VI. INTERCONNECTION AND ACCESS

The main efforts in 2004 were directed towards the development of the new secondary legislation to the Telecommunications Act, complying with the new trends in the development of the telecommunications and harmonized with the European legislation in connection with the undertaken commitment for the accession of the country to the European Union. The building up of the secondary legislation formed the overall legislative and regulatory frame for the implementation and the development of the telecommunications.

One of the main purposes of the Telecommunications Act and the secondary legislation is the introduction of preventive restrictions and obligations for the fixed and mobile SMP operators. The restrictions for those operators aim at stimulating the competition in the relevant markets by introducing the following obligations:

- 1. interconnection, ensuring equality of the operators with the right to interconnection
- 2. provision of unbundled access to the local loops of the operators of a fixed telephone service
- 1. The interconnection of the telecommunication networks is considered one of the key factors for providing efficient competition, creating conditions for the entering of new operators in the telecommunication market. The basic principles, determining the relations among the operators, included in the realization of the interconnection (transparency, objectivity, non-discrimination), were included in the basis of the regulations of the Telecommunications act and were further developed in the adopted by CRC Ordinance No 10 on the conditions and the procedures of interconnection of telecommunication networks (Ordinance No 10). With the adoption of Ordinance No 10 the principle of transparency in providing and negotiating the conditions for interconnection between the operators with the right and obligation of providing the interconnection of their networks, was regulated, as well as the principle of non-discrimination for those, determined for the SMP operator. In this Ordinance the range of the interconnection services was determined, the essential requirements, which should be observed, are exposed in details. The rights and the obligations of the operators were determined, in order to protect their interests in concluding Interconnection Contracts, as well as to ensure the quality of the provided services.

The regulations of the Telecommunications Act and Ordinance No 10 determine the requirements for publish the Interconnection Reference Offer (RIO) of the operators of the fixed telephone networks, providing fixed voice telephone services, and of the operators, providing the service leased lines, with significant market power. In this connection, BTC PLC submitted to CRC a project for reference offer.

After the performed public discussion and execution by BTC PLC of the obligatory instructions of CRC, the Commission with resolution No 1410/29.06.2004 approved the reference interconnection offer. So real conditions were set up for signing agreements for interconnection between BTC PLC and the newly licensed operators, for the provision of fixed voice services. In the time period 29.06 to the end of 2004 three agreements were signed for interconnection on the basis of the reference offer –between BTC PLC and ORBITEL AD, NEXCOM BULGARIA EAD and GLOBALTECH BULGARIA EOOD. The main element in the approved reference offer, which is of a significant importance both for stimulating the competition in the telecommunication sector and for the subscribers of the company, is the regulation of the conditions for providing the service "carrier selection". The introduction of this service guaranties the users an easy and non-discriminating mechanism of choosing an operator according to their wish, for each call. The service lets the users to make the best choice concerning the quality, the service and the price.

The requirements of Ordinance No 10 on the interconnection foresee the SMP operator to update every year the conditions for the interconnection in the reference offer, connected with the modifications in the prices, the technical conditions and the provision of new services. In this connection at the end of September 2004 BTC PLC submitted to CRC a project for changes in the reference interconnection offer. The main changes in the project are connected with the introduction of conditions for providing the service "carrier preselection" and with the prices for collocation. The introduction of this service, as well as the service "carrier selection", is a significant step towards opening to the market and laying the foundations of efficient competitions in the telecommunications sector under the conditions of a transition from a monopoly to free competition (liberalization).

After the procedure, foreseen by the relevant legislation of public consultations, CRC approved the reference offer, reducing some of the foreseen terms of providing and using the services and imposed certain restrictions to part of the proposed by BTC PLC prices due to lack of reasons for their approval.

The reference interconnection offer approved by the Commission could be found, on the web sites of BTC PLC and CRC.

In 2004 the new fixed operators ORBITEL AD, NEXCOM BULGARIA EAD and GLOBALTECH BULGARIA EOOD reached agreements for interconnection with the operators of the mobile cellular networks (GSM).

Despite the signed new agreements, at the end of 2004 there was no operating interconnection between networks. The real start of the interconnection in 2005 will demonstrate the efficiency of the reference offer and the changes needed.

2. Besides by interconnection, another way to stimulate the competition and to ensure equality of the operators is the so-called unbundled access to the local loop.

The Telecommunications Act stipulates the requirements to the SMP operators for the elaboration of a "Reference unbundling offer". In compliance with these obligations BTC PLC submitted to CRC a project of a Reference unbundling offer. The project was published on the Commission's web site for public consultation. CRC approved the reference offer and gave obligatory instructions for making certain corrections.

The approved by the Commission Reference unbundling offer could be found on the web sites of BTC PLC and CRC.

This is the first reference offer of this type on the telecommunication market in our country and a real start up of the service will demonstrate its efficiency.

Leased lines

The competitiveness on the leased lines market to a large extent depends on the regulation of the SMP operator's obligations. In this connection and in compliance with the regulations of the Telecommunications Act, CRC developed and the Council of Ministers approved an **Ordinance on the conditions and the procedure of providing the "leased lines" service.** The adoption of the Ordinance determined the conditions, under which the public operators provide the "leased lines" service and possibilities were created for anyone to use the "leased lines" service with observation of the following principles: public announced and objective conditions and equal treatment of the users.

The Ordinance determined the so called "minimum set" of lines with definite technical characteristics, which the SMP operator has the obligation to provide. The prices shall be publicly announced and cost oriented. Towards the middle of the year the approved by CRC Reference leased lines offer was published.

As a result of the created conditions for the development of the competitive market, by the end of the year 11 operators obtained individual licenses for providing the service "leased lines". They constructed and enlarged their networks with new transition capacities and offer this service, including lines, differing from the minimum set offered by that time only by BTC PLC. There appeared on the market competitors of the SMP, offering various types of lines — CABELTEL AD, BULGARGAS EAD, VESTITEL BG AD, PTB EAD, NETERA EOOD, EVROCOM CABLE EAD, EST AD, TELEVOICE AD and the mobile operators RADIOTELECOMMUNICATION COMPANY (RTC) Ltd, MOBILTEL AD, COSMO BULGARIA MOBILE AD.

Numbers and addresses

In 2004 the last stage of the procedure of extending the subscriber numbers s of the mobile cellular operators ended. With the changes in the numbers used in the network of COSMO BULGARIA MOBILE AD, the format of the national significant numbers used in the mobile cellular networks was unified. Subscriber number was increased to 7 digits after the two-digit access code (NDC).

By the elaboration and the coming into force of Ordinance No 16 on the rules for allocation and the procedures for assignment, reservation and withdrawal of numbers, addresses and names, the formats of all types of numbers and addresses and the rules for their use were approved. Ordinance No 16 is in compliance with the Telecommunications Act,

the international and the European agreements, standards and recommendations as well as with the relevant Bulgarian legislation. Besides, the specific conditions have been taken into account and the current practice in the country by that moment. The issue of this Ordinance ensures the observation of the principles of transparency and equality in assigning numbers and addresses for the telecommunications. Ordinance No 16 does not treat the provision of names, since, according to the Telecommunications Act, CRC has no powers over the distribution of the names, used on the Internet.

The changes in the Tariff of charges collectable by CRC in compliance with the Telecommunications Act, fees were introduced for all types of numbers and addresses, determined by Ordinance No 16 and provided by CRC, for instance: numbers for the services "personal number", free phone services, premium rate services, provided on national level; for the NSPCs and ISPCs, MNCs, DNICs, etc.

The charges for using the numbers and the addresses are based not only on the administration costs of their management. By determining the type and the dimension, the efficient use of these resources is stimulated.

In the past year 7 new operators were licensed, providing fixed voice telephone service. From the allocated resources CRC let for use more than 170 000 geographic numbers and 35 addresses (7 ISPCs and 27 NSPCs) to the telecommunication operators for the voice service. For the implementation of the service "carrier selection" the operators were given 4 new codes of the type 10xy.

Immediately after Ordinance No 16 came into force, the operators demonstrated their interest in non-geographic numbers for the services of the ranges "700", "800" and "900". A number of applications were submitted to CRC for providing such numbers, as well as applications for numbers for access to directory information services).

In connection with the licensing of the third GSM operator a new block of 10 000 000 national significant numbers was determined, with an access code to the mobile network "87".

From the National Numbering Plan code "430" was determined for access to the network of the newly licensed operator, carrying out telecommunications by public telecommunication network of the TETRA standard.

The issuance of the new licenses reminded again of the need of additional ISPCs. In this connection a third group of 8 ISPCs were applied for and provided by ITU-T.

At the end of 2004 a draft was elaborated of the regulatory policy of using numbers and addresses for the carrying out of the telecommunications. The regulatory policy takes into account the current status and determines the trends in the use of this resource with the development of the telecommunication market in short term (2004 - 2005) and middle term (2006-2007) plan. After its final approval by CRC, an optimization of the National numbering plan is foreseen for unallocating number resources for new types of networks and services.

Standardization

In compliance with article 29 of the Telecommunications Act, CRC is a national standardization organization for ETSI and has the obligation to organize public enquiry on the ETSI deliverables, which CRC fulfils by putting them to the Commission's web site.

The performed public enquiry and voting for 2004 and the obtained new publications are, as follows:

Table 17

	Number of processed documents				Number of procedures			
	2001	2002	2003	2004	2001	2002	2003	2004
PE – public enquiry	197	17	40	26	21	10	16	12
Vote – voting	288	28	24	28	29	20	13	13
OAP – one- step procedure	301	84	93	36	38	27	16	15
MV – member voting	31	92	77	35	17	25	18	18
PUB – weekly received standards	1670	2461	1786	1233	Every week			

As a national standardization organization for ETSI, CRC is responsible for the implementation of the published standards of ETSI as Bulgarian, offering them to be included in the operative schedule of the technical standardization committees TC 47 "Radio

communication systems and radio equipment" and TC 57 "Information and communication technologies" to the Bulgarian Institute of Standardization.

In 2004 **1005** nos. of ETSI standards were introduced as Bulgarian standards by endorsement (only by translation of the title). Practically all the published by the end of 2003 EN (European series) standards, including the harmonized standards were introduced. In this way the requirements of the European Union have been fulfilled in the field of the telecommunications sector for the introduction as national of minimum 80 % of the European standards.

An important event for players on the Bulgarian telecommunications market (operators, test laboratories, importers and producers of terminal and radio equipment) in 2004 was the workshop which took place on 16.04.2004 in Sofia titled "The Accession to the EU – Challenges and Advantages for the Telecommunications market", organized by ETSI in collaboration with CRC. This workshop was a part of the series of workshops of the program "Matchmakers meetings" of ETSI and EC, held in all newly integrated countries, as well as in those, whose membership is forthcoming. Besides the problems of the standardization, topics of regulatory and practical nature were discussed there.

In order to achieve networks interoperability the operators should apply the same standards and/or specifications for the services, the technical interfaces and the networks' functions. In the Ordinance on the conditions and the procedures of providing the "leased lines" service there are definite standards for the minimum set. By a decision the Commission will approve a list of standards to Ordinance No 10 on the conditions and the procedures of interconnection of telecommunication networks. In order to stimulate the harmonization in the electronic communication networks, the provision of services and the satisfaction of the needs of the consumers it is necessary to update these lists periodically, in compliance with the standards, applied in the EU.

Radio and telecommunications terminal equipment

In 2004 drafts were prepared for the Ordinance on the ways and procedures of affixing a sign for specific marking for identification of the radio equipment, in compliance with article 208, paragraph 3 of the Telecommunications Act, as well as a List of radio equipment whose putting into service is restricted were taken into account, in compliance with Art. 209, Para. 2 of the Telecommunications Act.

This Ordinance and the List are closely connected with Directive 1999/5, introduced by the Ordinance for essential requirements and conformity assessment of the radio and telecommunications terminal equipment (the Ordinance) in compliance with the Law on the technical requirements to products.

Directive 1999/5/EC also supplements the new regulatory frame in the EU for the electronic communication networks and services, which is to be implemented in our country. The Directive obliges the operators to publish the technical specifications of the interfaces for connecting the radio and telecommunications terminal equipment to their networks. Such an obligation could be found in our Telecommunications Act and the Ordinance but no control is foreseen, as a result of which no operator has fulfilled this obligation by now. An amendment in the Telecommunication Act is needed and the operators shall be reminded of their obligation to submit this information to the competent authority – CRC, granting it the right to control.

Electronic document and electronic signature

The Electronic Document and Electronic Signature Act (EDESA) and the related to it Ordinances govern the powers of the CRC in this field and determine the activities in 2004.

In the past year one of the main tasks was the elaboration of a methodology for the supervision of the providers of certification services. At the same time the final elaboration of a sample form of a written statement of ascertainment started up, which is to be finalized.

Certificates for universal electronic signature by the registered in CRC providers – INFORMATION SERVICES PLC and BANKSERVICE PLC were purchased. In this way the start was given for the supervision of these providers by monitoring of their Internet sites and practical use of their certificates for universal electronic signature.

A representative of CRC participated in the interministerial work group of the Ministry of Justice on the legislative measures for arranging the acceptance and issuance of electronic documents for use in the judicial system.

With the participation of CRC experts, an Ordinance on the conditions and the storage procedure for specimens of cryptographic keys by the Minister of Transport and Communications, with the obligation of confidentiality, in case of their use by the telecommunication operators, was developed.

CRC took part with a representative in the sessions of the Work group 3 "Free Provision of Services" to the Ministry of Finance, where the state of the Bulgarian legislation relevant to the field of the electronic signatures is regularly monitored and assessed.

In 2004 working expert meeting on the problems of the electronic signature was organized with Dr. Jos Dumortier – Director of the Interdisciplinary Center on Law and Informatics in Belgium.

Representatives of the Commission took part in the organization and the proceedings of the international group on the "Introduction to the main elements of the informational security".

Bearing in mind the existence of current relevant legislation, the presence of operating providers of certification services as well as the implementation of a policy aiming at the accomplishment of the Strategy for an e-government, adopted by the Council of Ministers on December 28, 2002, growing interest in the electronic signature is expected in the future.