EU - Japan Business Round Table
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Recommendations of the EU-Japan Business Round Table to the Leaders of the European Union and Japan

[Tokyo, April 19-20]

Working Party C
Information & Communication Technologies (ICT)

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List of Abbreviations

AEO	Authorized Economic Operator
COP	Conference of the Parties
GeSI	Global e-Sustainability Initiative
GHS	Greenhouse Gas
ICT	Information Communication Technology
ICT4EE	ICT for Energy Efficiency
IT	Information Technology
JBCE	Japan Business Council in Europe
MOU	Memorandum of Understanding
NGN	Next Generation Network
PUE	Power Usage Effectiveness
WP	Working Party

Recommendations Supported by European and Japanese Members

New Path for Growth by Adoption of ICT

C-EJ-1: Sustainable Growth towards Low Carbon Society

At the Fifteenth Conference of the Parties to the United Nations Framework Convention on Climate change (COP15) held in Copenhagen last December, the Conference of the Parties "took note of the Copenhagen Accord," and the participants could not agree on a post-Kyoto Protocol framework. However, climate change continues to be one of the biggest challenges for both industrialized and developing modern societies.

The Japanese government stated that Japan will aim to reduce its emissions by 25% by 2020, compared to the 1990 level, on the condition that a fair and effective international framework is established in which all major economies participate.

In March 2007 the EU's leaders endorsed an integrated approach to climate and energy policy. The EU Heads of State and Government set a series of demanding climate and energy targets to be met by 2020. These are:

- A reduction in EU greenhouse gas emissions of at least 20% below 1990 levels
- 20% of EU energy consumption to come from renewable resources
- A 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.

Collectively these are known as the 20-20-20 targets.

The EU leaders also offered to increase the EU's emissions reduction to 30%, on condition that other major emitting countries in the developed and developing worlds commit to do their fair share under a global climate agreement.

To achieve these goals, authorities should prioritize the role ICT can play in achieving a low-carbon society. Studies such as the GeSI SMART 2020 study have shown that the benefit of wide utilization of intelligent ICT solutions can lead to 15% global emissions reductions in other sectors by 2020. Greater deployment of ICT and high-tech solutions are therefore key to unlocking energy-saving potential in other sectors.

In its recommendation “on mobilizing ICT to facilitate the transition to an energy-efficient, low carbon economy” issued in October 2009, the European Commission asks the ICT industry to even exceed the overall 2020 reduction targets by 2015.

Countermeasures against climate change can not be seen just as a burden and should be recognized as new opportunities to promote growth.

In response, the ICT sector has announced the creation of an ICT for Energy Efficiency (ICT4EE) Forum. It is supported by four key industry associations of the sector (Digital Europe, GeSI, JBCE and TechAmerica). Green IT Promotion in Japan also has signed a MOU with ICT4EE.

The Forum is pursuing the ambitious goal of not only improving energy-efficiency processes in advance of the EU 2020 targets but also taking a global and harmonized approach. Progress towards such targets should be measurable and verifiable. Therefore the forum intends to adopt and implement a common framework to measure the sector's energy and carbon footprints, set targets, and benchmark progress. Moreover, it will also initiate dialogues with specific sectors (building & construction, transport & logistics, energy supply) with the aim of identifying how ICT solutions can contribute to the more intelligent and efficient use of energy. When it comes to this kind of initiative, Japanese and European authorities should play the role of a facilitator, e.g. regarding the dialogue between the ICT sector and other sectors.

GHS emission reductions by ICT in other areas are known around the world, so we recommend that the EU and Japan act as aggressive regions on environmental activities to conduct a campaign for enlightenment.

In order to expedite the introduction of solutions, we continue to request the governments of both the EU and Japan to support the development of common metrics and processes for the measurement of GHG reduction by ICT, such as the ongoing efforts in ITU which visualize reduction effects in terms of the environmental burden, thus improving persuasiveness in the market.

With the spread of cloud computing, data centers are expected to be the area where power consumption will increase in the future. Therefore, as common metrics, in addition to IT equipment and IT solutions, data center energy efficiency is important. PUE is the most popular index in this field but PUE only shows the efficiency of the data center facility. The Green IT Promotion Council is creating the new index “Datacenter Performance per Energy (DPPE)” covering overall productivity, including IT equipment. We propose to use this index for environment-related institutional settings.

Both the governments of the EU and Japan are recommended not only to promote R&D and field trials for innovation, but also to share the results to enable others in developed countries and developing countries, where we foresee that the use of ICT applications will be expanded in the future, to contribute to the development of a low-carbon society.

ICT-enabled infrastructure such as smart grids has a huge potential for the reduction of greenhouse gases. Smart grids can contribute to lower energy consumption not only in buildings, but also with regard to energy distribution. They allow for decentralized and flexible energy supply and distribution, which is essential for an efficient use of renewable energy sources. Most renewable sources are volatile and often unpredictable in nature, as they depend on natural phenomena to generate power. Thus, any type of power infrastructure using a significant portion of intermittent renewable energy resources benefits from having means of effectively managing supply and demand. Efficient network management relies on real-time data from multiple sources instead of historical average consumption data. Smart metering can provide this real-time information. As a result, the roll-out of smart meters is a prerequisite for smart grids. It is therefore essential that authorities support and encourage the roll-out of smart meters as much as possible. To accelerate investment in this area, authorities could start a dialogue with industry with regard to the harmonization of meter features, data protocol, data privacy, and data security.

C-EJ-2: Knowledge-Based Growth

Both the EU and Japan are establishing a long-term growth strategy plan for growth not only as a short-term response to recover from the economic crisis. The ICT industry should play a strategic role in economic growth, job creation, and innovation. ICT is functioning as social infrastructure of all industries, and strategic use of ICT is effective in the economic policy for each industry. Thus, ICT strategy should be consistent with growth strategy.

Knowledge-based growth will be achieved by the creation, distribution, and sharing of knowledge among societies. Therefore, the Next Generation Network (NGN), cloud computing, and supercomputers are key components.

Both governments are encouraged to continue their efforts to create regulatory and economic incentives for the utilization of NGN. Cloud computing has the potential to enlarge the application fields of ICT in e-government, healthcare, education, green IT, local revitalization, and agriculture. In order to promote strategic investments in those fields, a regulatory review in each sector for cloud computing deployment is required. Existing information systems need innovative and continuous overhauls to address changing needs from society and the latest technologies.

ICT's role as an engine for knowledge creation also needs to be recognized. The next-generation supercomputer will drive the advancement of simulation technology and provide innovation in R&D. Computing capability of the next-generation supercomputer will enable us to solve highly complex problems in physical science and life science. Using simulation results, development time and the cost of new products will be significantly reduced and bring about innovative ways of manufacturing. Furthermore, supercomputers are also useful for large-scale complex systems like nature. Emulating nature will contribute to addressing global social problems such as climate change.

New Regulatory/Institutional Framework that Paves the New Path for Growth

C-EJ-3: Taxation System that Supports the New Path for Growth

(Applying reduced VAT rate to eBooks)

We strongly support a reduced taxation rate on "culture." In the EU, the long-standing application of a reduced VAT rate on culturally worthy products has helped to spread fine culture widely and rapidly at lower prices, and has highly contributed to the development of rich culture and improvement of the quality of life.

The latest innovation provided us with the new option of reading books by electronic means, i.e. eBook, rather than on paper. In light of the lower price, availability of contents, search performance, and resource saving, this new method provides even better access to fine culture than the original method. Consumers, however, are obliged to bear a higher cost to enjoy the benefits of the latest technology due to the fact that the eBooks are subject to the standard VAT rate in the EU. Respecting the spirit of a reduced VAT rate for "culture" and in order to end the unnecessary discrimination against eBooks compared with paper books, we urge that eBooks be taxed at the reduced VAT rate in the EU, and at most at the same rate as paper books.

(Greenhouse Gas Emissions of Data Centers)

Regulations have been introduced in the UK and Tokyo to make it obligatory to reduce the total amount of CO2 at each facility in an effort to reduce greenhouse gas emissions.

Data centers house integrated server and network equipment, and as the equipment operates 24 hours a day, the power consumption per floor area is

large. However, the outsourcing of equipment to a specialized operator and management in a data center will make for more efficient operation than the individual companies' management of IT equipment, because of the sharing of air conditioning and power facilities and virtualization technology. We request governments to recognize the contribution of data centers to a low carbon society. These must be taken into account when considering additional requirements for operators of data centers, which would hamper their competitiveness in relation to general offices.

C-EJ-4: Data Protection, Utilization, and Security in the Cloud Computing Era

The significance of cloud services is not only the efficient use of IT infrastructure, but the crossing of business and industry borders. The social system as a whole can promote the integration and sharing of vast amounts of information and knowledge. Consequently, an "information society" with the participation of all individuals and companies can be realized.

Along with the expanded use of ICT, accelerated information storage is enabling new value-added services through cloud computing. In the near future, new services with cloud computing that handles enormous data process such as real-time stream data can be deployed as a new infrastructure for our businesses.

The connected society and cloud computing are crucial elements in that process. Cloud computing is a mechanism to provide computing resources in data centers through fixed or mobile IP connectivity. The development shows that mobile connectivity is rapidly evolving to become the default connectivity of most devices of the future. Indeed, fixed connectivity will fulfill the extreme bandwidth demands of specific areas and devices.

On the technology side, high dependability must be ensured to deploy cloud computing as an infrastructure for businesses of the EU and Japan. Government support is expected for the promotion of R&D and standardization of the basic technologies that underpin operational continuity, security, data storage, and the process of stream data. A technology for anonymizing the large amount of data can convert the data into highly value-added services, and is critical in promoting the use of cloud computing.

Last but not least, governments should foster a secure feeling in the market about cloud computing by deploying it for their e-Governments and presenting successful cases. UK is one example of a country having recently adopted an ICT strategy which is aiming at the establishment of a government cloud, or "G-Cloud".

The government cloud infrastructure will enable public sector bodies to select and host ICT services from one secured, resilient, and cost-effective shared network.

Cloud services will provide enterprises and private users with a variety of services. These services may vary from simple text-based information services to high resolution multi-media services providing the user with a rich experience. In order to cater for this, the governments of both Japan and the EU should stimulate the introduction of mechanisms where the cloud and its services can request and get a different quality of service from the underlying network (NGN).

C-EJ-5: The Right Regulatory Environment for Investment in NGN

High-speed broadband networks are the decisive input factor for achieving all other ICT-related policy objectives since they provide the basic underlying infrastructure needed to make nearly all other services and applications of the future information society a reality. Cloud computing is just one example of the future applications that depend on high-speed broadband deployment. Academic research and empirical evidence have shown that a widespread and reliable broadband infrastructure will improve productivity, stimulate innovation, accelerate growth, and create jobs. Demand for bandwidth at work, at home, or on the move is growing constantly. High-performance fixed and mobile telecommunications infrastructures have thus become a decisive factor for the global competitiveness of modern knowledge-based economies. Hence, social development as well as future growth and jobs will largely depend on the ability to provide for an innovation- and investment-friendly regulatory framework. When regulating, authorities should take into account the investment risks companies are willing or not willing to take and come up with differentiated regulatory responses targeted to the amount of investment risks companies are willing to take. On top of that, regulation should provide for the necessary legal certainty for investors.

Due to different subscriber density and demand in different regions and over time, different technologies and topologies are best suited for different scenarios. Therefore the principle of technology neutrality in any regulation is crucial. It is also important to let different technologies evolve on their own merits and not to stifle innovation and hamper investment by making regulation prescriptive on technologies.

C-EJ-6: ITA & Trade Security

(ITA)
The expansion of the Information Technology Agreement (ITA) is crucial for Japan's and Europe's future, not only as a factor of development of a major industrial sector in its own right, but also as a driver of productivity, innovation, job creation, improved competitiveness, and service quality in virtually all other

industrial sectors and public services. In particular, the focus should be on the following aspects.

The scope of the expansion should cover the products determined as being included within the scope of the current agreement plus additional products. The broadest possible expansion of the scope of the ITA, including at least large portions of chapters 84, 85, and 90 is needed in order to ensure that current and future innovative technological developments do not result in uncertainties regarding product classification. It is noted that there are concerns around the world over ITA-covered products being reclassified as dutiable. In fact, some new convergence-technology ITA products have already lost their zero-tariff status. Such expansion would boost trade in the whole electronics sector, remove uncertainties regarding product classification, and would ensure the reflection of technological developments in the sector as future products would also be expected to fall within these chapters.

The removal and prevention of non-tariff barriers is of utmost importance for the Japanese and European electronics industries. Every positive development in terms of both extended product scope and additional participants of the ITA would be compromised if non-tariff barriers were not properly addressed, resulting in a deteriorated level playing field in the other current and future ITA member states. Unfortunately, the use of Non Tariff Barriers (NTB's) often increases after abolition of duties and taxes.

Many more countries should be encouraged to participate in the new agreement. Many non-participants still levy high duties on and impose many NTB's against imports of IT products. Thus membership should be promoted as a means of boosting efficiency and productivity, improving the investment climate as well as a necessary tool to bridge the digital divide and enable the move to a more energy-efficient and climate-friendly society.

Finally, the establishment of effective mechanisms is needed to keep the new agreement up to date to ensure that technological developments are reflected in the agreement.

Taking into account these aspects, Japan and the EU should drive not only maintenance of the current ITA but should jointly strive for a review of the ITA as soon as possible.

(Striking a Balance between Security and Facilitation of Trade)

Amid a global trend of stricter security measures, the multinational companies which build the international supply chain have been taking action to pursue supply chain security by striking a balance between security and the facilitation of trade.

However, neither Authorized Economic Operator (AEO) programs nor the advance cargo manifest declaration rules developed around the world based on the WCO SAFE Framework on Standards are necessary the same, and excessive tightening of regulations such as Importer Security Filing and Additional Carrier Requirements (U.S. "10+2" Program) is enforced. The multinational companies of the EU and Japan share concerns about further burdens on businesses and unwanted hindrances to smooth trade as a result of such regulations.

In such an environment, we repeat that the EU and Japan must lead the international harmonization of trade institutions to strike a balance between security and the facilitation of trade, and to realize efficient public-private operation.

More specifically, governments are expected to:

(1) Implement the mutual recognition of AEO programs between the EU and Japan as soon as possible, and exempt from the application of the EU advance cargo manifest declaration rules, just like the case admitted by the mutual recognition of AEO between the EU and Switzerland;

(2) Standardize the importing and exporting declaration data based on the WCO Customs Data Model (*) and exchange electronic information. Finally, we hope that export declaration data in Japan become import declaration data in the EU.

As the world economy is still sluggish, the EU and Japan should take a leading role in striking a balance between international supply chain security and the facilitation of trade by a launching positive initiative with ICT infrastructure.

*: Mandate in Lyons summit (G7) in 1996

C-EJ-7: Fundamental Review of the Copyright Levy System and the Compensation System for Audio and Video Private Copying

In order to promote further lawful use of digital content, it is necessary to implement dialogue/cooperation between the EU and Japan concerning a fundamental review of the compensation system for private copying. Currently compensation is paid by means of copyright levies, a system which dates back to the analog era (at least in Europe). Copyright levies are a way of compensating for revenue loss caused by private copying, but they are not intended to fight piracy.

This move is based on existing common business models utilizing DRM, as well as other emerging business models, including the on-line distribution of content on the basis of contracts with individual users, which is also expanding. In these cases copyright levies may impose a double payment for consumers.

Furthermore, the rules of the current levy system vary enormously across Europe. There is no European benchmark for determining what products are subject to levies, or what amount is to be charged.

In reviewing the systems, we should take into consideration in a comprehensive manner the methods available, including the above new content distribution practices, to secure compensation for private copying for right holders and creators. The goal should be to enable the establishment of a system which is transparent, fair, and equitable to such interested parties as consumers, right holders, service providers, and equipment providers.

This increased transparency and legal certainty can be achieved only through the application of objective European criteria by a political and legislative intervention at the European level. The European Commission and member states must therefore ensure that private copy compensation remains firmly on the agenda as a priority in the wider copyright debate on the European digital economy agenda.

Recommendation Supported only by Japanese Members

C-E-1: International Transfer of Personal Data in the Cloud Computing Era

The international harmonization of regulations and international data transfer regime between EU and Japan should be streamlined so as to develop a better environment for businesses to mutually provide highly value-added services. The objective should be to build and implement a reliable and cost-effective regime for businesses in the EU and Japan. In this regard, the European Commission should consider granting the adequacy status to Japan on condition that data importers in Japan have obtained the Japanese Privacy Mark.