

The first truly independent TETRA crypto solution



The flexible crypto solution for your public safety organization

Sectra is a leading supplier of voice crypto products to European government authorities and defense departments. Sectra's crypto solution for TETRA communications ensures a secure and efficient cooperation for public safety organizations.

Smart Card based end-to-end encryption

The TETRA crypto is a Smart Card based solution for end-to-end encryption between terminals in a TETRA network. Sectra has developed this crypto for users of the Swedish public safety network (RAKEL) in close cooperation with the Swedish Defense Materiel Administration (FMV). The security solution is designed to be used with various TETRA terminals in emergency cooperation situations.

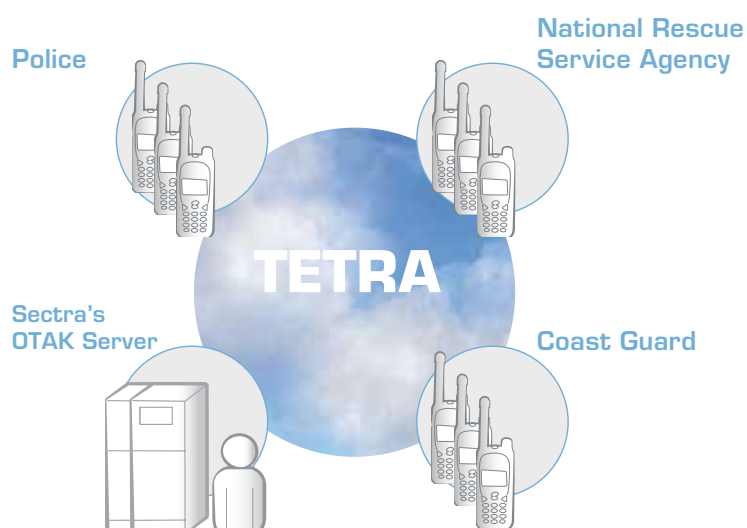
Add security to your TETRA system

Sectra's security solution with "crypto on Smart Card" makes it possible to add security to your existing TETRA network. You can keep the TETRA terminal already in use and choose any TETRA brand or vendor you like.

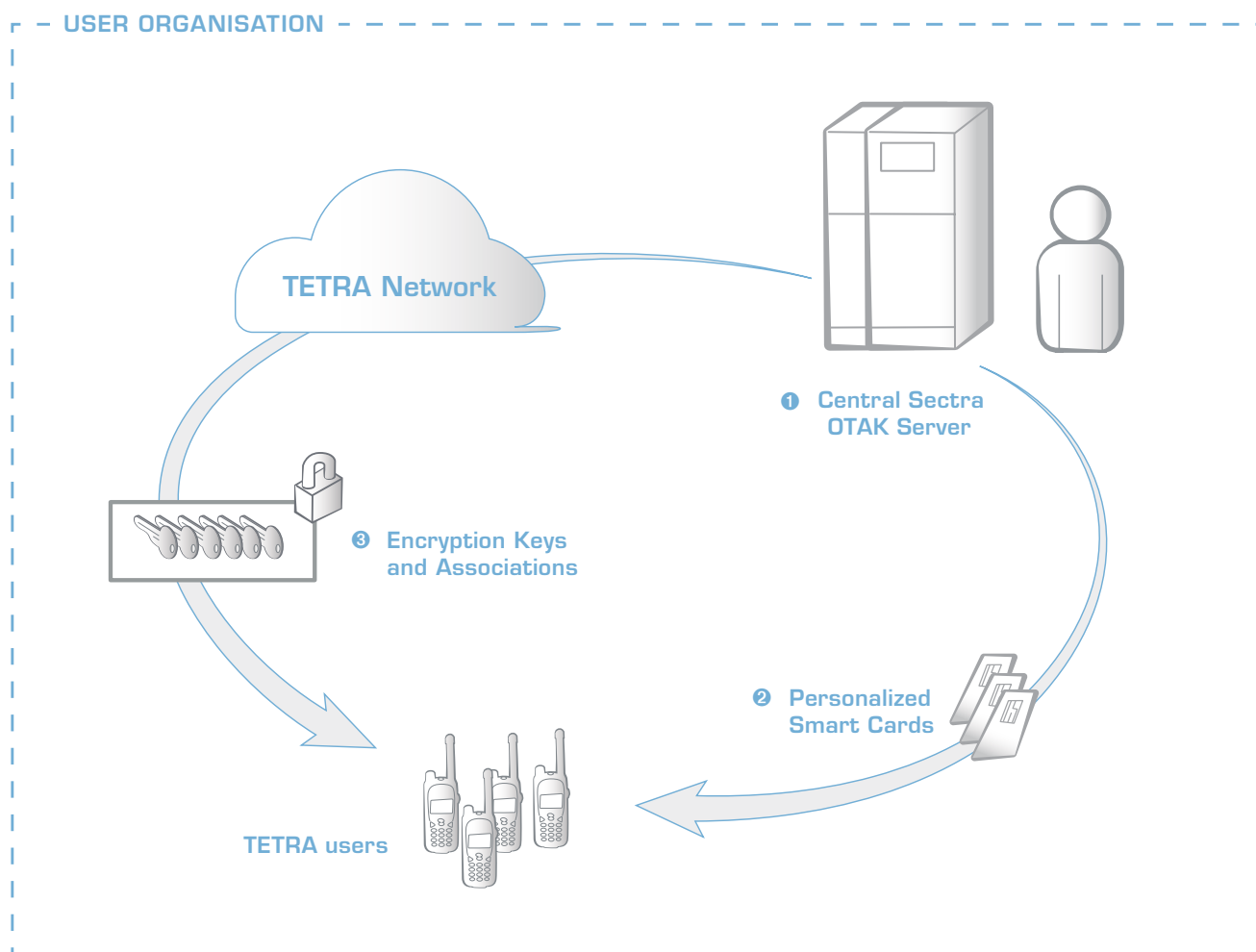
Sectra TETRA crypto users

The flexible TETRA crypto is for such public safety organizations as:

- Police
- Coast Guard
- Customs
- National Rescue Service Agencies



Sectra's TETRA crypto system overview



1 The Crypto Custodian personalizes the TETRA crypto Smart Card. The Smart Card is assigned a user and a configuration which specifies a set of associations defining what Key Series will protect which TETRA user.

2 The TETRA crypto Smart Card is delivered with PIN and PUK codes together with an individual Key Encryption Key and an individual Signaling Encryption Key.

3 Sectra's OTAK Server sends keys and associations over the TETRA network encrypted with the user specific Signaling Encryption Key. The OTAK Server periodically updates the keys in the Smart Card according to the configuration set by the Crypto Custodian.

Key generation, an essential element in secure communications

Key Generation is performed by Sectra's OTAK Server. The Smart Card individual key types Key Encryption Keys, Signaling Encryption Keys and Group Encryption Keys are generated when a new Smart Card is personalized. Traffic Encryption keys are generated automatically when creating new associations or when the previous key of an existing association expires.

Easily update with new keys

The Smart Card is automatically updated with new keys from Sectra's OTAK Server. The validity period is a policy issue and can be set from 1 day up to several weeks.

The keys are only exposed as clear text keys (Red keys) when generated by the OTAK Server and inside the highly protected Smart Card.

"The TETRA crypto solution from Sectra is designed for maximum user-friendliness. The security is almost invisible for the user and easy to manage for the administrator."



Technical specification

Security level	AES algorithm with 256-bit keys More than four concurrent algorithms can be implemented.
Keys	The Smart Card is automatically updated with keys from Sectra's OTAK Server. Key generation is performed by the OTAK Server.
Physical & electrical interface	Supports Recommendation 08 from the TETRA Association. This means that the Sectra TETRA crypto can be integrated in virtually any terminal on the market. All major terminal manufactures either support or will be supporting this recommendation.
Performance	Power consumption less than 10 mA in operating mode.
Smart Card configuration	USB-connected Smart Card reader

“*Sectra's TETRA crypto can be used with any TETRA terminal supporting recommendation 08 from the TETRA Association's Security and Fraud Protection Group (SFPG).*”

Sectra protects EU communications

Sectra is a one of the leading players in the market for secure communications. The company has developed crypto products for Swedish defense and government customers since the 1980s.

Today, Sectra has established cooperation with national security bodies in several European countries as well as leading EU organizations.

Sectra's voice encryption customers are found in more than half of all EU member states.

With core expertise in encryption and focus on strong security solutions, Sectra contributes to protecting the transmission of classified information within Europe.

SECTRA

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