Recommendation to the Leaders of the EU and Japan
EU-Japan Business Dialogue Round Table
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Information and Communication Technology Working Party

In its conclusion of the July 2001 EU-Japan BDRT, Working Party 5(IT/Electronic Commerce) decided to support the acceleration of the e-Europe/e-Japan initiatives with particular focus on the rapid implementation of the new regulatory framework promoting fair competition and on increased cooperation on network and information security.

As the Working Party 5 has accomplished its initial objectives and with the rapid development of ICT, it has become increasingly difficult to separate issues covered by WP3(standardization relating to ICT) and WP5(IT/eCommerce). Therefore, member companies of these Working Parties have decided to restructure them and replace them by a New Working Party that covers ICT related issues. In order to support the EU and Japan to become the most advanced ICT nations in the world, we need to discuss issues covered by the two WPs without separating the issues. This will allow for a more effective and efficient discussion.

ICT WP believes that the issues of the speedy implementation of IPv6, Protection of IPR through technological Protection measures and DRM, the promotion of the Smart Card System and creating a favorable policy environment for New Multimedia Services are of critical importance. Although we are aware that the governments of the EU and Japan have made valuable efforts in this regard, we urge them to take further initiatives that take into account the urgency of these issues.

1. Japan-Europe Initiative for Speedy Implementation of IPv6
Issue Description
The number of IPv4 addresses will likely be exhausted by 2005 at the earliest. In particular, the shortage of addresses will become a pressing issue in areas like Asia and Africa, where the number of Internet users is expected to rise in the coming years.
Always-on access to the Internet is essential to fully utilize the broadband network, and the need for additional addresses will become even greater. Because Ipv6 will provide an almost unlimited number of addresses compared with IPv4, it is an absolute necessity for the broadband era. It will foster cultural diversity in the network by expanding the capacity of information that can be freely disseminated. In that sense, IPv6 will benefit all nations, corporations, and individuals.

While IPv6 provides tremendous advantages compared to IPv4, IPv6 wide deployment will take time because a substantial investment has already been made in IPv4 Service Provider and Enterprise Networks, and IPv6 would require new investment where everything has to be built from scratch. Fortunately standards bodies have put in place mechanisms to fix, in the short term, IPv4 inherited issues- e.g. Network Address Translators (NATs), Class-less routing- while smoothly migrating IPv6. Taking into account the fact that, in order to be successful, the migration from IPv4 to IPv6 could not take place "in one night", the industry should be encouraged to satisfying both needs by developing, IPv6 native products, solution to interconnect both worlds, and solutions to migrate current IPv4 network to IPv6.

In terms of its economic impact, the implementation of IPv6 will revitalize industries by providing opportunities for the creation of new businesses as well as the integration of existing businesses with the network.

We expect private corporations to be IPv6-ready in terms of their technology/system, networks (backbone, fixed lines, mobile), service providers, and terminals by 2004.

Recommendations

We understand that the governments of Japan and the EU see the need to implement IPv6 through the e-Japan and e-Europe programs. Because there are limits to efforts at the private level, the governments must clarify their support scenarios and devise policies to promote the speedy implementation of IPv6.

The proliferation of IPv6 requires an approach from both ends of its use, namely, the infrastructure and terminal devices. There are various ways to accomplish this, including reducing the tax burden by accelerating depreciation and providing subsidies to the service providers and users.

As with IPv4, Internet crimes and leakage of personal information should be seriously considered when deploying IPv6 to assure privacy protection and avoid social system issues. Specifically, IPv6 security capabilities are identical to those provided by IPv4, except that they are built-in and not adds-on as in IPv4. However, once it has been resolved, IPv6 will offer greater ease of use and simplicity than IPv4.

We recognize the efforts of the Japanese and the EU governments to adopt e-government systems in their administrative functions, and from a longer-term perspective, we recommend that further efforts to adopt information-age systems be pursued with IPv6 in mind.

We hope that the governments of Japan and the EU will play a leading role in the speedy implementation of IPv6 at the international level.

2. Protection of IPR through technological protection measures and DRM

Introduction

The availability of a wide range of content and the robust protection of intellectual property rights is closely linked. Content providers should have an incentive to grant access to their content on the Internet through an effective protection of technological measures and the development and deployment of Digital Rights Management Systems ("DRM").

Issues

The WIPO Copyright Treaty of 1996 obligated the contracting parties to provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures. Also, the Treaty obligated the contracting parties to provide adequate and effective legal remedies against the removal or alteration of any electronic rights management information without authority as well as against the distribution, importation for distribution, broadcasting or communication to the public, without authority, of works or copies of works knowing that electronic rights management information has been removed or altered without authority. The contraction parties have implemented or will implement in the near future the above obligations by revision of each national law.

The demand for, and the supply of, content is important to the development of broadband around the world. It is vital that piracy is minimized as much as possible so that content providers have the confidence to make their works available on-line. The deployment and take-up of effective digital rights management tools are key to realizing this objective.

Recommendations

All stakeholders should facilitate open and interoperable standards for technological protection of content in order to support the supply of demand-oriented media-rich content to foster new forms of consumption.

Proper DRM solutions should also be based on open and interoperable standards to open opportunities for all stakeholders in the digital value chain. Especially, such solutions should be designed in a way that increases the business opportunities for all such stakeholders.

3. Promoting the proliferation of the smart card system

Introduction

The smart card system has been used to control the forging of credit cards / debit cards. In recent years its importance as a means of user authentication / safety data storage, is becoming widely recognized at a time when broad Internet use has fostered electronic commerce.

The system is positioned as one of key infrastructures that shape a safe and secure ICT society. Along with the PKI authentication system, there is a strong need for proliferating its use and improving the social environment to facilitate it.

Current Status and Issues

In Europe, smart cards have been used mainly in financial services and in mobile phones with the SIM-cards. Current or trial use is being conducted in a wide range of areas from administration to communications, although with some fluctuations between countries in the extent of progress.

Japan has begun using the system for the payment of public telephones, highway tolls and public transport. A large-scale deployment experiment on smart cards for both administration and private-sector services is also underway using contactless smart cards.

Yet, in order to proliferate the use of the smart card system as a social infrastructure, efforts must be made to enhance user convenience and the added value of having such cards, providing attractive application services and offering access to various services at various venues to users with only a few smart cards.

Currently, Japan and Europe are both working toward achieving multi-purpose use and mutual compatibility among different smart card systems. Propelling a partnership between Japan and Europe in enhancing such efforts and developing the environment for smart card use, is expected to contribute to the goal of building a secure ICT society and achieving further economic development in the regions.

Recommendations

• **Active use of smart cards in administrative services**

The government should actively introduce the use of smart cards in its preparation for building e-Government, and make active efforts to developing the environment for its use, e.g., installing smart card terminals and preparing legal systems associated with its use. Smart cards issued for administrative services, should be designed to allow multi-purpose use, including use in private-sector services.

- **Ensuring mutual compatibility among smart card services**

Japan and Europe are making a joint approach to achieve multi-purpose use and the mutual compatibility of various smart cards, as seen in examples such as NICSS-SCC partnership and SmartMEIJI. The public and private sectors should further promote this type of activities to enhance the system's usability and convenience in a wide range of areas.

- **Creating new applications for promoting the use of smart cards**

In order to provide users with attractive smart card services and advantages of using the system, the private and public sectors of Japan and Europe should join forces in creating new application services and improving the environment for such development.

4. New Multimedia Services

Issue Description

The convergence between telecommunications, media services and information technology is reshaping the entire global communications market. In particular, key developments in broadband technology have allowed for New Multimedia Services to become available and increasingly affordable. Combining voice, data and video, these new services can be delivered on various types of networks, typically fixed, mobile or satellite, and enable access to innovative and interactive content.

The advent of a mass market of these services will be giving rise to new business models for telecom carriers, content aggregators, content owners, technology suppliers. These services constitute a real potential for invigorating economic growth, for achieving public policy goals such as education and for fostering international cooperation and development.

In order to ensure the success of these services, the key elements are:
- The need for an open and interoperable technology environment characterized by industry-led global standards.
- The need for public initiatives such as the recently adopted *e*Europe Action Plan to stimulate these services and foster consumer demand, and consider public support where there is no/not at present commercially sustainable business cases to deploy broadband infrastructure and content services.
- A regulatory environment tailored to the nature of these services and a coherent approach to these regulatory principles at global level.

Current Status

In Europe, the regulation of telecommunications and media services is at a crossroads. Until now, the prime objective of telecommunications regulation has been geared towards maximizing competition for voice and data services to declining prices for end-users. This

objective is now largely achieved. Furthermore, in terms of competition parameters, key changes have been occurring that must be taken into account:

- Competition on voice telephony is increasing between fixed and mobile networks.
- In many countries competition exists between telecom and cable networks for voice and Internet access.
- The local loop unbundling "learning curve" is being overcome, competition is increasing and both EU National Regulatory Authorities and the Commission have committed to tackle the access monopoly.

There is a significant development with the recent adoption of the European Union's new communications Regulatory Package. It creates a new framework favorable to the provision of the New Multimedia Services on different transport networks. The rapid and coherent implementation of this milestone legislation must now be ensured.

Another important development is the adoption of the eEurope Action Plan which contains actions aimed at creating an environment for doing e-business and stimulating on-line public services (such as e-government). It also contains actions which aim at ensuring wide access to a secure broadband infrastructure.

In Japan, the broadband market has taken off within a year. Japan has now close to 4 million broadband subscribers. The main reasons behind this important change are:
- The growing sense of urgency to fight the sector's crisis among all the stakeholders especially the electronic and technology industry.
- Like in a number of OECD countries, the penetration of CATV networks has been steadily increasing over recent years which created incentive to accelerate the pace of ADSL deployment on telecom fixed networks.
- Active and successful new entry into the ADSL and FTTH fixed broadband market, which has become very competitive.
- The commercial launch of 3G services.
- The launch of a stimulating "e-Japan strategy" by which Japan has pledged to be the number one information economy by 2005.
- Significant changes in the telecom regime over the year before last: Clear and effective rules on local loop unbundling, collocation, and release of dark fiber were established. There are also a clearer set of obligations on owners of essential infrastructure, particularly the local loop and local switching centers where others may place their equipment and this is working well.

European and Japanese policy makers and regulators must now ensure that the regulatory and competitive environments have the following new objectives:

- To make the whole environment truly open and competitive at the level of the transport network, receiver equipment and conditional access.
- To ensure that the regulatory framework for traditional media is not extended to new content services.
- To increase dramatically the level of service available to enterprises and residences: higher speed, more content, greater interactivity.

Recommendations

The future-oriented principles that meet the above-mentioned objectives, necessary to promote the development of New Multimedia Services, can be summarized as follows:

- **Access conditions must be tailored to ensure that access is open through the chain from content provider to consumer:** (1) consumers must be allowed to access any type of service and content by means of standardized conditional access systems, (2) providers of conditional access should further make available sufficient bit-rate for high-speed access to the whole Internet.

- **Relevant market definition must take into account the potential offered by all technologies available in the market.** When a regulatory authority is determining the existence of a dominant position in order to impose ex ante rules on an operator, it must not be bound by former decisions on existing markets. On the contrary, it must envisage the future of the market and check carefully the substitutability of products or services or inside a new broadband access market including different access platforms.

- **Industry and governments should facilitate the development of an open and interoperable technology environment. E.g.** the global mobile industry has recently launched such an initiative: the Open Mobile Alliance (OMA) to promote open, global standards, protocols and interfaces to enhance market growth for the entire mobile industry. European and Japanese companies are actively participating in this initiative. This initiative paves the way towards seamless application interoperability and allows industry to compete through innovation and differentiation.

- **Marketing freedom must be consecrated.** Ex ante regulation should not lead to the prohibition for the provision of New Multimedia Services on certain network operators and/or service providers (e.g. level playing field between telecom operators or ASP/ISPs and cable operators). This would result in great prejudice to consumers. It should only be used by national regulators to prevent abuses of dominant positions in the technical

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infrastructure and telecommunications markets, especially to prevent unfair leveraging of a dominant position into a newly competitive area.

- **Definitions must distinguish clearly between traditional Broadcasting Services and "New Multimedia Services"**, the latter being characterized by their individual nature which presupposes an individual request by the recipient for the provision of a New Multimedia Service. Technically, a "return channel" is necessary to ensure the transmission of a signal from the customer to the service provider before accessing the service.

- **Safeguard of ethic principles applying to content distribution is better achieved through self-regulation on international level.** This could be done for instance through stakeholders group bringing together all concerned parties (operators, content and service providers, equipment suppliers and user communities). However, diverging national approaches creating unnecessary barriers should be avoided. The GBDe Cyber Ethics Declaration adopted at the Tokyo conference 2001 is an important example for successful global industry self-regulation avoiding the limitations of national and regional regulatory approaches.

- **Regulatory requirements linked to objectives of "general interest" protection are not applicable to new content services.** Many of the provisions currently applying to television broadcasting programs in Europe, such as diffusion quotas and advertising constraints, cannot be applied to new content services as they would put a brake on the development of these services.