REPORT ON SECOND WIPO INTERNATIONAL CONFERENCE ON ELECTRONIC COMMERCE AND INTELLECTUAL PROPERTY (PLENARY SESSIONS AND WORKSHOP ON PRIVACY)

GENEVA, SEPTEMBER 19TH TO 21ST, 2001

In recent years WIPO has developed new and ambitious programs to improve protection of intellectual property in the digital age and most notably on the Internet.

The latest initiatives consist in the Arbitration and Mediation Center under the Uniform Domain Name Dispute Resolution Policy, the Internet Treaties negotiated in 1996 – this year the 30th ratification or accession necessary to bring them into force will be reached – and the WIPOnet project that will aim to provide several services to the intellectual property offices.

In the digital world intellectual property has become strongly connected to electronic commerce. At the first International Conference on Electronic Commerce and Intellectual Property, WIPO started to study this interaction and the possible solutions to the emerging problems according to its digital agenda: a plan of action for adapting intellectual property to the digital age and its adoption by the Internet. During the second conference attention was stressed on the evolution of the electronic commerce, which at the first conference was considered as a phenomenon which "graduated from the preparatory experimental stage to an economic reality". In his opening speech Mr. Kamil Idris, Director General of WIPO, pointed out the influence of the above mentioned evolution on the social, economic and cultural framework on the one hand, and the traditional intellectual property system on the other. The consequences are 7 million pages added daily to the Internet and 36 million domain names that "are forecast to increase to 75 million next year". Mr. Idris viewed the growth of these numbers in connection to the increasing cases of

¹ Dr. Kamil Idris , opening session, in First Conference on electronic commerce and intellectual property, Geneva, September 14-16, 1999.

piracy and cybersquatting of domain names, which in one year has brought to WIPO Arbitration and Mediation Center more than 3,000 cases involving cybersquatting.

In plenary sessions the evolution of electronic commerce according to three different fundamental issues – intellectual property in the digital economy, identity and identifiers, and finally, digital divide – was examined. During workshops were then thoroughly investigated: business method patent; branding on the internet; e-publishing; rights management; UDRP; music on line; privacy; cultural heritage; new gTLDs; jurisdiction and applicable law; Online IP Administration – PCT – Madrid – IPDLs; IP dot coms.

Now, at the beginning of 2003, the original version of the report, not yet published, has been amended. The report deals with the plenary sessions and workshop on privacy, and, in my opinion, should no doubt continue to be useful as a "starting point" for an analysis of electronic commerce at present.

I. INTELLECTUAL PROPERTY IN THE DIGITAL ECONOMY

Ms. Suvi Linden, minister of culture, Finland, pointed out different aspects of electronic commerce defined as "any transaction over a computer-mediated network which involves the transfer of ownership or rights to use goods or services". Thus, electronic commerce of digital content is considered trade in rights: "we sell and buy rights to use and otherwise exploit material delivered electronically in the form of bits".

Digital technology, information networks and e-commerce are considered necessary elements for e-commerce which may be involved broadly in the new economy defined as a knowledge-based economy which generally mean "the economy generated by information and communication technologies". The panellist considers intellectual property important in this contest as affirmed by the WIPO Primer on e-commerce: "Copyright and related rights give incentives to creators to reduce and disseminate new creative materials; the rights also

recognize the importance the contributions of the creators, by giving them reasonable control over the exploitation of those materials and allow them to profit from them; the rights provide appropriate balance for the public interest, particularly education, research and access to information; and thereby ultimately benefit society, by promoting the development of culture, science, and the economy."

Content production is another important aspect of e-commerce which is crucial for speeding up "economic cultural and social development"; Finland, for example, has established a large scale programme for promoting content industries which is going to play a fundamental role in digital economy.

Furthermore, Ms. Linden pointed out the importance of two conditions for a world wide spreading of electronic commerce. Firstly the technological protection measures which are diverse depending on the object to be protected. Regarding copyright, she considers the WIPO treaties and their national implementation. Moreover, she suggests the creation of policy guidelines or models would be a suitable project for WIPO itself.

Secondly, she fosters the bridging of the digital divide through education, information sharing and skills training.

The importance of Ms. Linden's speech can be summarized as a definition of the process: "E-commerce can happen because of the linking of often complex and dynamic chains of identifiers which connect people with goods and services. E-commerce does not necessarily have always exclusively financial gain as its object. The model applies equally to cultural transactions that may have modest commercial expectations".

The other panellists then proceeded to explain two different fundamental aspects of digital economy: intellectual property (hereinafter referred to as I.P.)

commerce programmes of their own. The European Union is dealing with e-commerce in many different contexts, such as the e-Europe Action Plan and the e-Content".

² There are also other intergovernmental organisations with their own development programmes for e-commerce: according to Ms Linden, "the WTO work programme addresses general questions relating to commodities and services in e-commerce. UNESCO is exploring ways to activate developing countries. Many countries have e-

and ownership. In particular an interesting point of view emerged thanks to Mr. Randall Davis, Professor of Computer Science and Engineering, MIT, who stressed the attention on the evolution of digital economy, characterized by the digital dilemma as a collision of I.P. and information structure³ which has the potential to demolish the careful balancing of public good and private interest⁴ that has emerged from the evolution of intellectual property law in the U.S. The panellist viewed the problem arising from two sources. One source "is a trio of technological advances that helped produce the infrastructure":

- 1. "The increasing use of digital information" as characterized by an intimate connection between access and copy⁵;
- 2. "The widespread reach of computer networks"; this has "radically changed the economics and logistics of information distribution, enabling information to be sent worldwide, almost for free, and (for items of reasonable size) almost instantaneously";
- 3. "The creation of the World Wide Web"; it has radically altered the economics and logistics e.g. of publication, allowing everyone to be a publisher with worldwide reach.

The second source is the emergence of computers as a routine part of everyday life and consequently: firstly, individuals routinely have "the means and opportunity to access and copy vast amounts of digital information, including software, text, and audio and video material, but have no clear picture

⁴ He stated that 'in the US, the public good is phrased as the betterment of society that results from the constitutional mandate to promote the 'progress of science and the useful arts'; the private interest is served by the time-limited monopoly (a copyright or patent) given to one who has made a contribution to that progress'.

³ He explained that the text available in electronic form may not be subject to the technological limit of "the number of people who can access it simultaneously, from almost anywhere on the planet".

⁵ He actually reports the following example: "Use a computer to read a book, look at a picture, watch a movie, or listen to a song, and you inevitably make one or more copies. Contrast this with the use of traditional media: reading a book does not involve making a copy of it, nor does watching a movie or listening to a song". According to the author this has an important consequence regarding one of the essential elements of copyright: the right to control reproduction.

of what is legal or acceptable"; secondly intellectual property law and its enforcement are becoming increasingly concerned with private behaviour⁶.

The problems arising from digital information is normally solved through technological solutions, such as the combination of encryption and rights management software. But these can be considered limited in a number of important ways: constraint arises from the need for consumer devices to be simple and fast (easy cracking), anchoring content to a specific machine (which would be of limited use to the consumer), and the difficulty in attempting to provide end-to-end protection to computers which have an open architecture. Thus the panellist considers the Technical Protection System + PCs an insufficient solution. Whereas business models can "at times significantly influence the pressure for any degree of illegal commercial copying and unauthorized reproduction" according to several principles: by making the product cheaper and easier to buy than to steal, or by reconceptualizing the basic product, or by taking an economic (pay or it dies) and sociological approach already used in the online publication of Stephen King's novel *The Plant*. Models should be directed so as to require less need for I.P. protection, for example: giving away the product and making money from an auxiliary service (Linux) or giving away the product and selling upgrades (anti-virus) or giving away one piece that promotes another (Acrobat Reader) or offering extreme customisation (CDs with a particular customer's selection of audio tracks) or offering a mass-market product with a low price and high volume, with frequent improvements.

-

⁶ This sentence briefly explains "the shift in the focus of IP law". In fact, copyright "has traditionally been concerned with public actions that have public consequences, such as public performance, public display, or the dissemination of copies. It has also focused on behaviours of organizations or individuals whose actions have large-scale public consequences. But with computer now commonplace in the home, individuals can do in private what once would have required substantial investment and perhaps criminal intent".

⁷ He explains the concept with the example of digital music. Digital music business "may in fact be primarily a service business, rather than a product business. As the value in the digitised music itself becomes increasingly difficult to protect (because digital information is so difficult to share without losing control of it), the value may reside in the service of providing speed, reliability, and ease of access, rather than in artifacts like CDs or tapes".

So Mr. Randall viewed the problem arising from the interaction of I.P. and the information infrastructure in a context "that encompasses not only law, technology, and markets but economics more generally, as well as psychology and public policy" that must be considered a "need for multiple perspective".

Finally, he confirmed that copying was not a completely correct concept in the age of digital information for the following two reasons:

- a) Legitimate use of digital work requires making a copy;
- b) Copying "is so bound up with the way computers work" and controlling the "act of copying seems to provide unexpectedly broad powers towards access to the web, considerably beyond the copyright law". In fact it is like giving the author, in the world of physical work, the right to control the access to the distributed copy.

Thus he defined copying "a less precise predictor".

Mr. Allen N. Dixon, IFPI General Counsel and Executive Director, disagreed with

Mr. Randall's innovative position. He views copyright protection only attainable through technology and legal dispositions addressed to new formats, encryption, technical protection, right management information as well as to creating a system of global and individual licenses or new and collective licenses. According to a legal system largely in favour of increasing protection of copyright, the author gave evidence of such initiatives as WIPO treaties and Europe directives. Furthermore, copyright value is recognized in the recent court cases which "are sympathetic to recognize a protection of the copy right in the web too".

Mr. Craig Mundie, Chief Technical Officer of Advanced Strategies and Policy at Microsoft Corporation, directed the attention to the particular structure of "the digital right architecture" which separates content and rights. In fact the package content is first distributed to a streaming server or web server thus enabling the consumer to acquire the content before applying for a license. However, regarding I.P. protection he noted the importance of different choices which "have policy implications":

- Development choices (language, community, source model, platform language);
- Distribution choices (open source, shareware, freeware, commercial and mixed);
- Licensing choices (BSD, shared source licenses, traditional commercial licenses, GPL, public domain);
- Business choices (services, packaged software, aggregate "distributions", appliances, hardware).

Finally, he believes that protection of "ownership" in Internet could be acquired by technology and policies, both important elements to maintain incentives within the balance of content availability and fair use.

As far as digital economy is concerned, the subject of the evolution of the E.C. legal system was brought about. Mr. John Mogg, Director General of DG XV Internal Market and Financial Service of the European Commission, spoke about the important achievements which have been adopted since the first conference on e-commerce held in 1999:

- The Directive on Electronic Commerce of June 2000, which provides two important principles. The first concerns the free movement of services according to the law in their home Member State and freedom of establishment in all the community. The second regards the exemption from civil and criminal liability of the intermediary service providers providing "mere conduit services" and the sole limitation for liability, civil and criminal, "of intermediaries providing catching and hosting services";
- The Directive on Copyright and Related Rights in the Information Society of May 2001, which provides, in conformity with WIPO treaties, common

ground with the scope "of the core rights in copyright protection" and "enshrines" the protection of technological measures that will enable creators and rightholders to employ new business models putting the consumers "in a position to access legally and use the full range of contents available in the digital environment";

- A Commission proposal, in August 2000, for the creation of a Community patent, within a standardized law and uniform system of litigation to promote innovations and reduce costs;
- The launch of a Commission consultation via the Internet on the patentability of computer-implemented inventions in October 2000;
- An Action Plan on the Fight against Piracy and Counterfeiting (November 2000), which shall be followed by a directive intended to "strengthen the means of enforcing intellectual and industrial property rights and defining a general framework for the exchange of information and administrative co-operation between national authorities";
- A Commission proposal, in December 2000, for the creation of a register to run the .eu Top Level Domain which deals with the Commission's adoption of public policies on the treatment of intellectual property rights regarding in particular "the possibility of registration of domain names in a phased manner (the so-called "sunrise period") and the establishment of exclusion lists for geographic and/or geo-political concepts which affect the political or territorial organization of Member States".

Ms. Patricia Shroeder, President and Chief Executive Officer of the Association of American Publishers, stressed the attention on the U.S. legislation about ownership, particularly on the Internet. In 1996 the U.S. signed the World Intellectual Property Organization Copyright Treaty and in October 1998 it was implemented with the Digital Millennium Copyright (DMCA) by Congress. She considers the Act an important achievement in order to protect the creator and develop electronic commerce (e.g. in e-

books) against the "illegal attacks" such as happened this summer when a Russian was offering for sale on a website the hacking software for the encryption system being used to protect some of AAP members' ebooks. The Russian hacker was arrested in the U.S. during a hacker conference, under the anti-circumvention provision of the DMCA which "is one of the keys to being able to protect copyright ownership on the Internet". The law permits "an exemption for research, so that if you discover a weakness in my encryption system and inform me, that's legal". Whereas it is illegal "if you hack away until you crack my encryption and then sell your discovery to allow others to do the same". In the end, she maintains that the protection of "ownership" encompasses the conception of the open web as a free web aimed to promote the development of electronic commerce and the digital world as well and "there is no way the world is going to be able to deal with online protection of property unless we stand together and have strong enforcement policies in our countries".

II. IDENTITY AND IDENTIFIERS

The conference stressed the attention upon the identity and identifiers which were examined in relation to two important elements on the Internet: DNS and language.

Mr. Francis Gurry, WIPO Assistant Director General, discussed the very recent "Report of the second WIPO Internet Domain Name process" of September 3rd, 2001. First he described the insufficient current system "governing the interface between domain names and the intellectual property" which is composed fundamentally of international treaties (specifically: Paris Convention and Trips Agreement), national laws (divided into general and non-specific, and territorial) and Uniform Dispute Resolution Policy (UDRP) for gTLDs. He then stressed the importance, along with the intention and modalities of the several States to complete "the present framework", on the

"recommendations" stated in the Report for the following identifiers: the International Nonproprietary Names for Pharmaceutical Substance (INNs) (defined as "consensus-based naming system used in the health sector to establish generic names for pharmaceutical substances that are free from private rights of property control")8 should be protected by a cancellation policy directed to the exact INN registered as a domain name in gTLD; names and acronyms of Internet Government Organizations (IGOs) should be subject to "a special administrative procedure, modelled on UDRP and provided by the states constituents of IGO's," avoiding misleading registration as domain names; personal names should be protected encompassing the limit of the present UDRP ("commercial misuse and only where common law trademarks are recognized under the applicable law"); geographical identifiers, such as indications of source and geographical indications and names of countries, peoples and places, should be submitted to strong and general regulations among the States. Finally, he found fault with the majority opinion that protection should be extended to trade names within the DNS. This, because different national approaches and the large range of commercial activities within small enterprises operating in small geographical areas, and the international vocation of Internet as expressed in UDRP ("designed for, and applies to, straight forward disputes where there are rights on one side, and no rights or legitimate interests on the other side")⁹ are two contradicting elements.

Regarding the second element – the language, or better still, scripts on the Internet in relation to the Internationalized Domain System – Mr. Patrick O'Brien, General Manager Registry Business at I-DNS.net International, pointed out predictions of a decrease in the "English" language (particularly: web pages, e-commerce sites, user-spoken English) on the web for 2002/2003. The consequence will be an increase of the domain names in local

⁸ WIPO, The recognition of rights and the use of names in the Internet domain name system, in Report of the second WIPO Internet Domain Name Process, Geneva, 2001p. V.

⁹ WIPO, cit, p.141

languages/scripts that ensure Multilingual Domain Names be encoded, passed across Internet and translated at the receiving PCs¹⁰. He then stressed the problem of language evolution, providing examples of countries such as Egypt and England where it is possible to find that different languages were used as identifiers of roles and capabilities combined with control access on the one hand, and as identity (such as common language as a basis of participation) on the other. The evolution of the language has led to an open system, whereas the Internet still has a hierarchy system which is insufficient to achieve complete development of Internationalized Domain Names. Finally, he believes that it is important to continually update the technology and to consider it only the start of the process according to both viewpoints in research that of IAB (Internet Architectural Board) based on the future and of the IETF (Internet Engineering Task Force) for the present.

III. THE DIGITAL DIVIDE

In his opening speech Mr. Idris stressed the fact that the Internet cannot be truly considered a "global medium", but that "it has the potential to be" one. In fact, although "the online population has grown to 460 million users this year, only about 6% of the world's population is currently online". This growth can be considered to be non-homogenous due to the difference between the developing and the industrial countries. Mr. Orlando Jorge Mera, Secretary of State and President of the Institute of Telecommunications of the Dominican Republic, pointed out the experience of his country where the "telecommunication revolution" has started since the liberalization of the telecommunication, as the Telecommunication Act n. 153/98 was enforced in 1998. The new "era" is headed by the Instituto Dominicano de las Telecomunicaciones (INDOTEL) – allowed for by the Act – which makes plans within the government to develop the phone net together with the computer infrastructure in all the country. In

1

¹⁰ For a deeper analysis see Mr. O'Brein, Foreign character domain names, in WIPO conference on intellectual property questions relating to the ccTLDs, Tuesday, February 20, 2001 available on www.wipo.int.

fact, he affirmed that in the 3rd millennium, telecommunications "are a human right".

Mr. Ramiro Soto Platero, Member of the Board of the Uruguay National Chamber of Commerce, underlined the speedy developing of the digital era which increases the gap between countries. He supplied numbers relating to the lack of telecommunication infrastructure in the world: in the year 2000 only 16% of the world population had a telephone, in particular only 2.5% in Africa and 1.16% in Nepal, as against the 70% in the U.S. and Canada. Only 7.68% of the world population owned a PC, 0.99% in Africa as against 56.55% in Europe. According to Mr. Platero, to reduce the divide it is necessary first of all to liberalize the telecommunications, so that the United Nations, along with other organizations, should invest in developing the telecommunications and computer infrastructure: Internet points, national web sites and schools. Consequently, it will be possible for the digital era and electronic commerce to become global.

Mr. Joseph O. Okopaku, Sr., President and Chief Executive Officer of Telecom Africa Corporation in Nigeria, considered the digital divide as a complex phenomenon which consists of more and different divides or better said, disadvantages. First he stressed the lack of "extent, quality and versatility of information and communication infrastructure and networking capacity" (infrastructure divide) as the result of a human resource capacity divide. Then he spoke about the "ethnocentricity of the digital world" (content divide) and the impossibility of the "digitally disadvantaged to reply or to tell his own story to the world" (information divide) which enables "the access to, mastery of, and capacity to meaningfully deploy knowledge" (knowledge divide) and "the ability and the wherewithal to acquire and manage information, analyze experience and draw on existing knowledge" (intellectual divide). Another important element is the technology itself, which has been based on the black-and-white western thought which differs from the African culture which

expresses itself "more in shades of grey" (cultural divide). According to Mr. Okopaku the solution for bridging the digital divide is the research and development of the African technological infrastructure by a partnership among the developing states and the industrial countries. According to this program, Telecom Africa, amongst other initiatives, is working with UNESCO to build the Telecom Virtual Research Laboratory. So the "self-development" seems to be conforming to an African solution and thought to bridge the digital divide and arrive at a "digital diversity".

IV. WORKSHOP ON PRIVACY

The important relationship between privacy (the processing of personal data) and copyright was first discussed by Mr. Ulf Bruhann, head of the unit Data Protection within DG XV Internal Market and Financial Services at the European Commission. He pointed out the same origins (both "emerged largely from doctrines on personality rights" and "use legal restrictions on information use and flows so as to safeguard certain values and interests") that S. Warren and L. Brandeis – the "grandfathers of privacy" – have affirmed in their famous article "On the Right to Privacy" considering law protection of intellectual, artistic and literary property based "upon a broader principle of protection of privacy and personality". He made out that the applications of privacy and copyright principles and rules have to be intended not "as mutually exclusive" but "cumulatively" (e.g. "The use of information has to respect both copyright and privacy principles and rules at the same time"). But according to Mr Bruhann this relationship must not overplay "the similarities between their respective agenda" and the "extent to which the copyright community has taken privacy concerns actively into consideration and vice-versa". In fact "private use" and "fair use" exemptions in copyright law are "grounded not so much upon privacy considerations". Furthermore, he gives relevance to the different

¹¹ S Warren and L. Brandeis, *The right to privacy, Havard Law Review*, 1890, pp. 193 ss

"economic logic". Copyright works as an "incentive to produce original works and contribute to public well-being by providing exclusive rights to creators"; instead, data protection has a wider range by securing the privacy, autonomy and integrity of individuals.

However, the panellist believes that the above mentioned level of "coherence" and "complementarity" between copyright and privacy is about to come under "considerable tension" arising from "a technological challenge and the response from the copyright community". The response is given through Electronic Copyright management systems or, more recently called, Digital Rights Management Systems (DRMS), which "basically provide an infrastructure allowing the creator of an information product to enforce copyright in the product when it is accessed on-line by other parties" and the use of domain name registration "as a vehicle to locate the origin of copyright infringement and piracy". Both do not respect privacy principles. In particular he pointed out that DRMS allows to register data about persons who merely browse "i.e. who merely inspect information products without purchasing a particular right"¹². But he viewed the possibility for the "cumulative" application of privacy and copyright principles and rules through the use of technological solutions incorporating privacy requirements which are commonly called PETS (Privacy Enhancing Technologies).

Finally Mr. Bruhann illustrated the different attempt of creation of regional and global rules for data protection, which may be ineffective without an alternative dispute resolution settlement just as in the area of domain names.

_

¹² Mr. Ulf Bruhann gives evidence of two features of DMRS which cause violation of the privacy of the consumer, or in B2B situations, the commercial buyer. The first is **authentication** of the consumer/buyer. "It establishes who the buyer is, and also establishes a unique identifier for the buyer. The unique identifier can thereafter be used to collate information about the user or buyer obtained from the current transaction with all kinds of other information divulged by the user/buyer using the same identifier. The very requirement of this step prevents the possibility of anonymous browsing". The second is **tracking**. "The amount and quality of tracking information that can be generated for digital media differs by many orders of magnitude from that generated for traditional off-line media, and it can be very granular and accurate. A usage log for a single user can itself be a fairly valuable digital asset, often more valuable than the asset whose use it logs".

The workshop then developed with the Australian and U.S. privacy legislation.

Ms. Helen Daniels, Assistant Secretary at the Information of the Law Branch Commonwealth Attorney General's Department, Australia, spoke about the Privacy Amendment Act 2000 and stressed the attention on the flexibility of the Privacy Amendment in order not to extend privacy protection excessively:

- Legislation is co-regulatory: it provides National privacy principles (NPP). They will neither operate as minimum benchmarks for the development of privacy codes for organizations which have to meet certain prescribed standards and be approved by the federal privacy commissioner, nor "will operate by default where a business or other organization chooses not to develop their own code, or is not covered by a code that has been approved by the federal privacy commissioner";
- Legislation regulates the acts and practices of "organizations" defined as "a body or corporate, an incorporated association, a partnership, a trust or an individual", profit and no profit. However the legislation is not applicable with regard to small business operators who do not submit the following criteria:
- 1) Annual turnover of 3 million Aus. dollar or less;
- 2) Provide health services or hold health information;
- 3) Trade in personal information;
- 4) Are contracted to provide a service to a Commonwealth government agency;
 - Legislation shall not apply to employee records in most circumstances if the act or practice is directly related to: "a current or former relationship between the employer and the individual; and an employee record held by the employer relating to the individual".

Finally, on the subject of U.S. privacy, Ms. Christine Varney, partner at Hogan & Hartson, stressed the most important differences between privacy in the U.S. and in Europe. Firstly, she affirmed Americans are far more concerned

about "what the government knows about us" and are "virtually" unconcerned about the data collection practices of the corporate entities - the so-called "commercial privacy". But this is going to change now with the Internet according to 92% of Americans who have expressed fear for the process of collecting, storing, analyzing, transmitting and reusing in an easy and inexpensive way, so-called sensitive information. This is generally information from and about children, finance, health and medical records and it was recently addressed in three different laws: Children Online Privacy Protection Act (COPPA) for commercial websites aimed at children under 13 which collect personal information or "knowingly collect such information from children and companies on whose behalf these websites collect the information"; Gramm-Leach-Biliey (G-L-B) Financial Services Modernization Act of 1999 for financial institutions including businesses involved in various financial activities (leasing, financing, tax preparations, credit counseling, investment advice); lastly, the Health Insurance Portability and Accountability Act (HIPAA) of 1996 which standardized the protocols for transferring personal information and medical records within the entire health-care system in the U.S. But privacy out of this context has still not been regulated by law even though the commerce sector is subject to "privacy and fair information practices" that provides for: notice telling how personal information is used online; choice about "whether and how that personal information will be used"; security against unauthorized use and access not so extensive as in the European directive, but limited to the accuracy of personal information.

According to the incomplete U.S. legal framework, Ms. Varney talked about the Safe Harbor which allows free transfer of personal data between the U.S. and the E.U. in conformity with an adequate level of protection. In particular she spoke about the following principles referring to Safe Harbor:

a) Notice: "organizations" must declare the purposes of using and collecting information, provide contact information and "list the types of third

- parties to which one discloses information within the choices and means for limiting disclosure";
- b) Choice: the right of the individuals to choose whether their personal information will be disclosed to third parties or used for purposes other than for which it was collected; ("opt-out" or "opt-in" for sensitive data);
- c) Onward transfers: "organizations" must apply the same notice and choice principles to onward transfer and it would be made only if "the organizations to which the data is to be disclosed adhere to Safe Harbor" or are subject to the Directive or another "adequacy finding";
- d) Access: individuals must have access to personal information within the possibility to correct, amend or delete that information;
- e) Security for the personal data: may be granted by "organizations" against loss, misuse or unauthorized access;
- f) Data integrity: means that the collected personal information must be relevant "for the purposes for which it is to be used" and organizations must take "reasonable steps" to ensure data is "reliable, accurate, complete and current".

In the end she discussed Section 5 of the FTC Act, which defines unfair and deceptive acts such as when a company registers under Safe Harbor and fails to comply with any of its principles.