT standardization. These are, for instance, the Internet Engineering Task Force (IETF), the World Wide Web Consortium (W3C), the Institute of Electrical and Electronics Engineers (IEEE), Ecma International, and the Organization for the Advancement of Structured Information Standards (OASIS).

These informal SBs are characterized by their open and participatory nature, which allows all interested parties – whether companies, technical experts, government agencies, consumer groups, or individuals – to contribute to specification-elaboration and decision-making. Informal SBs benefit from a high degree of flexibility enabled by the direct input of market-needs and technical expertise in a consensus-driven decision-making process. Thanks to this, informal SBs have been very successful in developing relevant and technically sound ICT specifications in a timely manner. Thus, they significantly contribute to the innovation and expansion of the Digital Economy.

As the digital transformation comprises an increasing number of industrial sectors, the design of ICT specifications has a major influence on business operations of companies that are not part of the digital sector. Especially in the development of specifications that are a basis for the IoT, the interests of other industrial sectors must be duly represented in order to find fair and adequate solutions. These should be based on standardization principles like openness, inclusiveness, consensus, and transparency. Open workshops, as well as liaison and cooperation agreements between standardization bodies, can contribute to an effective definition of requirements, close collaboration, and the avoidance of duplications.

Cooperation in Global Standardization

The cooperation between different standardization processes is of the utmost importance due to the considerable requirements of ICT Standards for compatibility, coherence, and interoperability. SDOs have well adapted to this premise and established substantial cooperation amongst themselves. In 1985, ISO and IEC institutionalized common hardware and software standardization by creating the Joint Technical Committee 1 (JTC1). Other initiatives such as the Global Standards Collaboration (GSC) focus on common principles and frameworks for standardization that help foster a coherent working structure amongst regional SDOs.

Furthermore, reacting to the market realities in ICT standardization, international SDOs have facilitated incorporation of input from renowned informal SBs (such as Ecma International, OASIS, W3C, and IETF) with the Publicly Available Specifications (PAS) and the fast-track procedures. Also, common workshops have been established to coordinate standardization processes.

Altogether, cooperation between international SDOs and informal SBs has improved in the last few years, although some institutional jealousies may remain. Joint working groups and coordination committees can help in avoiding duplication as well as instances of incoherence.

Cooperation is especially important for IoT-standardization. A multitude of platforms have been created, for instance the oneM2M, which is a global partnership of regional SDOs following the example of 3GPP, the IoT-initiative by IEEE, or the Joint Coordination Activity on IoT (JCA-IoT) by ITU. Since technologies from distinct fields are involved in the IoT, open, consensus-based platforms that include stakeholders from all sectors and regions are crucial for the development of an adequate IoT-architecture.

The Role of Governments in the Implementation of Common Standards

Policy makers and societies need to be prepared for technology of the future. In order to attain this goal, they will need a clear understanding of how technology might shape the global economy and society in the coming decades. Policy makers can encourage development of the technologies that are most relevant to their economies by having a structured mechanism for the decision-making process of investing in new forms of infrastructure. Implementation of common ICT Standards has a crucial impact on the international success and penetration of the new technologies and consequently on increasing the social welfare.

While the use of common ICT Standards can provide significant benefits, their mere existence is not enough to ensure the coherent implementation that sustains international compatibility and interoperability. Reaping the benefits of Common Standards ultimately depends on how they are used at the regional and national levels. Ideally, the use of Standards is voluntary and standardization processes are market-driven. However, governments can significantly foster or hamper the dissemination of globally coherent Standards.

National Standardization

Operators, other ecosystem players, as well as governments and regulators all have a role to play in disseminating digitalization and improving the reach and affordability of mobile technologies.

Governments set the framework for the operation of national standardization bodies (NSBs). NSBs that can operate independently, as open platforms, are fulfilling their role in seeking the most adequate solution for all stakeholders. When implementable common ICT Standards are available, their adoption by NSBs usually represents the best solution for business and consumers.

Governments can support global interoperability by making information widely available. For instance, certain governments have developed interoperability frameworks and reference lists that provide recommendations regarding the choice of internationally available Standards in specific contexts. Also, Standards landscaping and roadmaps can help provide guidance on internationally available Standards and specifications, thereby promoting their implementation.

However, certain governments manipulate national ICT standardization in NSBs in the pursuit of misguided 'indigenous innovation' schemes. In these cases, NSBs are put under pressure to develop country-specific Standards that are designed to insulate the local economy from foreign competition. This includes diverging from adequate internationally available Standards and adopting ICT Standards that refer to locally-developed patents or technologies. In this way, standardization is used to construct de-facto local content requirements. Forbidding meaningful foreign participation in national standardization processes is especially harmful to the global economy. The participation of foreign stakeholders can ensure that even in the absence of common ICT Standards, appropriate attention is given to international interoperability and compatibility.

Manipulating standardization effectively turns Standards into protectionist tools that are also harmful to the local economy. Artificial trade barriers constructed by country-specific ICT Standards exclude local companies from global value chains, technology diffusion, and competition, thus impeding rather than encouraging 'indigenous' innovation.

Public Procurement

One of the main concerns in public ICT procurement is to ensure interoperability and compatibility between the different goods and services purchased by governmental agencies. Referring to open ICT Standards in public procurement tenders is a much more beneficial way of ensuring interoperability rather than referencing a specific technology that is accessible only to certain companies. Well-adjusted use of Standards in public procurement allows for fairer and greater competition, which saves tax-payers money.

On the other hand, referencing Standards in public procurement effectively constitutes soft regulation, since the market power of governments as consumers for ICT-related goods and services has a significant impact on the market adaptation of Standards. In the European Union alone, more than euro 78 billion is spent annually on public ICT expenditures.⁶ The design of tenders can foster the implementation of efficient, globally coherent Standards but they can also be misused as a protectionist tool to discriminate against foreign parties by locking in country-specific Standards.

⁶ European Commission, *Against Lock-in: Building Open ICT Systems by Making Better Use of Standards in Public Procurement*, 25.6.2013, p. 3, <<https://ec.europa.eu/digital-agenda/en/news/against-lock-building-open-ict-systems-making-better-use-standards-public>>.

Regulatory Policy

The most direct impact governments have on the use and development of Standards is through regulation. The implementability of Common Standards at the local level fundamentally hinges on the legal framework regarding the provision of goods and services. For ICT Standards, this mainly involves regulations about data protection and cybersecurity. If these substantially diverge, or are even contradictory, between countries, country-specific Standards or significant local alterations to internationally available Standards will be needed. Diverging regulations thus put a considerable strain on international interoperability and compatibility by rendering the development of Standards that are globally implementable in a coherent way impossible.

If technical requirements are not applied in the least trade-restrictive manner and are internationally inconsistent, the use of globally coherent Standards becomes unfeasible.

Regulatory Cooperation in Free Trade Agreements

Current free trade negotiations, such as the Transpacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (TTIP), place considerable focus on the harmonization of regulations, technical requirements, and use of Standards. Hereby, they could significantly contribute to a globally coherent use of ICT Standards. Institutionalized regulatory cooperation fosters interoperability by ensuring continued coherence in regulatory and standardization processes. Lack of it at present is one of the major gaps in the current international trade regime.

RECOMMENDATIONS

Global Standardization Fora

The distinct ecosystem for the development of common ICT Standards and specifications has worked well to sustain the growth and innovation of the Digital Economy. Through the development of high-quality open Standards, it has enabled innovative systems and technology integration.

As the Digital Economy is increasingly encroaching on other industrial sectors, perpetual adaptation is needed to assure the continued adequacy of ICT standardization for the needs of all stakeholders. This effectively includes all economic actors.

While not necessarily appropriate for standardization in other industrial sectors, the development of specifications through open, informal SBs have significantly helped to address specific needs for timeliness and flexibility. Rather than trying to impose their standardization system on each other, informal SBs and SDOs should continue to increase their cooperation on the basis of consensus-driven processes. This is important in order to avoid duplication or conflict in standardization. While competition in Standard-setting is

part of the market economy and contributes to the assertion of the most market-appropriate Standards, duplication and Standard wars lead to a waste of resources and the risk of damaging coherence and fragmenting markets.

Cooperation is important to assure the coherence and compatibility of ICT specifications with other Standards. ICT solutions are increasingly used as enabling technologies in all sectors. SDOs and informal SBs should cooperate in ways that allow for the concerted, consensus-based development of ICT and other Standards needed, for instance, for IoT-infrastructure and -devices. While a number of adequate platforms exist, ‘platform wars’ about Standards must be avoided. Conflicts in standardization could impede a globally coherent deployment of the IoT and its enormous benefits.

Besides coordinating working-processes and -agendas, the transposition of specifications developed by informal SBs into SDOs should be pursued when appropriate – for instance in Industry 4.0. Transposed specifications should be maintained by those who have the expertise and the critical mass for consensus-building. The availability of existing procedures such as PAS or the fast-track procedures should be broadened in this regard.

To ensure their continued relevance in ICT standardization, informal SBs should proceed with their efforts to enable stakeholders of any size and from any industry to engage equitably in the consensus-based development of specifications. The participation of SMEs and non-digital-savvy companies can, for instance, be encouraged through accessible and transparent working-processes.

Role of Governments

Common Principles

Standardization processes that are industry-led, open, consensus-based, and coherent can foster trade, productivity, and innovation and result in improved product and investment value. Rather than striving to develop Standards themselves, governments should set adequate frameworks to ensure that standardization processes have a high-quality outcome that is beneficial to both businesses and consumers.

As business operations relying on digital solutions effectively function in a borderless world, a global Standards paradigm is needed. G20 governments should adopt common disciplines on ICT standardization. A joint approach to ICT standardization can ensure that Standards are based on efficient, market-appropriate, and open solutions worldwide. This would also increase the chances of coherent and compatible Standards even in the absence of internationally available Standards. Most notably, governments should commit themselves to refraining from manipulating standardization processes in order to discriminate against foreign companies and insulate the local economy from competition.

Common ICT Standardization Principles

Meaningful participation must be **open** to all interested parties, independent of their nationality, size or sector-affiliation.

Decision-making must be **consensus-based, inclusive** and **balanced**, taking into account the needs of all materially affected parties.

Standardization must be **transparent**, so that information is easily accessible for all interested parties.

Standardization should be **voluntary** and **industry-led**, since it is the industry that best knows market-needs. This ensures the **relevance** and **effectiveness** of outcomes.

Working processes must be **coherent**, and in particular avoid divergence from internationally available Standards.

Standardization processes should be **coordinated**, to ensure economy-wide and international compatibility as well as interoperability.

Procurement Guidelines

Governments should strive to make better use of ICT Standards and specifications in procurement by giving appropriate preference to Common Standards and specifications. This will allow greater competition in procurement, whereby governments can save money and have access to a wider variety of goods and services. Furthermore, referencing internationally available Standards and specifications in procurement can encourage markets to adopt these in all of their operations, which will be beneficial for the entire economy and consumers.

Many global ICT specifications are developed by informal SBs. Governments should adapt to market realities. Therefore, in ICT procurement, governments should reference not only Standards developed by international SDOs but also global specifications developed by informal SBs. A common approach to the use of Standards in procurement is important to avoid market fragmentation. G20 governments should draft a common list of informal SBs that respect the WTO-criteria of sound standardization and whose specifications can therefore be referenced in ICT procurement.

Technical Requirements and Regulatory Cooperation

Referring to Standards in regulations turns a voluntary Standard into a legal, technical requirement. Especially for the Digital Economy, the use of technical requirements should be avoided, since an effective lock-in of certain Standards or technologies nullifies the main advantages of digitalization: continuous innovation and network effects.

When technical requirements are necessary for public interest, governments should commit themselves to applying the principles of the WTO-Agreement on Technical-Barriers-to-Trade (TBT). Respecting the TBT-principles can ensure that technical requirements are as least trade restrictive as possible. A common international approach to technical regulation can help to minimize the negative effects on interoperability and compatibility.

Technical Requirements Should:

- be as **least trade restrictive** as possible;
- be **regularly reviewed**;
- apply appropriate preference for **international ICT Standards** adopted by international SDOs;
- be **technologically neutral**;
- provide for the **mutual recognition of conformity** tests.

Ideally, governments should prescribe only the essential legal requirements in regulations. Technical details should be defined in specifications. If those specifications become formally recognized (harmonized) then economic operators, for instance manufacturers, can demonstrate compliance with the mandatory legal requirements by using these formally recognized specifications. The use of Standards must remain voluntary. Economic operators should always be free to choose other technical solutions to meet mandatory legal requirements. However, economic operators could then benefit from a presumption of conformity when implementing formally recognized Standards. Otherwise, they would have to prove that their technical solution meets the essential requirements of the applicable legislation.

Regulatory policy also has a significant impact on the use and development of Standards by setting the legal framework that ICT-goods and -services must respect in order to gain market access. If regulation considerably differs amongst countries, Standards may have to diverge significantly to respect the respective legal requirements. Governments should thus ensue in regulatory cooperation to ensure that Common Standards can increase interoperability and lower transaction costs.

Fostering Common ICT Standards through Free Trade Agreements

The institutionalization of regulatory cooperation can significantly contribute to the harmonization of existing regulations, technical requirements and Standards, as well as in the continued coherence of work processes in regulatory and standardization bodies. A focus on continued cooperation is especially important for an innovative Digital Economy.

Reliable and trusting cooperation among both regulatory and Standard-setting bodies brings considerable benefits to businesses and consumers by opening markets, increasing interoperability, and fostering mutual recognition of conformity.

The harmonization of technical requirements and Standards in free trade agreements (FTAs) must contribute to both bilateral and global interoperability. Therefore, firstly the focus should be on establishing globally applicable and adequate principles. Secondly, rather than developing new specific bilateral Standards that could lead to trade diversion, the harmonization of technical requirements and Standards should, wherever possible, be based on internationally available Standards. Hereby, the coherent use of Standards will be encouraged. This will also substantially benefit third parties, as a common use of Standards will decrease the need for country-specific product alteration and multiple conformity tests. FTAs should aim to implement the principle - *one Standard, one test, accepted everywhere*.

This statement is issued in
Berlin, Brasilia, Brussels, Buenos Aires, Istanbul, Johannesburg, London, Madrid,
New Delhi, Ottawa, Paris, Rome, Seoul, Sydney, and Washington, D.C.
by the B20 Coalition members

ABOUT THE B20 COALITION

The B20 Coalition brings together leading independent business associations
from G20 economies and operates as a worldwide exchange platform
between national business communities, aiming at building consensus and developing
common positions on critical issues for enterprises.

Through its broad-based representation, the Coalition
on behalf of more than 6.8 million businesses of all sizes and from all sectors
engages policy-makers on a global scale and advocates
policies that contribute to global growth and job creation at regional and international levels.
The Coalition is instrumental, notably, in supporting the G20 process
and ensuring continuity over successive Country Presidencies.

B20 COALITION MEMBERS

*Ai Group, Australia · BDI, Germany · BUSA, South Africa · BUSINESSEUROPE, Europe
CBI, United Kingdom · CCC, Canada · CEOE, Spain · CII, India · CNI, Brazil · Confindustria, Italy
FKI, South Korea · MEDEF, France · TÜSİAD, Turkey · UIA, Argentina · US Chamber, USA*



CONTACT US

Presidency
360 Albert Street Suite 420 Ottawa, ON K1R 7X7

Secretariat
55, avenue Bosquet 75007 Paris France
Email: secretariat@b20-coalition.org

FOLLOW US

on twitter [@B20Coalition](https://twitter.com/B20Coalition)
on our website at www.b20coalition.org
and join our business community on LinkedIn at [B20 Coalition](https://www.linkedin.com/company/b20-coalition)

