

4G Tactical Radio

HALYS-E TELM-ENENSYS

Mission Critical Radio Networks



Your Challenges - Our Commitments

As a Mission Critical user, do you encounter any of these Challenges?

- How to reinforce interoperability on the field
- How to enhance radio coverage
- How to improve situational awareness
- How to optimize the radio performance
- How to offer broadband services
- How to guarantee latency and QoS for video and data
- How to efficiently manage several networks
- How to extend useful life of existing radio systems

With the idea of helping you overcome these challenges, **HALYS**, **E TELM**, and **ENENSYS** have decided to combine our mutual expertise and entered into a **technological partnership** to offer a comprehensive, flexible and scalable solution that fulfils your operational requirements for **tactical Long Term Evolution (LTE)** Networks deployment, enabling you to protect critical infrastructure and assets.

Solution at a Glance

Our solution for rapid and tactical deployment is the combination of our respective innovative technologies and deep market knowledge complemented by strong R&D expertise. It is based on the 3 key components:

- PMR Radio: LTE Macro-/Picocell, TETRA eNodeB (E TELM)
- PMR Core: 4G EPC (HALYS)
- eMBMS/LTE Broadcast (ENENSYS)



The solution is compliant with international 3GPP standards, in particular Mission Critical Services (MCPTT, MC DATA, MC VIDEO).

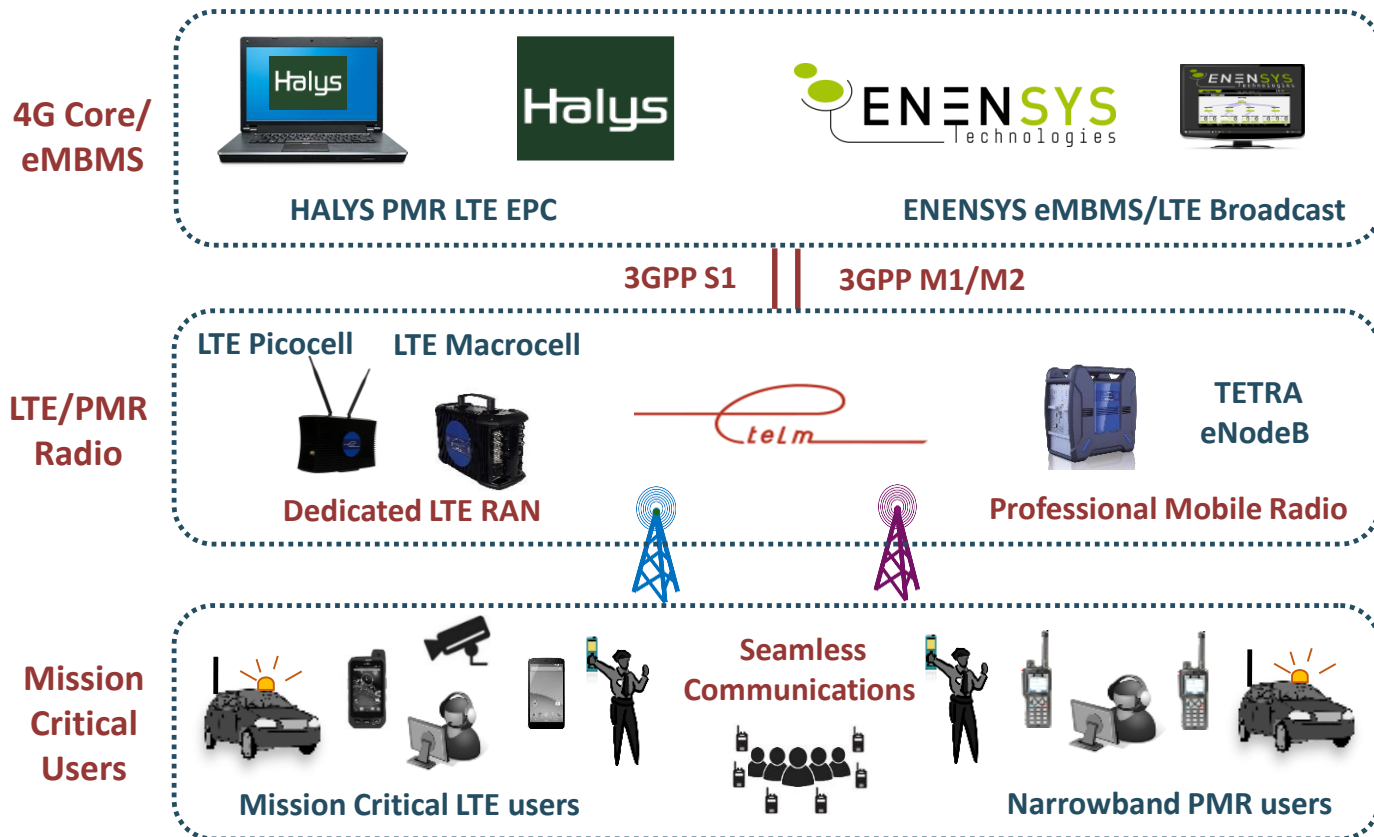
Coverage | Resilience | Scalability | Security | Efficiency | Simplicity



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Technical Overview



- Several Technologies on a single LTE Core (LTE + TETRA + LTE Broadcast)
- Multi-site, Multi-organisation Management
- Interoperability and Resilience
- Real-time Management of users profiles
- Secure and Encrypted Communications
- Pre-emption/Priority Management
- Seamless Mission Critical features (group/emergency calls, priorities, alerts...) across TETRA and LTE networks
- Real-time Radio Resource Management

Defence & Public Safety | Oil & Gas, Energy | Operators of Essential Services | Transport & Utilities | Smart Cities

3GPP Standards Compliance (Release 13)

HALYS EPC

- MME, HSS, S/P-GW, PCRF, IMS
- OTA SIM (over IP or SMS)
- Full Virtualisation, no hardware dependency
- Highly scalable and customisable
- Full HALYS source
- Statistics and Reporting

E TELM eNodeB

- Integrated BBU and RRH
- Many frequency bands available
- Picocell (up to 2x1W Tx), Macrocell (up to 15W Tx)
- Fully designed and developed by E TELM
- Technology enhancement (eLongRange and Interference Management)
- Adapted to PMR users' needs
- Operation & Management (OAM) tool

ENENSYS eMBMS

- BM-SC, MBMS-GW, MCE, MME-B
- Full Virtualisation, no hardware dependency
- Scalability based on needs and performance
- 100 % In-house technology
- Automatic control of the broadcast resources

Who we are

HALYS is a high-technology company producing equipment and solutions for private or public telecommunication operators, mobile or fixed.

The LTE 4G / 5G Core Network Halys is developed for public and private operators (PMR) in many countries.

E TELM's core expertise is the Mission Critical Radio. E TELM has been manufacturing radio infrastructure (LTE, TETRA...) for PMR networks since 1981. All products are based on in-house R&D and can be tailored to meet any specific end users needs.

E TELM serves Critical National Infrastructures all around the world.

ENENSYS Technologies designs and manufactures innovative professional equipment and software enabling efficient video delivery over Broadcast and Telecom networks.

ENENSYS provides LTE Broadcast (eMBMS) solutions compatible with LTE Networks (3GPP).