

ProTel engineering, Ltd.

The ProTel company was founded as early as in 1990. That time few former members of the Výzkumný ústav telekomunikací (Telecommunication Research Institute) company started to co-operate and subsequently new colleagues with experience in the area of telecommunication technology, computer hardware & software and data networks, joined. Then in 1994, the informal cooperation was transferred into newly founded ProTel engineering, Ltd company.

The ProTel company main concentration is on development of special telecommunication devices and systems. In the periods of 1990 to 2000, mainly the orders directed both straight and indirectly to Telefónica O2 CZ a.s. (ČESKÝ TELECOM a.s., eventually) company, partially then also into the area of power engineering and railway, were concerned. The ProTel company activities were step by step extended by service and designing actions, by small-lot production and consultancy actions. In recent years, the company has about 30 employees, among these more than 20 staff members are specialists focused on up-to-date telephone hardware and software development.

The following orders from periods of 1990 to 2000 may be included among interesting projects:

- ❑ Software development for first central supervision over the intensity and quality of intercity telephone traffic, exploited in the ČESKÝ TELECOM a.s.
- ❑ Development of hardware and software devices for accounting of local telephone calls where production was ensured in TSE spol. s.r.o. company and the customer was ČESKÝ TELECOM a.s.
- ❑ Development of software for collecting records about particular telephone calls and their transfer for subsequent invoicing by the ČESKÝ TELECOM a.s. company.
- ❑ Development of hardware and software devices for monitoring of faulty states of telephone exchanges, TSE spol. s r.o., being the manufacturer, Telefónica O2 CZ a.s. and ČESKÉ DRÁHY a.s. being the customers.
- ❑ Software development for central supervision over faulty situations and extraordinary states of telephone exchanges of Telefónica O2 CZ a.s. and ČESKÉ DRÁHY a.s. companies.
- ❑ Software development for modelling and dimensioning of capacity and quality of metropolitan or regional telephone networks, ČESKÝ TELECOM a.s. being the customer.
- ❑ Hardware and software development for monitoring and central supervision of power system exploited in CDO dispatching and ČEZ a.s. company.

At some orders, ProTel company took part in projection, installations and service, too. Long-term support to the customer staff , including additional completion of software functions, is a part of majority of orders.

The activities introduced above were very interesting from the profession point of view and accordingly successful commercially. However, these activities showed also a negative aspect, namely big dependence on few customer only and therefore also easy vulnerability of such PhoNet business. In addition, no of this time products had the character of long-life and generally applicable product. That was the reason why ProTel company commenced their activities in the area of research and development of 5th generation telephone exchanges. At the beginning, it was not sure at all if the original intention is feasible from technical point of view and if it is within the capability of modest group of Czech specialist. However, after a time it was proved that very progressive telephony concept was concerned which was evidently under development even in laboratories of great worldwide companies. About 2000, the VoIP concept arose in the world and it was confirmed that the ProTel's intention was very advanced. Thus, by concurrence of circumstances, in a Czech company, today there is existing and under further development very valuable know-how from the area of most advanced telephony.

ProTel engineering, Ltd, is the owner of rights to PhoNet system technical solution and to word and graphical PhoNet trademark and to internet domains phonet.cz, phonet.sk, phonet.eu, phonet.ru, xphonet.cz, xphonet.sk, xphonet.eu a xphonet.ru.

Present offer of the ProTel company includes the following main products:

- ❑ **GTW PhoNet 1000** - internet telephone gateway serving for mutual high-capacity both voice and signalling interconnection between classic telephone network PSTN with several E1//SS7 interfaces and advanced VoIP packet telephone network with one or several Ethernet type interfaces with SIP signalling.
- ❑ **PBX PhoNet 3000** - 5th generation private branch telephone exchange consistently applying principles of packet telephony and serving for telephonisation of private companies, state-owned and other institutions. The PBX may serve for needs of a site or campus or even of vast group of sites within corporate telephone networks.
- ❑ **NET PhoNet 7000** - internet telephone exchange operating on VoIP principle (or, packet commutation of calls) and serving for provision of public telephone service in the environment of MAN metropolitan networks (for instance in cable television), or extended data networks (for instance in internet network), with support of TCP/IP protocols.
- ❑ **NMC PhoNet 9000** - centre of telephone networks consisting from a register of networks (database of identification, technological and commercial data), a tester of networks (for tests of their functionality) and a transit exchange (realisation of an overlay VoIP star interconnecting particular telephone networks) serving both for anonymous public and for authorized persons of telephone operators.

Further products are under preparation: TST PhoNet 2000 (tester of telephone exchanges) or ATX PhoNet 8000 (public telephone exchange) or iProTel (advanced telephone terminal). At the same time, features and functions of all types of PhoNet telephone exchanges offered so far, are further extended. The PhoNet system is fully certified from the point of view of electric safety and electromagnetic compatibility. Simultaneously, its capabilities of interconnecting with Czech and Slovak telephone networks of Telef3nica O2, GTS Novera, Radiokomunikace, ĀD-Telematika, T-Mobile, T-Com companies and majority of VoIP operators, have been proved.

Recent years, ProTel company business activities were diversified into several directions: to Czech VoIP operators (Mattes, Āeský bezdr3t, Voinet, KTV Přerov, KTV Rořnov, SELF, Best Call), to Slovak VoIP operators (Imafex, Antik, InomaNet), to license manufacturers of PhoNet exchanges (TESLA Lipt. Hradok and TESLA Karl3n), to users of PBX telephone exchanges (1. Městská, A RENT, ALMA N. Bystřice, CENIA, FÚ Řiřany, NPO InterElectroMontage, Snyze, Svojtka, řkola Sedlec-Prřiice, VUMS DataCom) and to operators of centres of telephone networks (in Czech and Slovak republic).

The ProTel company offers to its customers advanced products that are not charged by foreign licences and are proved by a range of successful installations, direct support by Czech technicians, manufacturer and authors of hardware and software of telephone exchanges, quality extensive experiences with operation of both public and private networks, very acceptable delivery and service terms, warranty times 36 to 60 months and highly professional interest in advanced telephone technology issue.

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