Secure telephony via classic and IP networks

OFFICE SECURITY SOLUTIONS

Every kind of telephone technology has its information risks...

Telephone conversations are still a core function of daily communications – where confidential information is at risk and has to be protected against third-party access. Or can you, in your position of responsibility, afford to let your telephone conversations be intercepted by third parties?

With the vast range of options of new communication technologies, the risks posed by voice communication are all too easily forgotten. However, information security must be ensured everywhere and at all times – regardless of the technology being used.

Even though IP is becoming the base technology for voice communication, classic telephone networks (PSTN and GSM) are still used in parallel. The challenge therefore lies in the smooth implementation of high-security encryption solutions – for every kind of telephone technology and in increasingly complex and inhomogeneous networks. Special attention should also be paid to secure transitions in the implementation of continuous networks. Professionally implemented, such solutions provide reliable protection against interception, are available everywhere via fixed networks, GSM and Satcom, and can be operated without any specialist security knowledge.

Encryption solutions from Crypto AG for all networks and applications in the world of communication

Secure voice communication in the age of convergence

Encryption is a core competence which Crypto AG applies to the ever-increasing number of new technologies. Network topologies are changing more rapidly than ever before, and classic telephone networks are converging with modern IP-based ICT structures that offer operational and structural benefits.

We have the in-depth knowledge and experience to ensure the seamless integration of security technology into the widest variety of communication networks.

As a full-service provider with expertise in practically all common communication technologies, we can implement your individual security solution for combined use with fixed-network telephones, secure GSM telephones and portable satellite telephony terminals.

For IP-based telephony you may use our proven IP VPN security solutions as either a stationary or a portable system. Our IP encryption is multi-media capable and can therefore be used for further applications (e.g. data, video)

in your ICT infrastructure.

Thanks to our service portfolio you will receive a customised solution to help you benefit from all the technological advantages and to provide optimum support for your security policy. Our future-proof solutions will support upgrades and further technological developments, thus ensuring that your investment is protected in the long term.

Encrypted voice communications in modern IP networks
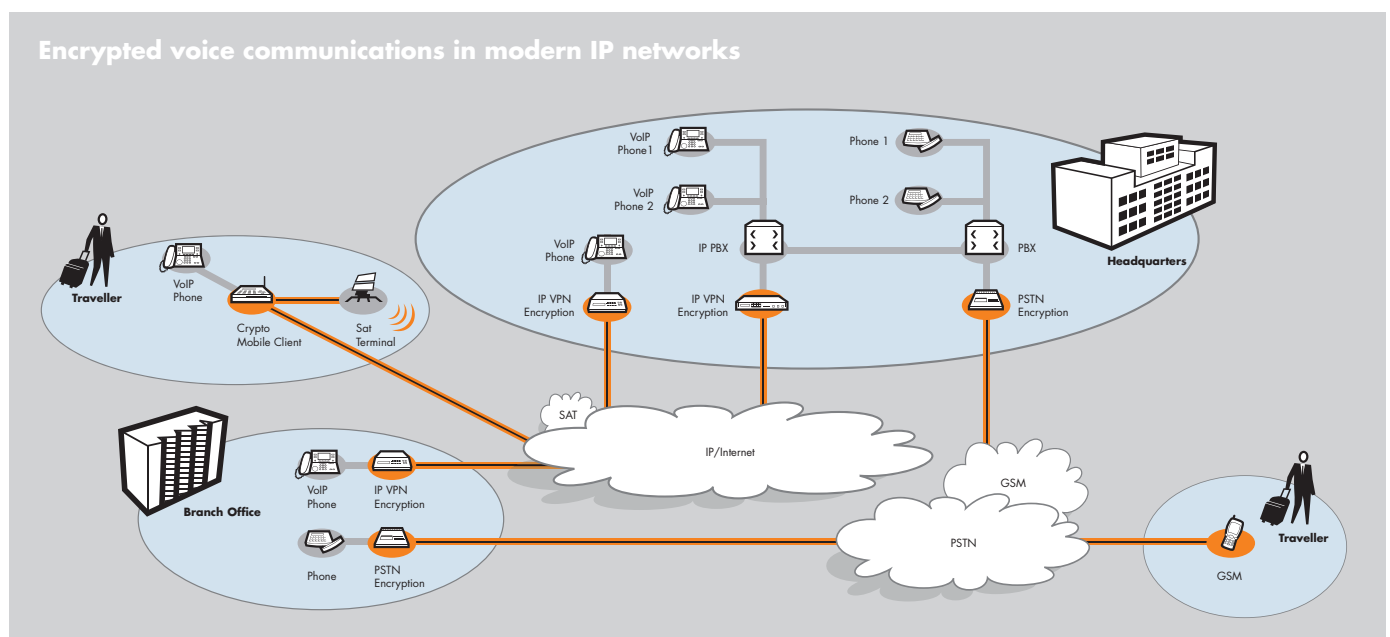
Voice communication in military C2 applications

The duties of a defence organisation are manifold as are their requirements for voice communication: here too, the migration of technologies impacts the universally secure communication. Incorporation into existing and new C2 (Command & Control) structures is a challenge for the future.

Solutions from Crypto AG for military use in strategic networks can fulfil all the requirements of this environment and are interoperable.

The systems have been designed with a pre-planned improvement capability to grow with new applications and technologies, thus offering optimum protection of your investment and ensuring that your organisation is well-prepared for future developments.

Secure communication solutions from Crypto AG can be smoothly integrated into your existing networks and offer end-to-end voice encryption for maximum security requirements. Connections via leased lines/dedicated lines are just as feasible as connections via PSTN, satellite or microwave.

Security philosophy and architecture

The main elements of the comprehensive security architecture from Crypto AG for all voice encryption solutions are encryption in a tamper-proof hardware encryption module based on secret, user-specific algorithms, and safe security and key management in offline or central online mode.

The flexible and secure management functions allow you to form and manage individual cryptographic groups in any way you want – hierarchical, horizontal or overlapping. In case of equipment loss, protection is ensured as individual units can be excluded from the network at any time.

... but there is also a high-security encryption solution for each telephone technology
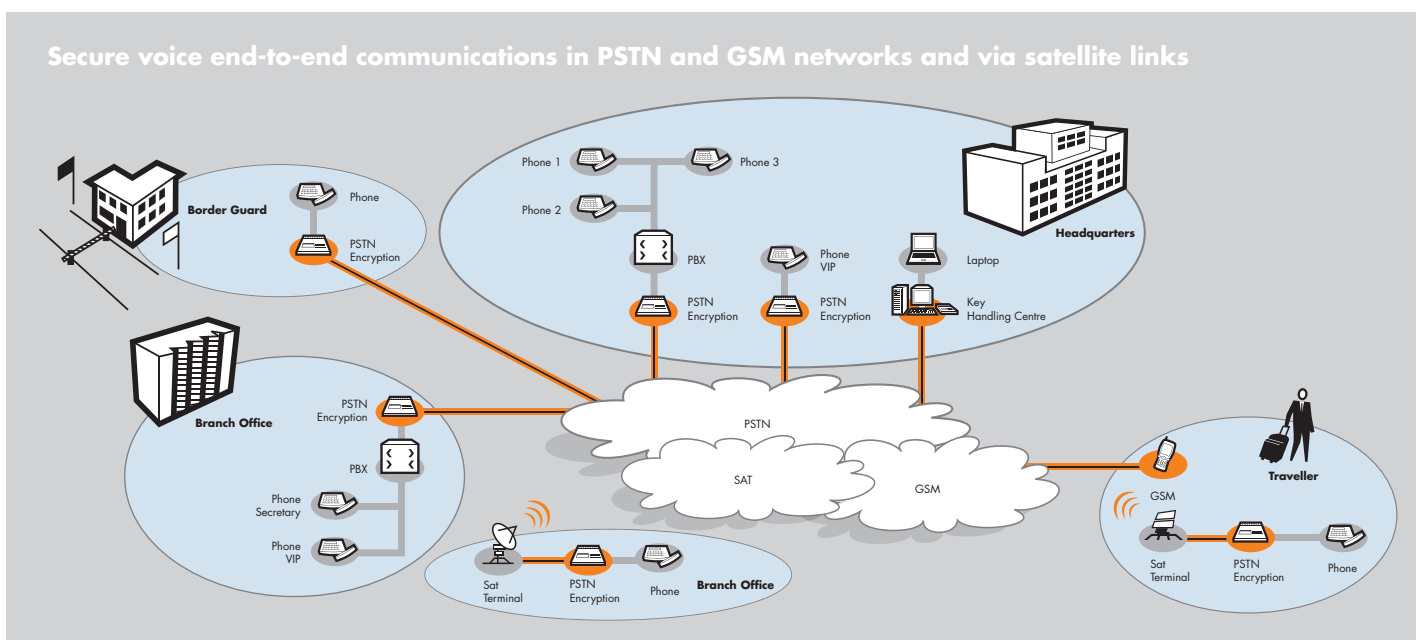
Security solutions from Crypto AG offer comprehensive protection from interception for classic PSTN networks by means of end-to-end encryption.

Flexibility for use in your existing telephone infrastructure is ensured, without the need for any change to your working practices. The technical integration does not require any adjustments to existing systems or equipment. Encryption units can be placed on your desktop, in the secretarial department where they are operated, or can be implemented to be shared by several users.

Interconnectivity between the fixed network and the GSM network is ensured by the compatibility of the products with PSTN encryption and the secure GSM telephone. Theses systems can also be used for applications via satellite connection.

Convenient handling is provided by the KHC-2000 Key Handling Centre, for the central or decentralised management of security data in the encryption units and for key changes. By forming cryptographically protected groups you can reproduce your organisation's structure in the communication structure and make changes at any time. When working in online mode you can establish secure connections to any single unit in the network without risk.

Secure voice end-to-end communications in PSTN and GSM networks and via satellite links

Border Guard — Phone — PSTN Encryption

Phone 1 — Phone 3 — Phone 2 — PBX — Phone VIP — Laptop — PSTN Encryption — Key Handling Centre — Headquarters

Branch Office — PSTN Encryption — PBX — Phone Secretary — Phone VIP

Sat Terminal — PSTN Encryption — Phone — Branch Office

PSTN — SAT — GSM

Traveller — GSM — Sat Terminal — PSTN Encryption — Phone

Crypto AG – To Remain Sovereign

Crypto AG is your ideal partner for the efficient and secure handling of information. As a legally and economically independent Swiss company, we are not subject to any export restrictions.

We have developed, manufactured and implemented custom security solutions for over 55 years. The package we offer features the latest technology solutions and comprehensive services. Throughout the entire lifetime of your system, we provide you with support services to guarantee autonomous operation and high availability whatever the user environment.

You too can rely on the expertise and capabilities of Crypto AG – just like our customers in over 130 countries.

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