

**LEGISLATIVE FRAMEWORK OF THE
INFORMATION AND COMMUNICATION
TECHNOLOGIES IN BULGARIA –
PRESENT STATE AND PERSPECTIVE**

November 2002

Sofia

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ABBREVIATIONS

AP	Additional Provisions
BSI	Bulgarian Standardization Institute
BTC	Bulgarian Telecommunications Company
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
CM	Council of Ministers
CRC	Communications Regulation Commission
EDESA	Electronic Document and Electronic Signature Act
ETSI	European Telecommunications Standards Institute
EU	European Union
ICT	Information and Communication Technologies
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
ISP	Internet Service Providers
NRFSC	National radio Frequency Spectrum Council
OSP	Online Service Providers
PPDA	Personal Data Protection Act
SC	Standardization Council
SG	State Gazette
SMP	Significant Market Power
STC	State Telecommunications Commission
TA	Telecommunications Act
TRPA	Technical Requirements to the Products Act

LEGISLATIVE FRAMEWORK OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN BULGARIA - PRESENT STATE AND PERSPECTIVE.

I. Legal Framework of the Telecommunications Sector. Legal Status of Telecommunications Operators. Methods of Control

1. General Overview

The legal regulatory framework of the information networks, electronic communications and e-commerce in Bulgaria comprises considerable number of normative acts. Some of them regulate the relations within the sector generally (like the Contracts and Obligations Act, Commercial Act, Criminal Code, Personal Data Protection Act, Standardization Act, taxation and procedural laws etc.), and some provide particular regulation (such as Telecommunications Act (Prom. State Gazette (S.G.) issue 93, 11 August 1998.), Electronic Document and Electronic Signature Act (Prom. S.G. issue 34, 6 April 2001), the secondary legislation on their implementation, etc.).

The major players on the ICT (Information and Communication Technologies) market in the country are the telecommunications operators as defined by the Telecommunications Act. These are the economic subjects that construct and own the telecommunications networks (such as the fixed lines operators, mobile operators, satellite operators etc.), as well as the companies providing information and communications services through those networks without being owners of the infrastructure. Thus the telecommunications operators can be divided into network operators and service operators (service providers).

The network operators are operators that install, manage and operate their own (fixed or wireless) telecommunications transmission networks for the purposes of provision of public voice services or public network services. The service providers are operators that provide telecommunications services using predominantly networks of third parties. Among those operators special attention should be paid to the ones, providing access to the global communications network Internet – the *Internet Access Providers*.

Other players on the market are the *Internet Service Providers (ISP)*. The notion ISP has broader sense since it covers the companies providing different Internet-based services. In order to put emphasis on provision of services different from the Internet access, these operators are also called *Online Service Providers (OSPs)*. For the purposes of the present review the term Online Service Providers (OSPs) will be used as the broadest term to encompass the providers of Internet access, as well as the providers of various Internet-based services.

The Online Service Providers belong to the circle of persons, whose activities are regulated by the above mentioned acts. Depending on the specific type of activity performed, they might reveal capacity of telecommunications operators under the Telecommunications Act,

intermediary of electronic statements under the Electronic Document and Electronic Signature Act, administrators of personal data under the Personal Data Protection Act, etc.

2. Legal Status of Telecommunications Operators

The Telecommunications Act (TA) and the ordinances adopted on its application establish the general framework of the legal status of Online Service Providers that exploit digital networks. Such Online Service Providers are telecommunications operators in the sense of the TA. This deduction rests on the definitions as given in the text of the TA. Under the definition provided by Para 17 of the Additional Provisions of the TA – a Telecommunications operator is “*each person performing telecommunications on the basis of a license, registration or free regime.*” According to Art. 3, Para 1 Telecommunication is “*carrying, transfer or receiving of characters, signals, written text, images, sound or information of any kind by means of wire, radio waves, optic or other electromagnetic medium*”. As far as the provision of online services includes transmission of characters, signals and other information through a wire, radio-waves, optic or other electromagnetic medium, it is a telecommunication under the meaning of Art. 3, Para 1 TA and hence its provision could be considered a telecommunications service.

Three regimes for performance of telecommunications activities are provided for by the TA - individual licensing, registration under general license and a free regime. Art. 39 TA gives the general framework for the performance of the respective telecommunications activity while in details the matter is regulated by *Ordinance 13 of July 2, 2002 for Determining the Telecommunications Activities Subject to Individual Licensing, Registration under General License and Free Regime* (Ordinance 13). Depending on the particular activities of a telecommunications operator, it might fall into the scope of regulation of each of the mentioned regimes.

2.1. Individual Licensing of Telecommunications Operators

Under the Bulgarian legislation currently in force, the telecommunications operators (TOs) need individual licenses for provision of their services in the following cases:

2.1.1. Individual licensing of TOs when individually defined limited resource is provided for construction, maintenance and use of a telecommunications network (Art. 39, Para. 3, Item. 1 TA)

The cases in which TOs are subject to individual licensing for using the radiofrequency spectrum – individually defined resource - are described in details in Ordinance No 13, where the following hypotheses relevant to the activities of TOs are indicated:

- Construction, maintenance and use of public or separate telecommunications networks by an immobile radio service
- Construction, maintenance and use of public or separate telecommunications networks by an immobile satellite radio service
- Construction, maintenance and use of public or separate telecommunication networks for data transmission.

2.1.2. Individual licensing of TOs when public telecommunications network is constructed, maintained and used and public telecommunications services are provided through it (Art. 39, Para. 3, Item. 2 TA)

For the issuance of an individual license under the mentioned hypothesis the following conditions shall be cumulatively available: construction, maintenance and using of a telecommunications network; the network should be a public one (i.e. to be intended for provision of public telecommunications services and/or for telecommunications for unlimited circle of users) and, in addition to this, public telecommunications services should be provided through it.

The provision of Art. 32, Para.3, Item 2 expressly outlines the only case when according to the TA the TOs are required to possess an individual license in order to provide Internet access to an unlimited circle of users without using individually defined limited resource – in the case when they themselves construct and own a public telecommunications network. Ordinance № 13 gives a more detailed definition of this type of activity subject to licensing – “*an activity for construction, maintenance and use of public telecommunications network for data transmission*” (Art. 3, Item. 2 Ordinance №13).

Licenses are issued by the Commission for Regulation of the Communications (CRC) without tenders or competitions upon request by TO that meets the indicated requirements. Although the procedure for registration is not very complicated, a check in the public register maintained by the CRC shows, that up to the present moment only a negligible part of the Bulgarian Internet Service Providers have obtained such a license. This means that in the current circumstances of still existing state monopoly over many telecommunications activities the majority of the Internet Providers do not construct and possess their own telecommunications networks.

2.2. Specific Obligations of Licensed Telecommunications Operators

In the events when the TOs construct, maintain and exploit a public telecommunications network and/or provide public telecommunications services under individual license, they operate as public telecommunications operators under the meaning of Para. 18 from the Additional Provisions of the TA. Being such, these TOs are bound by some additional obligations compared to the rest of the TOs. For instance, according to Para.11, Item 1 from the AP of the TA until the fall of BTC's monopoly in the end of 2002, all public telecommunications operators are obliged to construct the terrestrial part of their network through lines leased from BTC. Public Telecommunications Operators are prohibited until 31.12.2002 to offer to third parties leased lines, as well as to remise the lines leased from BTC - Para. 10, Item 1, b) and Para. 11a, Item 2 from the Transitional and Conclusive Provisions of the TA. Public TOs with individual licenses are also bound by all obligations under their individual license, including the preparation of General Terms and Conditions for their relations with the users, which are subject to prior coordination with the CRC. Some more general obligations are also applicable - to publish the prices of the telecommunications services provided and to submit these prices to the CRC before publication (Art. 111, Para. 1 and Para. 3 TA), to provide under equal and publicly known conditions the offered telecommunications services, to provide access and interconnection with other public telecommunications operators etc.

2.3. Registration under a General License and Free Regime

As mentioned above, when using an individually defined limited resource the TOs can construct telecommunication networks – public or separate – only after the individual license is issued by CRC.

When using the radiofrequency spectrum designated for common use in accordance with the *National plan for distribution of the radiofrequency spectrum to radiofrequency and radiofrequency bands for civil needs and for the needs of the defense and the security, as well as for the joint use between them* (Prom. S.G. issue 56/2002), after registration under general license TOs can construct separate telecommunications networks for data transmission, where telecommunications shall be carried out for own purposes (Art. 39, Para. 4, Item. 1 and Art. 81, Para. 2 TA; Art. 7, Para. 2, Art. 9, Para. 2 and Art. 8, Para. 4, Item. 4 Ordinance №13).

No license is required for construction, maintenance and exploitation of separate telecommunication networks for data transfer without using radio frequency spectrum – Art. 9, Para. 4, Item. 3 Ordinance №13. What is common between all the above mentioned hypotheses is that they are applicable only for the construction of separate telecommunications networks. Separate telecommunications network according to the definition of Para 3 of AP of the TA is “*a telecommunications network for own non-commercial needs of the separate telecommunication operator, including within and/or between its divisions, branches or affiliate companies*”. This means that upon construction and exploitation of telecommunications networks registered under general license or free regime, regardless if this is undertaken with or without the use of the radiofrequency spectrum, the TOs would not have the right to provide telecommunications services to their clients, and will only be able to carry out telecommunications for own purposes within their separate telecommunications networks.

No license is required for performing of telecommunications services when the TO is not establishing its own telecommunications network but is using the network of another telecommunications operator and is providing to the end users the service Internet access or other Internet services.

3. Methods of Control in the Telecommunications Sector

Telecommunications Act introduces the separation of the functions of state governance (performed by the Ministry of Transport and Communications, Council of Ministers (CM) and the National Radio Frequency Spectrum Council (NRFSC)) from the telecommunications market regulation (performed by the CRC).

In performance of its obligations for management of the telecommunications activities the Council of Ministers adopts Sector Policy for the Telecommunications, which determines the state policy in this sphere. The Updated Sector policy was promulgated in State Gazette issue 62, 25 June 2002 and it outlines the major trends and the concrete stages and terms for the development of the telecommunications sector and its regulatory framework in Bulgaria.

The NRFSC at the Council of Ministers carries out the state policy on the radio frequency spectrum. The Council prepares and periodically updates the National Plan for distribution of the radio frequency spectrum to radio frequencies and radio frequency bands for public needs, for the needs of the defence and for the security, as well as for joint use among them, which is approved by the Council of Ministers.

The minister of transport and communications carries out the telecommunication policy on the basis of the TA and of the Sector Policy adopted by the Council of Ministers. The minister of transport and communications works out, presents for adoption by the Council of Ministers and carries out the sector policy in the sphere of telecommunications. He

exercises the rights of sole owner of the capital in sole-owner trade companies and in trade companies of branch "Communications" in which the state is shareholder or partner.

The regulation and control of the telecommunication activities is presently performed by the Communications Regulation Commission (called hereinafter "the Commission" or CRC). The Commission was established several months ago as a successor of the State Telecommunications Commissions by an amendment to the Telecommunications Act from December 2001.

The new Commission differs substantially from the closed-down State Telecommunications Commission in terms of its independence, composition and mandate. New functions of CRC are introduced - regulation and control over the provision of postal services, registration and control over the activities on the provision of certification services related to the electronic signature and so forth.

The establishment of the CRC is a step forward in the direction of the implementation of the European legislation with respect to the national regulatory authorities. The Commission is an independent specialised state body, which carries out the Sector Policy in the Telecommunications and the Sector Postal Policy adopted by the Council of Ministers in observing the public interest, the state sovereignty and the national security. The Commission regulates and controls the telecommunications by the order stipulated by this law and it registers and controls the activity on providing certifying services related to the electronic signature by an order determined by the Electronic Document and Electronic Signature Act.

The Commission is a college body consisting of five members, including chairman and deputy chairman. Its main activities as listed in Art. 27 TA include: it prepares the documents and carry out the necessary activities for the issuance of the necessary licenses in the field of telecommunications; it has the power to issue, amend, supplement, stop, discontinue and revoke licenses for telecommunication activities and construction, maintaining and using new telecommunication networks; register and delete the registration under a general licence for telecommunication activities; work out and manage the National numeration plan and distribute the numbers and the addresses for telecommunication networks among the operators according to the approved principles.

The Commission also carries out certain activities related to the management of the radio frequency spectrum, such as: working out and publishing the principles of management and distribution of the radio frequency spectrum, submitting for using radio frequencies and radio frequency bands to the telecommunications operators licensed by the order of this law; issue permits for introducing on the market radio equipment using non-harmonic radio frequency bands for civil needs, utilising radio equipment for providing effective use of the radio frequency spectrum civil needs etc. The Commission controls the observance of the normative acts in the sphere of telecommunications, the principles of price formation, the quality of services, the conditions stipulated by the licenses etc.

II. Regulation and Deregulation of the Telecommunications Networks and Services – Future Developments. Liberalization and Harmonization

The Telecommunications Act has been effective since 15 August 1998 and is one of the most important steps in the process of harmonization of the Bulgarian regulatory framework in the field of telecommunications to the relevant European legislation.

The main purpose for the adoption of the Telecommunications Act was the establishment of the necessary legal and regulatory framework for the development of telecommunications and for the satisfaction of the public needs for high-quality and affordable telecommunications services.

Under the Telecommunications Act, the telecommunications activities and services were partially liberalised with the exception of the provision of the fixed voice service (local, long-distance, international and transit) between terminal points of the fixed telephone network, the provision of leased lines and the real-time trans-border voice transmission for the purpose of the provision of international voice services by public telecommunications operators. State monopoly is established over those activities until 31 December 2002.

In 2002 a detailed review of the legal framework was made. Updated Sector Policy in the Telecommunications was adopted in May by the Council of Ministers. In implementation of its main objectives and in view of the full liberalisation of the telecommunications sector after 31 December 2002 a draft for an entirely new Telecommunications Act was prepared by the Ministry of Transport and Communications and submitted for adoption to the Parliament by the Council of Ministers. The Updated Sector Policy, as well as the draft of the new Telecommunications Act provide for:

- abolition of the Bulgarian Telecommunications Company's monopoly,
- full market liberalisation,
- introduction of regulatory instruments forcing the operators with significant market power to comply with the requirements of the competitive environment,
- determination of the scope of the universal service and introduction of mechanisms for compensating the operator that provide it under economically unprofitable conditions,
- determination of conditions for network interconnection, for access to the local loop,
- unbundling of the local loop,
- determination of rights of way,
- full separation of the regulatory functions from the ownership management;

- relaxation of the licensing regimes and procedures, ensuring predictability, transparency and prior consultations on the licensing policy.

1. Liberalisation of the Telecommunications Market

The process of liberalisation of the telecommunications market in Bulgaria started in 1992. It is based on the European policy and, in particular, on the recommendations of Directive 90/388/EEC on competition in the markets for telecommunications services, and its subsequent amendments leading to gradual opening of the telecommunications market. Liberalisation is one of the processes of the ongoing structural reform in the sector. It has its legal and regulatory framework, reflected in the Telecommunications Act and in the existing secondary legislation.

As a result, presently, all telecommunications services, except the fixed voice service and the leased lines are liberalised. According to the liberalisation policy, reflected in the Telecommunications Act, and the commitments under the accession negotiations under Chapter 19, full liberalisation will be introduced after 31 December 2002 which will cover the fixed voice service, the leased lines and the trans-border real-time voice transmission. Generally, the introduction of full liberalisation implies that any entity (natural or legal), intending to provide any service on the market, has the right to be granted the relevant permit depending on the type of the service. That means that all restrictions to the access to the market are eliminated, except on the grounds of objective, transparent, proportional and non-discriminating criteria, relating to the use of the scarce resources. Rejection is allowable only under publicly known conditions specified in a normative act.

In the legislation presently in force – the TA and Ordinance 13 the individual licenses are prevailing. The reason for this is the early stage of self-regulation and the inefficiently acting competition mechanisms. In future licensing shall follow the line of further relaxation of the regime of issuance of permits without overlooking the efficiency of supervision and monitoring of the market. The general regulatory framework for the issuance of licenses for telecommunications activities in Bulgaria follows the regulatory framework outlined by the EC directives. The basic principles of licensing under conditions of full liberalisation are:

- removal of the restrictions to the number of market participants except in the cases of using scarce resources;
- giving priority of the regime for registration under a general license over the regime of individual licensing;
- definition of principles, procedures and documents, related to licensing, including the establishment of the “one-stop-shopping” procedure.

The introduction of full market liberalisation demands undertaking legislative measures for encouraging the entry of new participants and maintaining fair competition by adherence to the guidelines of the EU regarding the competition policy in telecommunications. It is necessary to establish clear rules regarding the necessary content of the agreements for interconnection and access to the infrastructures of the telecommunications operators competing with each other on the market; to implement schemes for funding of the universal service; to arrange normatively access to the rights of way through state and

municipal property and common ownership over the different networks and the shared provision of networks and services.

2. Harmonization

Major changes in the regulatory framework of the electronic networks and provision of electronic services are expected to take place and enter into force from the beginning of 2003 in Bulgaria.

In September 2002 the Council of Ministers submitted the draft of a new Telecommunications Act to the National Assembly. Adoption of an entirely new act is demanded not only by the necessity for harmonization of the telecommunications legislation with the laws of the – member countries of the EU, but also by the expiry of the period of state imposed monopoly in the sector. On December 31, 2002 expires the monopoly of country's largest telecommunications operator – Bulgarian Telecommunications Company EAD (BTC) over a certain number of telecommunications services, such as provision of fixed voice service between end points of fixed telephone network, leased lines and cross-border transmission of voice in real time. The purpose for the adoption of the new Telecommunications Act is to prepare the conditions for an effective competition in accordance with the tendency for liberalization of the market of telecommunications services in Europe.

Compared to the current law, the draft of the new Telecommunications Act provides many solutions unknown to the Bulgarian legal system so far. There are regulated: the scope and main requirements for providing the universal service and the compensation of the expenses for its provision; the definition of “significant market power operator” and its main obligations; protection of the personal data in telecommunications; the access to the telecommunications networks and interconnection; provision of leased lines and right to use telecommunications networks; basic rights of the consumers in telecommunications; principles of formation of state fees and prices.

The new draft is prepared to conform to the engagements undertaken upon closing of Chapter 19 of the accession negotiations with the EU - “Telecommunications and information technologies”. It was agreed that during the pre-accession period the legislation shall conform to *acquis communautaire* in force as of 2000 and by 1.01.2007 the Bulgarian legislation shall be fully harmonized with the European Community law. The draft act is therefore prepared to comply with the community acts in force in the period 2000 – 2001.

No consideration is made to the directives adopted in 2002 - Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Framework Directive), Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), Directive 2002/20/EC on the authorisation of electronic communications networks and services (Authorisation Directive), Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), Directive 2002/58/EC concerning the processing of the personal data and protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) and Directive 2002/77/EC on the competition in the markets for electronic communications networks and services.

The six new directives contain the uniform regulatory framework of all transmission networks and the services connected with them and the terms “electronic communications networks and services” are used instead of “telecommunications networks and services”. The adoption of the new directives was prompted by the need of further liberalization of the telecommunications sector, the stronger completion and the possibility for choice of services, which grounded the need that all the transmission networks and related services shall be regulated by a uniform legislative framework.

The new regulatory framework of the EU deals with electronic communications networks and their interconnection for the provision of electronic communications services. The definition of electronic communications networks and services is to a large extent independent from the rapidly developing technologies in the sector. The networks that are considered in the new regulatory framework comprise all communications networks providing publicly accessible communications services, such as fixed and mobile telecommunications networks, cable television networks, terrestrial broadcasting networks, satellite networks, Internet networks, irrespective of whether they are used for voice, fax, data or images. The measures undertaken in this directive are meant to create a framework, promoting competing network infrastructures and interoperability of the services provided via those infrastructures, which is to the benefit of the users.

The draft Bulgarian Telecommunications Act complies with the legal framework which will be repealed by the new European Directives as of July 25, 2003 (the date when most of the older Directives are repealed). The choice made by the authors of the draft seems logical, taking into considering the stage of development of the market of telecommunications services in Bulgaria, which is characterized by a transition from state monopoly to a free competition. Namely this stage in the EU was regulated by the directives, which are to be repealed in 2003. On the other hand, the approach chosen means, that by 2007 (the year of estimated accession of Bulgaria to EU) a third, entirely new Telecommunications Act shall be adopted to comply with the provisions of the European directives from 2002.

III. Competition in the Telecommunications and Specific Issues – Interconnection of Networks, Last Mile Access, Provision of Universal Service, Operators with Significant Market Power

As a result of the unprecedented changes in the global telecommunications industry a wave of pro-competitive and deregulatory telecommunications policies swept the world. Those processes imposed the interrelation of the topics of liberalization in telecommunications and free competition in the market of electronic communications services.

Among the most important measures to be taken for strengthening the competition and further liberalization in the telecommunications sector is the development of the regulatory framework of the:

- Interconnection of networks, Access, Leased Lines;
- Co-location and Local loop unbundling;
- Universal service provision;
- Obligations of Significant Market Power Operators.

1. Interconnection of Networks

The conditions for **open networks provision** in the modern liberalized telecommunications market guarantees free and efficient access to the telecommunications networks in accordance with harmonized conditions within the EU in terms of technical interfaces, conditions of use, tariff principles and access to frequencies and numbers/addresses/names.

In view of the abovementioned interconnection of telecommunications networks is considered as one of the key factors for open network provision. Interconnection requires application of the principles of open networks - transparency, objectiveness, non-discrimination, proportionality, and gives priority to commercial agreements between the parties, interconnecting their networks, within rules established by the national regulatory authority. An efficient system for interconnection is a prerequisite for investments, especially under conditions of full liberalization of the telecommunications market.

2. Access to telecommunications networks. Leased lines.

In European legislation “access” is a generic term, covering all forms of access to telecommunications networks and services, offered to the telecommunications operators or service providers who use the networks as a transport medium. Interconnection is considered as a specific access ensuring interconnection (physical and logical) of two telecommunications networks. In the EC directives “access” implies making available of

facilities and/or services, to another undertaking, under defined conditions, for the purpose of providing electronic communications services. This term covers for example: access to network elements (access points, points of presence) and the services related to them that can encompass the connection with equipment by wire or by wireless means; access to a physical infrastructure, including buildings, ducts (for cable routes), etc.; access to software systems, including operational support SW systems; access to systems for number translation or systems of similar functionality, etc. Access to telecommunications networks can also be accomplished by leased lines.

The regulation of the said matters by the Bulgarian legislation presently in force is still insufficient and not fully consistent with the provisions of EC law. Art. 84 TA provides, that the public telecommunication operators shall be obliged to create their networks in such a way as to be able to provide access and possibility of interconnection between themselves. They cannot refuse requests for interconnection if it is grounded and technically necessary. In case of impossibility the operator shall be obliged to motivate his refusal in writing.

The access to the telecommunications network of a public telecommunications operator is granted on the bases of contracts for interconnection concluded by the operators, which contracts settle the technical and the financial conditions and must be presented at the CRC. Public telecommunication operators are also obliged to construct the over-ground part of their network through lines rented from the Bulgarian Telecommunication Company till December 31, 2002. The public telecommunication operators can lease lines under publicly announced conditions and compliance with the principle of equality of the lessees. However lease of lines under publicly announced conditions until December 31, 2002 is a state monopoly and could be offered only by BTC PLC. Only upon refusal of the Bulgarian Telecommunication Company to concede lines under lease to a telecommunications operator it shall be entitled to request the CRC to permit the construction of lines of its own (§ 11, Transitional and Concluding Provisions, TA)

In relation to the issues of the interconnection and its influence over the telecommunications market the new Draft for Telecommunications Act, which has already been proposed to the Parliament should be mentioned. According to its provisions, the rules related to the rights and obligations of the telecommunications operators as regards to the interconnections enters into force before the provisions that determine the obligation of the operators with significant market power to provide Reference as regards to the interconnection and its price. Due to that gap in the terms specified in the Draft a premise for refusal of interconnection or for an offer containing ungrounded high prices comes into being. As a result in case of refusal telecommunications operator's customers would not be able to realize a call to the customers of the SMP. Or in case of ungrounded high prices the customers of those operators shall make use of an expensive service, because most of their calls shall be to the SMP customers. Both cases shall lead to the inability of the new market entrants to offer competitive offer to the end customer, which shall be an obstacle for the development of competitive market during the transition period.

3. Co-location and Local Loop Unbundling

In principle, the contracts for co-location are a matter of commercial and technical negotiations between the interested parties. In the process of liberalization and entry of new players on the market, co-location will be encouraged in the cases when there is a lack of technical capacity for independent use, there is a need of preservation of the

environment, health and safety of the people, or compliance with the objectives of the territorial public works. The national regulatory authority shall however determine conditions for co-location of telecommunications operator, so that:

- ·third parties are given access to specific network elements and/or possibilities;
- ·access that has already been given is not deprived;
- ·resale of certain services is offered;
- open access is given to technical interfaces, protocols or other key technologies that are vital for the functional interoperability of the services;
- possibilities are offered for co-location, including co-location of underground ducts, buildings or towers;
- specific services are offered, necessary for the provision of functional interoperability of the services for the users, including possibilities for intelligent networks or roaming for mobile networks;
- access is offered to systems for operational support or other similar software systems, necessary for ensuring fair competition in service provision;
- interconnection or network capacity are offered.

Under conditions of full liberalization it is very important more telecommunications operators to provide access to the end-users on the basis of the deployed local loop of the former monopolistic telecommunications operator. This service is provided by the telecommunications operator with significant market power (SMP) and is called Local Loop Unbundling. According to Regulation No. 2887/2000 of the European Parliament and the Council of the EU, **unbundling of the local loop** implies full or shared access to the subscribers through their subscriber lines, which are owned by the operator with significant market power. Two methods of local loop unbundling are possible - full and shared use.

The unbundling of the local loop enables the new telecommunications operators to offer the subscribers entirely new services by means of digital technologies, such as xDSL (Digital Subscriber Lines) over the existing transport medium (copper pair). Local access is also possible by radio from the subscriber to the base station which is part of a point-to-multipoint network, working in the frequency ranges 2.6GHz, 3.5GHz, 26GHz, etc. The Regulation mentioned above determines the conditions for the introduction of competition in the local loop. An important issue in this Regulation is the obligation of the telecommunications operator with significant market power to provide access (full or shared) to other telecommunications operators, requesting it, under the same conditions as they or their affiliates provide such services. The telecommunications operators with significant market power are obliged, after co-ordination with the national regulatory authority to publish and update Reference offer for unbundling of the local loop to provide local access at cost-oriented prices.

As far as the purpose of unbundling policies is to lower economic and technical barriers to the new entrant at the market the new Draft for Telecommunications Act deals with the local loop unbundling as an issue. Usually competitors are not willing to finance the building of duplicate networks, because it comprises significant financial barrier. On the

other hand many incumbents are unwilling to provide competitors with access to the unbundled network components unless they are required to do so. That is why mandatory network unbundling was provided for by the Draft.

4. Universal Service

Ensuring universal service (the provision of a definite minimum set of services to all end users at an affordable price) may involve the provision of some services to some end users at prices that depart from those resulting from the normal market conditions. The undertakings that are designated to provide such services are compensated under the provisions of the law, which also provides for the maintenance and development of the universal service in accordance with the principles of transparency, proportionality and non-discrimination.

A fundamental requirement of universal service is to provide users upon request with a connection to the public telephone network at a fixed location, at an affordable price. The scope of the universal service is extended and specified, incorporating services for free calls for the population (urgent medical aid, fire and emergency safety, police), inquiry services for the subscribers' telephone numbers, access to voice services through public payphones, special services enabling disabled people to use the services within the scope of the universal service - all very important from the viewpoint of the public interest. In accordance with the requirements of the European norms, the Commission for the Regulation of Communications is responsible to determine the undertakings which shall be obliged to provide the universal service in accordance with methodology approved by the Council of Ministers. According to §10 of the Draft of the Telecommunications Act, BTC shall be obliged to provide the universal service for 9 months after the law enters into force. This shall guarantee the users' rights and a smooth transition to the distribution of the universal service obligations among the competitors on the market.

5. Operators with significant market power (SMP)

The term "significant market power" was defined first in Directive 97/13/EC (already repealed) then in Directive 2002/22/EC (as of 7 March 2002). The basic formulations from the current European legislation provides that a telecommunications operator shall be deemed to have significant market power if, either individually or jointly with others, enjoys to a position equivalent to dominance, that is to say a position of economic strength, affording it the power to behave to an appreciable extend independently on competitors, customers and ultimately customers

The new Draft of the Telecommunications Act follows the abovementioned definition. According to those provisions a telecommunications operator is assumed to have significant market power if he possesses more than 25 per cent of the corresponding telecommunications market in the geographical region in which he is authorised to operate. The national regulatory authorities may decide that an operator with a market share of less than 25 per cent of the corresponding market has significant market power, and an operator with a market share of more than 25 per cent of the corresponding market does not have significant market power.

But because the basic issue is the definition of the markets of products and services in telecommunications it provides that the national regulatory authorities analyze the markets of products and services in accordance with a Methodology developed by the CRC and approved by the Council of Ministers. The methodology defines the principles that the national regulatory bodies are expected to follow when evaluating the competition efficiency on the market or the presence of significant market power. The analyses of every market conducted by the national regulatory authorities should be published. On the basis of the analysis conducted in accordance with the methodology, the national regulatory authorities express their opinion whether the market in a given geographical region is really competitive.

The obligations imposed on the telecommunications operators with significant market power are defined in EU legislation with regard to ensuring universal service and interoperability through application of the principles of open network, which are based upon transparency; non-discrimination; separate accounting; access to the network infrastructure; control over prices, including in terms of cost orientation and in terms of accounting systems. Some of those obligations could be listed as follows: provision of access at a fixed location, provision of special measures for disabled users, quality of service and others.

IV. Standardization Framework in ICT

For the purposes of determining the current state and forecasting the trends of development and ICT market it should be paid attention to the standardization in the field of telecommunications. The matter refers to the possibility of fast and secure deployment and implementation of cutting edge technologies and high quality information and communication services. The basic arguments for the development of standards in the area of telecommunications are the necessity of clear technical criteria on legal issues and contracts, the provision of basis for assessment of the product, process or service, primarily in terms of safety as well as the need to be globally recognized and used.

1. Definition

A standard could be defined as a technical specification, approved by officially recognized body and intended for general and recurrent appliance. According to the legal definition of Art.3 of the National Standardization Act a standard has to be approved and distributed according to the procedures defined in the law and the standards title, number and registration number has to be published in the Official Bulletin of the Bulgarian Standardization Institute (BSI). Nowadays, standardization should be considered as a voluntary process, based on consensus between different economically and socially related subjects - manufacturers, users, public institutions and other groups of common interests. However only standards complying with the characteristics of Art.3, could enter into force and be considered as official Bulgarian standards.

Presently, the field of telecommunications standardization is regulated by the National Standardisation Act and the Technical Requirements to the Products Act, as well as the provisions of Art. 30 of the Telecommunications Act, which appoints the CRC as “*the national standards organization before the European Telecommunications Standardization Institute*”. Legal regime in force is supplemented by a number of ordinances and procedures issued by BSI. Some of those acts are the Ordinance on the Labeling in Relation to the Technical Requirements to the Products, Procedure determining the standardization work, for the enrolment of technical committees at the Registry of Technical Committees on standardization, for approval and voting of the standards, as well as some others. Republic of Bulgaria is a member of ISO, IEC, CEN, CENELEC and other organizations on standardization. In spite of this no international or European standard in the field of telecommunications could be considered in force as regards to Bulgarian legislation unless it is introduced as Bulgarian national standard.

2. Bodies and Institutions Involved in Standardization Development and Implementation

The standardization process in the field of telecommunications is an activity that is organized and managed by the Bulgarian Standardization Institute (BSI) and the Standardization Council (SC) at the Institute.

2.1. Bulgarian Standardization Institute

Bulgarian Standardization Institute is the national standardization body in the Republic of Bulgaria, which represents the state before international and European organizations for standardization (ISO, IEC, CEN, CENELEC and others). Its powers are provided for in Art.6a of the National Standardization Act, the most important of which are to organize the working out and preparation for approval of Bulgarian standards as well as the provision of the unity and the lack of contradiction between the existing standards. However it should be emphasized that on the bases of the explicit provisions of Art. 30 of the Telecommunications Act the status of national standardization organization in relation to ETSI belongs to the CRC.

2.2. Standardization Council

The Standardization Council assists the Chairman of BSI in determining the priorities of the work on the national standardization in compliance with the development of the telecommunications market and approves the program for standardization. It consists of 11 members, representative of such institutions influencing telecommunications field as Bulgarian Chamber of Commerce and Industry, Bulgarian Economic Chamber, Bulgarian Academy of Science, Association of the Bulgarian Insurers etc.

2.3. Technical Committees

Persons interested in the creation of Bulgarian standards in the sphere of telecommunications could be organized in technical committees, which are responsible for the adoption of the projects for Bulgarian standards in the respective field. According to the provisions of Art.12, Para.2 the capacity of "technical committee" is acquired after the committee is enrolled in the Register of the Technical Committees on Standardization on the basis of an order issued by the Chairman of BSI and in case there is no other registered technical committee for the sphere of standardization in which it will work. Presently there are three technical committees at BSI, which closely concern the activities of telecommunications operators. Such committees are: Technical committee on the radiocommunications systems and radio equipment, Technical committee on the information and communication technologies and the Technical committee on the electronic exchange of communications in commerce, industry and administration. The latest corresponds to ISO/TC 154 and ISO/TC 184.

3. Standards Development Procedures

Due to the requirements for harmonization of the telecommunications legislation with that of the EU standards it is necessary to introduce as Bulgarian standards those related to the radio equipment and the terminal telecommunications equipment, as well as the relevant standards related to the requirements electrical safety and electromagnetic compatibility. In view of that requirement it should be mentioned that the National Standardization Act recognizes two procedures for standard development– the one according to Chapter II, which is designated to the development and application of Bulgarian standards, and that according to Chapter III, which examines the process of introduction of international and European standards.

If a technical specification is stable and well-understood, if it is technically competent, has multiple, independent, and interoperable implementations with substantial operational experience, enjoys significant public support, and is recognizably useful in some or all parts of the telecommunications field, then substantiated proposals for working out of Bulgarian

standards could be filed by individuals and legal entities before BSI, as described in Art.24 and the following.

The European standards in the legally non-regulated area (the international inter-block interfaces of the products, for example) become official in Bulgaria if the procedure of the National Standardization Act is followed. It recognizes two types of procedures for introduction of an international or European standard - by publication of the text of the standard in translation into Bulgarian language or through confirmation of the application as Bulgarian standard.

In case of approved proposal for introducing of European or international standards through publication of the text of the standard translated into Bulgarian language, the working groups at the technical committees are obliged to carry out the technical phrasing of the translation and its form as Bulgarian standard. If a proposal for introducing European or international standard through confirmation for application as Bulgarian standards was approved, BSI issues a declaration for confirmation.

The abovementioned procedures for introduction of standards are of key importance for the application of the European standards from the series BSS EN ISO 9000 and BSS EN 45000, BSS EN ISO/IEC 17025 which are significant for the harmonization of the Bulgarian certification system to the European one. They are the necessary prerequisite for signing contracts with the European Union for mutual recognition of the conformity assessment result of equipment and services in the field of telecommunications with the requirements set forth in the harmonized standard.

In view of the abolition of the Bulgarian Telecommunications Company monopoly after 31 December 2002 and the entrance of new telecommunications operators on the market the priority in the process of standardization should be given to the transposition of the European standards related to the open network provision, analog and digital leased lines, packet switched data services and network interconnection.

4. Technical Requirements to the Products

While The National Standardization Act defines the stages of the standardization process, requirements for moving a document between stages and the types of documents used during this process, the Technical Requirements to the Products Act settles the obligations of the telecommunications operators as regard to the products or equipment that were put into operation by them as well as the supervision of their compliance to the technical requirements.

The putting of the products into operation, as defined in the Additional Provisions of the Technical Requirements to the Products Act (TRPA), is the moment when the product passes into a stage of first use by the end user. Telecommunications operators activity, connected with products for which essential requirements are determined could be exercised lawfully only upon assessment of the product compliance with these requirements. They are determined in Ordinances issued by ministers upon delegation of Council of Ministers and settle the results to be achieved or the risks to be avoided in order to provide protection of the life and the health of people, the safety of the domestic animals and the protection of the environment and belongings. Obligations of the telecommunications operators arise in relation to Art.4, Para.2 of TRPA, which provides that the obligation to assess the compliance of the products belongs to the one, who puts them in operation, such as producers, importers or persons who assemble, install or carry out other activities which can affect the compliance of the product with the essential requirements. Assessment of the essential requirements could be carried out by individuals

who put products in operation or by the persons who have obtained permit to carry out assessment of the compliance.

The only exception from the obligation for assessment is that of Art.5 TRPA, according to which the products designed and produced according to the requirements of the Bulgarian standards, which introduce approximated European standards shall be considered complying with the essential requirements determined by the Ordinance outlining the essential requirements.

Telecommunications liberalization and globalization, technologies convergence, network migration to ATM and IP, and the endeavor to an ever greater mobility of telecommunications lead to strengthening of the role of standartization as a technical normative basis for regulation and provision of services in a competitive environment. That is why the introduction of standards for services, terminal and network equipment is of key importance in order to facilitate the commercial negotiations between the telecommunications operators and users of access and services.

V. Legal Aspects of the E-commerce. Electronic Document, Electronic Signature and Services, Related to the Electronic Signatures. E-government Initiatives

1. Overview of the Legal Framework of Electronic Commerce

In the era of fast development of information technologies, the electronic communication between legal subjects, private or public, has become an ordinary and preferred way of communication. Many jurisdictions, including the Bulgarian one, faced difficulties in regulating the particular problems arising from usage of electronic means of communication and the exchange of goods via the Internet.

In view of the necessity for establishing of a modern legislative framework for the development of electronic commerce, on the one hand, and the strategic emphasis on the harmonization of Bulgarian legislation with that of the European Community, on the other hand, the Bulgarian Council of Ministers adopted with its Decision №679/29.10.1999 a Strategy for the Development of the Information Society and National Program for the Information Society of the Republic of Bulgaria. Later on, the Program was updated by Decision 213 of 4 October 2001. One of its most important elements is the development of regulatory framework of electronic signatures and electronic commerce, based on the EC directives on electronic signature and electronic commerce, as well as other relative international instruments.

Thus in April 2001 particular legal base for the regulation of the e-commerce, new **Electronic Document and Electronic Signature Act** (the EDESA) was promulgated (S.G., issue 34, 6 April 2001). Six months later, on October 6, 2001 the act entered into force. The law was prepared on the basis of Directive 1999/93/EC on a Community framework for electronic signatures. Later three ordinances for implementing of the EDESA were adopted by the Council of Ministers - Ordinance on the activity of the providers of certification services, the order for their termination and the requirements for provision of certification services; Ordinance for the order of registration of the providers of certification services and Ordinance for the requirements to the algorithms for the advanced electronic signature (all of them promulgated S.G. issue 15, 8 February 2002).

It should be envisaged that even before EDESA has entered into force, the relations in e-commerce sphere were regulated by the legislative acts, regulating the commercial relations in general. These acts were: the Commercial Act and the Obligations and Contracts Act, Consumer Protection and Trade Rules Act, Protection of Competition Act, special laws regulating the banking activities, insurance law, etc. The main purpose of the Bulgarian EDESA is to create the basis for the *specific* legal framework on the electronic commerce in Bulgaria meeting the particularities of the relations.

However, the activities related to electronic commerce are much broader than the ones regulated by the EDESA – for example, they comprise of concluding of distant contracts on selling of goods online; content providing, providing access and usage of search, access and retrieval of data tools, providing services on plain and secure information transmission via communication networks and providing access to such networks, providing of hosting, particularities on collecting of information by the recipient of the service, establishing clear requirements for due care of the ISPs, etc. Regulation of all those issues falls beyond the scope of application of the above act.

De lege ferenda adoption of a codifying law on the electronic commerce is necessary, in compliance with the requirements of Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'), the other European directives it refers to regarding the electronic commerce, as well as the Model Law on Electronic Commerce of UNCITRAL. Presently there are two working groups working independently on drafting such an act. The first group is organized by the Minister of the State Administration and the other one is inter-institutional, led by the Ministry of Economy.

2. Objectives of the EDESA. Scope of Application

The main problem faced by the market players in their communication when using public or private networks is the development of fast and reasonably secure method and infrastructure for data interchange. Their existence will promote confidence in the possibility of identifying the authors of the messages and of ascertaining the integrity of the letters.

Worldwide, the electronic signature used within the public key infrastructure became a widely applied secure tool for communication. The providers of trust services related to electronic signatures play a key role in this infrastructure. Either by supporting the electronic signature by issuing certificate or by providing ancillary or other trust services, they are the persons trusted by the market actors communicating electronically by using electronic signatures.

Therefore rules for legal recognition of the electronic signatures and the regulation of the activity of the certification service providers should have been developed.

As already mentioned above EDESA was enacted on 07 of October 2001. The Law aims to provide legal regulation of electronic documents and electronic signatures and the rules and conditions for providing certification services. The law does not apply to contracts for which other laws require qualified written form, or to cases in which keeping a document or a copy of a document has specific legal meaning, such as for bills of exchange, securities, bills of lading etc.

In divergence to the Directive, under Bulgarian law both main types of e-signatures (the qualified and the non-qualified) are equal as regards their legal consequences to a hand-written signature, except for cases where the signatory or addressee of the electronic statement is the state, a state body or a local government body. A universal e-signature, being a variety of the qualified signature has the meaning of a handwritten signature in respect to everyone.

No explicit amendment to the procedure laws allowing the admission of signed with a advanced e-signature electronic document as valid evidence in the process is required. The procedure laws have already established clear rules for admissibility of written evidences, hence electronic documents being equalized to the written ones should be admitted.

In divergence to many other jurisdictions the scope of the law is not delimited to regulation of the usage of the electronic signatures in private sector, but as well as regulates its usage in the public sphere. The Bulgarian legislator provides certain particularities in this respect. All citizens and organizations may sign communications to state and municipal authorities only with universal e-signature, and *vice versa*, in order such signatures to be considered and legally valued as hand-written. Universal e-signature shall be used by the STC, registered

certification service providers, all state authorities, etc. As an exception of this rule, the law provides that the Council of Ministers shall specify the state authorities that may use another type of electronic signature in their relations.

The Council of Ministers shall determine its subordinate authorities which may not decline acceptance of electronic documents, signed with a universal electronic signature, and may not decline issuance of permits, licenses, approvals, and other administrative acts in the form of an electronic document, signed with a universal electronic signature. There is still no secondary legislation enacted in this respect.

The acceptance and issuance in the judicial system of electronic documents, signed with a universal electronic signature, shall be regulated by a law. Such law is presently drafted by a working group of legal experts.

The acceptance and issuance of electronic documents, signed with a universal electronic signature, by other state authorities except for the said above and by the local self-government authorities shall be regulated by their own acts. The procedure and form for performing and storing of the electronic documents shall be regulated by internal rules. There are still no such acts issued so far.

3. Certification Services Market

Presently there is no developed market of certification services in Bulgaria.

This results due to lack of clear registration procedure established by the CRC, lack of certification bodies to perform technical and organizational audits of the certification service providers, lack of developed electronic register within the CRC, etc. The fact is that there is still no any provider registered so far.

There are a few companies investing and preparing to start operation as CSPs.

The only provider that has submitted documents to the STC is the Information Services PLC. It has signed with Utimaco Safeware a contract worth 1.6 million Euros for setting up a security infrastructure for the e-government applications planned by the Ministry of Finance of Bulgaria. Partner in implementation of the project is GlobalSign.

The Bulgarian Industrial Association is acting as a Registration Authority of GlobalSign. It is also willing to register as a CSP.

There are several Bulgarian Web-Of-Trust notaries providing assertion on behalf of Thawte.

4. Forecast on the Usage of E-signatures in Bulgaria

The expectations are that after enforcement of the law the market will take up to the end of the year issuance of up to 60'000 certificates. They will enable companies and natural persons to submit their tax declarations, customs declarations, applications to certain state authorities, etc.

The Government has the intention to implement a system for electronic personal identity document for Bulgaria's more than 8 million inhabitants for which qualified certificates should be issued by kind of national trust center. It will be probably based on the Finnish model.

The above forecasts, however, are dependent on the successful outcome and the effective implementation of the organizational and technological objectives of the E-government Initiative of the Council of Ministers.

5. E- Government

E-Government refers to the use by government agencies of information technologies in relation to the automating delivery of government services and in some cases, services, to citizens, businesses, and other government agencies. Such initiative can serve a variety of different aims: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

Pursuant to the engagements undertaken in relation to the requirements for harmonization of the national legislation to *aquis communautaire* in 2002 the Republic of Bulgaria involved itself in the Pan European Project for Creation of E-Government. The beginning of the initiative was in July 2002, when the first draft of the E-Government Strategy was issued by the Council of ministers. According to the actual text of the Strategy till 2005 Bulgarian Government shall ensure 12 different kinds of services via electronic communications networks to its citizens.

Traditionally, the interaction between a citizen or business and a government agency take place in a government office. With emerging information and communication technologies it is possible to locate service centres closer to the clients. According to the Draft Strategy such services as filing of tax declaration, payment of social security or filing applications for issuance of identity card shall be realized via Internet.

The E-Government Strategy Draft, analogous to the e-commerce processes outlines several types of relations which aim to make the interaction between government and citizens (G2C), government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive. It also defines four stages: 1) publishing, 2) interactivity, 3) completing transactions, and 4) delivery. To date, most e-government activity is centered on publishing. Even at the present moment 150 as of 260 municipalities are website holders and nearly 80% of the state institutions possess websites also.

In view of the abovementioned, the Bulgarian Government has recognized that the transformation from traditional government to electronic is one of the most important public policy issues of our time. However it should be taken into consideration that E-Government includes a long lasting program for development of the contemporary management and technological measures designated to improve the interaction between governmental agencies, business and Bulgarian citizens. In the first place the commencement of that program shall start with the approval of the E-Government Strategy by the Council of Ministers of the Republic of Bulgaria, which is still pending.

VI. Electronic Banking. Systems for Electronic Payments

1. Electronic Banking

E-commerce development has brought the need for adequate electronic means for payment through Internet. Banks, financial institutions and other participants in electronic commerce recognized such need by the express promotion of a new type of bank product – electronic banking (e-banking) or admission to information and communication technologies in order to facilitate the access of the client to the services offered by a particular bank. Nevertheless the dominance of the cash payment in Bulgarian economy, the absence of legislative regulation and the lack of habits for use of bank services such as non-cash payments in the regular consumer, Bulgarian bank institutions already made an attempt to broaden their product list through the promotion of electronic banking.

No explicit regulative norms in relation to electronic banking are provided for by Bulgarian legislation. Electronic banking is not even listed as a type of licensed bank transaction in Art.1, Para.2 of the Banks Act, which provides for 16 types of such transactions. The varied forms of electronic banking are mainly connected with the access to reference information as regards to the bank account as well as to the opportunity to order payments via communications networks. Such services are based on the grounds of already existing relations between the bank and its clients, which in the absence of explicit regulation qualifies such activity as accessory service, aimed to enlarge the activity of the bank.

The order of payments via communications networks accounts for an integral part of non-cash payment or payment carried out by debiting and endorsing of bank accounts, according to Art.1, Para.2 of the Ordinance №3 concerning the non cash payments and the national payment system (S.G., Issue 75, 2 August 2002). In view of that definition the new amendments in the Banks Act as from 25th September 2002 (S.G., Issue 91) are of key importance. Those amendments refer to the participation of commercial banks in the national payment system and especially their activity in view of the operations related to non-cash trans-border payments. Ordinance №3 (Art.8, Para. 2) provides for the following definition of national payment system: “...*system, the settlement of the payments in levs in which are realized immediately and individually for every payment order in accordance with the operational rules and procedures developed by the Central Bank.*” According to the new regulation of Art. 45, Para.1, of the Banks Act commercial banks are entitled to operate not only non cash payments on the territory of Republic of Bulgaria, but also trans-national, in accordance with ordinances issued by the Central Bank (Bulgarian National Bank). In spite of the fact that such ordinances are not presently in force, those amendments were inevitable step. They shall influence the online activity and especially electronic banking in relation to international payments, which are regular as regards to relations in Internet. Due to the requirements for harmonization of the Bulgarian law with the EU legislation the provisions of Directive 97/5/EC on the transnational credit payments should be implemented as regards to several issues: the relations between the participants in trans national payments and especially to information that should be provided to the customer as regards to the payment; the terms for the transaction performance that should be reckoned with by any of the parties; the responsibility of the banks when failure to accomplish the payment occurs and the provision of adequate instruments for dispute resolution between banks and their clients.

As a result of the new amendments the penetration of electronic banking shall not be hindered by restrictive legislative provisions. However such factors as the condition of the telecommunications infrastructure, the habits of the consumers related to the perception of online bank services shall continue to determine the activities of the banks online. It could

be mentioned that presently only 29 banks are website holders, only several (First Investment Bank, United Bulgarian Bank, ING Bank and Encouragement Bank) offer services online and 9 do not possess website at all.

2. Virtual Bank Branches

At the present stage of the development of bank services in Internet only First Investment Bank has promoted its Virtual Branch. In view of the simultaneous existence of those two phenomena, the electronic banking and the services offered through Virtual Branch are activities which have to be distinguished. While the electronic banking is associated with the use of information technologies, the Virtual Branch accounts for a higher level of integration of the information and communications technologies in the bank activity as whole, namely performance of the entire electronic transaction through communication technologies. In fact it provides for instruments for realization of such activities which are usually fulfilled only in presence of the customer in person.

Similarly to the electronic banking a legislative regulation of the Virtual Branches of the banks could not be found in the Banks Act. However, while electronic banking is usually considered as accessory service, the activity of the Virtual Branch is more complicated. Based on the grounds of Art.1, Para.3 of the Banks Law Bulgarian legislation requires licenses for the lawful and eligible performance of bank activity. But it does not regulate activity through Virtual Branches so that at the moment they obtain such capacity without license or explicit permission. Moreover they are not only tolerated by the Central Bank, which also stimulates their activity. Such circumstances show that the Bank Act in force does not take into account the peculiarities of the online bank services, which could be characterized with involvement of international elements and necessity of security of the payments system, and state control and supervision as regards to consumer protection. Bulgarian legislation requires explicit prior permission of Bulgarian National Bank for operation of branches outside Bulgaria. The fact that any Virtual Bank Branch would use TCP/IP protocol and web servers already give rise to the opportunity for international payments, which do not fall into the jurisdiction of Bulgarian National Bank. In view of that fact it is important a legal regime as regards to the constitution of Virtual Branch to be provided for.

Because of the fact that bank transaction takes place on the Internet, Virtual Branches are also dependent on the legislative rules as regards to the identification of the one who initiates or accepts the payment, the authentication of signature and will and the security of the processes that took place. As a result of the entering into force of Electronic Document and Electronic Signature Act in September 2001, as well as the development of secondary legislation based on the abovementioned act a year later, such issues could not be considered as pending any more. However such types of services still are not popular due to the fact that most of the customers are not acquainted with it.

3. Systems for Electronic Payments

Presently payments initiated and performed on the bases of bank cards are one of the few widespread bank services performed online. There are two systems for online payments developed at the moment- ePay.bg, which unites 18 commercial banks and BgPay, which has only one participant –United Bulgarian Bank. Online payments based on bank cards

are accomplished on the grounds of a system of contracts. Those contracts set up the relations between the following participants in the electronic payment system:

- Customer - a debit or credit card holder, which wishes to purchase goods or services from merchants through Internet and which has given its consent on the bases of its contract with the Operator of the system, that online authorization and payment of goods and services, could be performed on his account.
- Merchant is natural person or legal entity, which offers goods and services on Internet, and which in accordance with its contract with the Operator, is obliged to accept online payments realized through bank cards.
- System Operator is a legal entity, which is entitled to register all customers or merchants, who are willing to realize payments through Internet by the means of debit or credit cards. The operator also ensures those payments from information and technological point of view, as defined in the established by the Operator and confirmed by the participating banks technology of the process.
- Banks are not direct participants in the payments system organized by the Operator. However they are important players as far as they are the issuers of the electronic payments means such as cards which are used for the payment.
- Except for the contract for the issuance of bank card, regulated by Ordinance №16 on the payments by the means of bank cards, the contracts that build the online payment system are not explicitly regulated by law. However they must comply with the requirements of Art.9 of the Contracts and Obligations Act “*The parties are free to determine the content of the contract insofar as it does not contravene the mandatory provisions of both the law and good morals*”.

3. Conclusion

Legislative framework of the bank activity in Bulgaria, which concerns the activity of the banks on the Internet still does not take into account the peculiarity of the environment where electronic payment took place. Moreover an online bank activity requires considerable investments, technical infrastructure, marketing and strategic planning, which must be developed and implemented by the bank. Those requirements, combined with the low level of activity of the consumers as regards to online goods and services in Bulgaria impedes the penetration of bank services on Internet.

VII. Privacy and Personal Data Protection in Electronic Communications

One of the keys for development of the ICT market is the existence of clear rules and guarantees in respect the privacy and protection of the personal data. Therefore there should be paid attention to the present state of the Bulgarian legislation in regulating these important issues.

1. General Legislative Framework of Personal Data Protection

No explicit legal regulation of privacy and data protection in electronic communications sector in Bulgaria existed before the beginning of 2002. On 1 January 2002 came into force the Personal Data Protection Act (PPDA, prom. in S.G. issue 1, 4 January 2002), which regulates the protection of individuals with regard to the processing of personal data and the right of access to the collected and processed such data. One of the main objectives for the adoption of the act was to harmonize the Bulgarian legislation with the European law in the sphere of the protection of human rights. Introduction of the rules of the European law for access to the information with assurance of the security of the data and the basic human rights is taken as a basic priority in the Updated National Program for the Development of the Information Society in the Republic of Bulgaria.

The PDPA implements into the Bulgarian legal system the basic provisions of Convention 108 from 1981 of the Council of Europe for the protection of individuals with regard to automatic proceeding of personal data (Convention 108/81/CE) and Directive 95/46/EC on the protection of individuals with regard to the processing of personal data and on the free movement of such data (Directive 95/46/EC). By such an implementation Bulgarian legislation was brought in line with the European law and subsequently this made possible the ratification by the Bulgarian Parliament of the said Convention 108/81/CE (ratification act prom. S. G. issue 56, 7 June 2002).

2. Administrators of Personal Data

Presently the protection of the personal data and the right of privacy in electronic networks in Bulgaria are regulated only by the general legislative framework of the PDPA. If a Telecommunications Operator/Online Service Provider intends to process the personal data of its clients, it shall comply with the requirements and limitations as set in the PDPA. In that case the OSP shall be considered as a controller (or as named in the Bulgarian PDPA - "Administrator of Personal Data") and its activities in processing of personal data of the clients shall meet certain requirements, listed in Art.17 PDPA.

The administrator of personal data may process such data when at least one of the following conditions is present:

- fulfillment of a normative obligation;
- the explicit consent of the individual;
- necessity of protecting the life or the health of the individual;

- fulfillment of the clauses of a contract between the administrator of personal data and the individual;
- legal interest of the controller of personal data, third person or of a person to whom the data will be disclosed.

In the case when the administrators of personal data are OSPs, then points 2 and 4 – existence of an explicit consent of the individual or the fulfillment of the clauses of the contract between the parties seem to have the most frequent application. The exposure of the personal data of the individual user (name, identification number, address, etc.) is necessary for the individualization of the parties yet before entering into the agreement. That is why Art. 7 of Directive 95/46/EC provides that the personal data may also be collected in cases when that is necessary in order to take steps at the request of the user prior to entering into a contract – a provision omitted in the process of implementation of this part of the otherwise literally translated text of the Directive.

The administrator of personal data is obliged to deliver to the data subjects the information, as described in Art.19, Para. 2 PDPA before the processing of personal data - namely information about: the purpose and means for processing of personal data; the obligatory or voluntary nature of submission of the data and the consequences from a refusal of submission; recipients or categories of recipients, to whom the data can be delivered, and the sphere of their usage; the right of access and for the correction of the collected data, the name and address of the administrator of personal data and the person processing the data.

The protection of the persons in processing their personal data and in providing access to them, as well as the control over the observation of the PDPA is accomplished by an independent state body called Commission for Protection of the Personal Data (the Commission). The Commission shall exercise the overall control over the observation of the normative acts in the sphere of the personal data protection, it shall keep a register of the administrators of personal data, it shall express opinion and give permits in the cases stipulated by the law. The Commission shall also consider complaints of individuals against administrators in connection with the breach of their lawful rights. Commission's first board was elected by the Parliament on the proposal of the Council of Ministers with a decision dated May 23, 2002 (prom. S.G. issue 54, 31 May 2002). After its establishment, the Commission adopted the stipulated by the law Regulations for the activities of the Commission and its administration (prom. S.G issue 71, 23 July, 2002). Six months after the enforcement of these Regulations (i.e. by the end of January 2003), the persons keeping registers with personal data shall bring them in compliance with the requirements of the law and shall notify the Commission. The Commission shall then within 3 months after the obtaining of the application, upon making preliminary investigations, register or deny registering as administrators those persons.

To be able to guarantee the security of the processed personal data, the administrators are obliged to undertake the necessary technical and organizational measures to protect the data from accidental or illegal destruction, accidental loss or change, illegal disclosure or illegal access, as well as all the other illegal forms of processing of personal data. The administrator is obliged to take special protection measures when the processing includes transmitting of the data by electronic way. The Commission shall determine by an ordinance the minimum of necessary technical and organizational measures, as well as the admissible type of protection.

3. Access to Personal Data. Disclosure to Third Persons

The PDPA regulates how access to personal data shall be given to the subjects of such data, as well as to third persons. The interested persons have to submit a written application to the administrator of personal data, following the procedure as described in the law. The access to personal data may be performed in a form of an oral or written verification or examination of data by the individual or explicitly authorized by him proxy.

The submission of personal data to third persons could be made only with respect to the strict requirements defined by the law. In those cases, at least one of the following conditions shall be satisfied:

- The individual shall explicitly give his consent;
- The sources of data are public registers or documents containing public information for which access is provided by an order determined by the law;
- The access is related to the life or health of the respective individual, as well as when his state does not allow him to give consent or some legal obstacles for that exist;
- The access is necessary to the of juridical and the executive authorities and for the protection of competition and of the consumers and that is established by a law;
- The data are necessary for the purposes of the scientific research or for statistical purposes and the data are anonymous.

4. Specific Rules for Personal Data Protection in Electronic Communications

Besides Directive 95/46/EC, containing the general framework of the regarded matter, the protection of the personal data in the sphere of e-trade and the telecommunications is regulated in EC law by Directive 97/66/EC concerning the processing of personal data and the protection of privacy in the telecommunications sector. With effect from October 31, 2003 this directive shall be repealed by the newly adopted Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications). The Bulgarian Personal Data Protection Act introduces only the general rules of Directive 95/46/EC; it neither implements Directive 97/66/EC, nor Directive 2002/58/EC and their special provisions on privacy and telecommunications/electronic communications. At the present moment the only legislative provision regulating those matters is Art.57, Para. 1, Item. 19 of the Bulgarian Telecommunications Act, pursuant to which requirements for guaranteeing the privacy of the communications shall be included in the individual licenses of the telecommunications operators.

The Updated Sector Policy in the Telecommunications of the Republic of Bulgaria from May 21, 2002 explicitly provides, that with regard to process of liberalization in telecommunications it is important to formulate a comprehensive legal and regulatory framework, compliant with the requirements determined in Directive 97/66/EC for collecting, processing and using of personal data by telecommunications operators.

The draft of the new Telecommunications Act as submitted to the Bulgarian Parliament by the Council of Ministers on 23 September 2002 provides for explicit incorporation in the text of the Telecommunications Act of provisions, concerning the processing of personal data and the protection of privacy in telecommunications sector. In Chapter Fourteen of the draft, named “Confidentiality of messages and protection of personal data for the purposes of telecommunications” special provisions are introduced with the aim to implement the rules of the Directive 97/66/EC. No reference is made to new Directive 2002/58/EC and the rules contained therein. The following major new rights and obligations of telecommunications operators and subscribers are introduced in the draft:

- obligation of the operators to guarantee the privacy of communications and not to disclose the information or data that has become known to them in the course of providing of the services;
- obligation of the operators to undertake technical and organisational measures to ensure the privacy of communications, as well as to eliminate the unauthorised interference with them and informing the users is a risk for security appears;
- obligation of the operators to guarantee the confidentiality of the messages and prohibition for tapping, recording or other kinds of interception or surveillance of communications;
- limitation of the processing and the time limits for the preservation of traffic and billing data;
- provision of the functions “caller’s line identification” and “connected line identification”;
- right of subscribers to request, free of charge, omission of the whole or part of their personal data from printed or electronic directories of subscribers available to the public.

VIII. Cyber Crimes

Amendments to Bulgarian Criminal Code concerning computer crimes were published in the State Gazette, issue 92, 27 September 2002. A whole new chapter under the title “Computer crimes” was introduced in the structure of the Code between Chapter IX “Documentary Crimes” and Chapter X “Crimes against Public Order and Public Peace”. The main purpose of its provisions was to introduce a criminal policy aimed at the protection of society against computer crimes. They entered into force three days later.

The amendments, which provide for the application of criminal liability to certain offenses committed through the use of computers or involving the effect on computer system was a long expected change in Bulgarian legislation. They account for the obligation of the State to defend the social and economic relations affected by the criminal behavior realized through the emerging new types of crime or resulting from the commission of traditional crime by means of new technologies. They are even more up to date in view of the fact that Bulgarian criminal legislation encounters a variety of new problems - the flow of information is not restricted to the existing state borders, while criminals are frequently located in places other than where their acts produce effect. In view of that fact the new provisions concerning computer crimes are a natural result of continued public dispute, the thorough work of many legal professionals, the efforts of international and national organizations and institutions dedicated to the purpose to protect legitimate interest in the use and development of informational technologies. They are also a consequence of the recent social and economic changes, which have made inevitable the legislative attempt for effective fight against such crimes.

1. The Reasons Which Prompted those Amendments

During the 1980s the lack of a broad and effective computer infrastructure in Bulgaria did not allow the distribution of computer crimes to such an extend, which could cause the interference of the legislators. The abovementioned period, according to the data presented by the National Institute for Criminology could be characterized with only 7 registered criminal acts with the use of electronic means (mainly fraud and documentary crimes). However, at the end of the 1990-es and especially in the period 2000-2002 the situation has rapidly changed. The use of new technologies became within the capacity of broad band of the Bulgarian society. The use of Internet both in public and private sphere increased, showing possibility for access to a great amount of information, knowledge, benefits and advantages that can be drawn there from. According to the data presented in April 2002 at one of the workshops dealing with the necessity of amendments in the Bulgarian Criminal Code, as a result of those social changes more that 200 offences which endanger social and economic relations through the use of new technologies took place in 2001. Among the most apparent are several cases of hackers attack over OSP networks, distribution of e-mails containing bomb threat and replacement of the homepage of one of the banks offering online service in Bulgaria in 1999.

While at the beginning of the period most of the crimes were inevitably connected with the use of local networks and local systems, during the last 2 years they were committed trough Internet and wide range of interconnected networks. That circumstance increases the possibility for violation of valuable rights and legitimate interests in a considerably greater scale than it was usual for the networks restricted in their range.

The legislative amendments to the Bulgarian Criminal Code are also a result of the engagements undertaken by the Republic of Bulgaria in connection with the Convention on Cyber crimes of the Council of Europe signed by our state on 23.11.2001. It is necessary to be emphasized that they implement the provisions of the Convention, as proposed on 23.11.2001 in Budapest. Yet, Bulgarian legislators have hesitated for more than a year before the amendments were voted in the Parliament, because of the widely spread doctrinarian view that computers were only a particular instrument for the commitment of the crime and no new crime definitions were necessary.

2. Computer Crimes and Computer Related Crimes

A distinction should be made between computer crimes as an emerging new type of crime provoked by the development of the information technologies and the traditional crimes committed by means of new technologies. Still there is no common understanding both in Bulgarian legislation and in the legal theory as concerns to the difference in the meaning of the terms “computer crimes”, “cyber crimes”, “computer related crimes” and “hi-tech crimes”. Those terms are used usually as synonyms, without further accurate definition of their acceptance.

3. Crimes Committed through the Use of Computers

The characteristic feature of such offences is the use of computers or information technologies as means for commitment of the crime. Precisely because of the peculiarity of the methods involved, which usually facilitate the criminals in order to produce the desired effect, such acts are distinguished as more dangerous for the society than the same crime committed in traditional way. However many criminal acts were qualified for punishment under the provisions of the Criminal Code even before the amendments. Most of them could be classified within the already existing texts such as fraud, documentary crimes, criminal breach of trust, misappropriation. Even part of the presently committed violations in Internet could be classified as some of the traditional crimes (the fraud realized in e-commerce as fraud under the provisions of Art.209 “*Whoever, with the purpose of obtaining for himself or for somebody else property benefit, arises or maintains aberration in somebody, thus causing him or somebody else property damage shall be punished for fraud*”, threat distribute via e-mail under Art. 326 “*Who transmits by a radio, telephone or in any other way false calls or misleading signs for help, accident or alarm shall be punished*”).

In spite of the existing possibility for punishment of those violations there was a ferocious need of strengthened protection by means of adequate texts in view of the facilitation of the court practice and the prevention of such crimes. That is why after the amendments in September 2002 some of the traditional crimes were enriched with qualifying circumstances and higher sentences aimed to be awarded in view of the possible use of information technology.

As some of the traditional crimes committed by means of information technologies the following could be pointed out:

- **Intellectual Property crimes.** Information technology allows the reproduction and fast distribution of diverse objects protected by intellectual property rights. The opportunity for exchange and dissemination regardless of geographical borders comprises favorable conditions for the spreading of that type of crime.

- **Trade espionage.** The information flow especially in the interconnected networks facilitates in a greater scale one of the most common offenses against the existing economic relations. It is much easier for those companies which maintain computer networks to become victims of trade espionage.
- Some of the other crimes which could be committed with the use of information technology are also the crimes against the national security, money laundering, especially with the use of electronic payments systems, insult or defamation and many others.

Bulgarian legislation as from 1st of October 2002 provides for four new criminal offences which do not affect computer system, but the fact that information technology was used in its commitment results in a stronger penalty than it was provided for in the existing text. Such crimes are offenses related to child pornography, the specific offenses related to abolition of somebody else's property or the offenses against the integrity of the personal correspondence.

4. Computer Fraud

One of the long expected amendments is related to computer fraud. During the last two years many companies started their activity in Internet also many banks have developed payment systems which fulfill electronic transfers. As a result of this amounts administered or represented in computer systems have become object of manipulation just like the traditional tangible or intangible property. That is because the provisions of the Criminal Code related to computer fraud are important for the protection of envisaged economic relations.

The aim of the new Art.212a of the Bulgarian Criminal Code is to criminalize any undue manipulation in the course of data processing with the intention to affect an illegal transfer of property. Neither there is court practice related to that crime, nor a definition, but the probable notion of the legislator of "*any input, alteration, deletion or suppression of computer data*" could be interpreted as acts which involve hardware manipulations or acts affecting recording or the flow of data, or the sequence in which a program runs. In addition the offence must be committed "without right" and the benefit must be obtained "without right". Moreover the offence must be committed not only intentionally but also with the specific intent to benefit for oneself or for another. The last of the elements of the regarded crime requires damage (loss of property of economic value) caused to anyone but the perpetrator. In distinction to the traditional fraud, computer fraud shall be punished with an accumulation of the penalty – not only imprisonment from 1 to 6 years but also a fine shall be determined by the court.

5. Computer Crimes

The text of Art.319a to 319e of the amended Bulgarian Criminal Code are meant to protect the functioning, availability and the integrity of computers, computer systems and networks, as well as the lawful creation, use and exchange of data and information. The need to protect the security of the computer systems reflects the interest of the organizations and individuals to manage, operate and control their systems in an undisturbed manner, so that there is no danger of alteration or destruction of data or

illegitimate access to confidential data. According to the provisions of Art.319a “*Whoever commits unlawful access to computer resources, copies or utilizes computer data without permission in case such permission is required, shall be punished*” Strongest punishment is provided for by the law if the offense was committed by an organized group, if the crime was committed more than once, in case the data accounts for state secret and if the crime had serious consequences.

The next of the new texts criminalizes data and system interference. If considerable damages or other severe consequences have resulted from the offense or if the crime was committed with the specific intent of the perpetrator to benefit from that act the crime shall be punished with stern measures. Stern measures also are imposed if the same act was committed as regards to data which is due under the obligation imposed by a law, transferred by electronic means, if the data was stored on a magnetic carrier or the crime was committed with the specific intent not to fulfill lawful obligation. The integrity and the proper functioning of the stored computer programs or data, which could be impeded through adding, alternation, deletion or deterioration of the date referred, is the legal interest protected here.

The abovementioned acts are punishable only when committed intentionally and without permission of the individual responsible for the computer or the network and if the case is not of minor significance, according to the definition of Art.93, Para.19 of the Criminal. On the contrary if the offense involves computer data, which characteristic feature was the way it is transferred or stored or the way in which the obligation for delivery to another was imposed, then because of the specifics of such data its interference is meant to be punished with stronger measures.

The new amendments to the Bulgarian Criminal Code criminalize also the introduction of a virus into computer system or network, the dissemination of computer or system passwords, which causes the disclosure of personal data or state secrets as well as the infringement of the obligation of the certifying authority to store the information for the time of the data transmission and its source.

Detailed and thorough acquaintance with the legislative provisions introducing computer crimes in the Bulgarian legal system shows the attempt for adoption of the solutions of the European Convention on Cyber Crimes. However not all of the offenses provided for by the Convention were used by Bulgarian legislator. A possible explanation is that there is no social necessity for the implementation of all texts. Criminal law must keep abreast of the technological developments which offer highly sophisticated opportunities for misuse of computers and data, but if there is no need for Criminal law protection because of lack of some criminal offenses then such legislative texts shall be unduly provided for.

The texts which were adopted in view of the computer crimes are expected to provide the necessary level of protection of the social relations so that the law could realize its aim. However their application by the legal professionals shall be hindered by the lack of court practice, legal literature as well as the lack of theoretical works in that field. Nevertheless those difficulties the main obstacle shall remain the absence of adequate procedure adapted to the needs of the recently introduced crimes. Until the necessary amendments in the Criminal Procedure Code take place, the implementation of those texts shall be restricted.

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