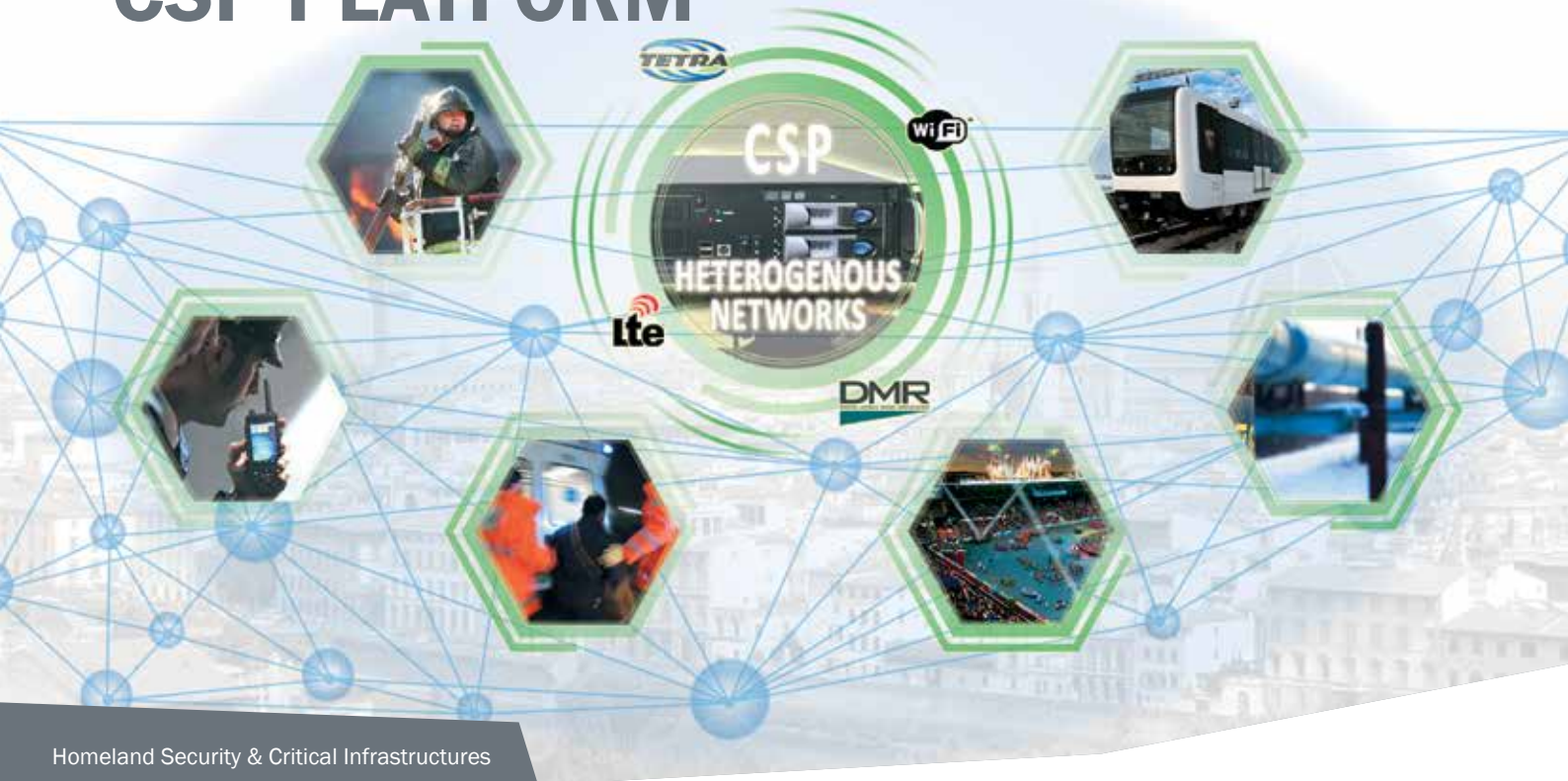


CSP PLATFORM



Homeland Security & Critical Infrastructures

CSP-ALS AUTOMATIC LOCALIZATION SYSTEM

The CSP Automatic Localization System Server (CSP-SRV-ALS) is the component used to track mobile assets such as vehicles and people of the CSP network.

To provide mobile unit location and more in general fleet management, GPS position data is transmitted from vehicular or hand-held radios to the CSP-SRV-ALS using the Short Data Service (SDS) provided by the TETRA network.

The ALS supports the TETRA Location Information Protocol (LIP), an ETSI application layer protocol designed to minimize the number of location reports sent over the air interface to avoid network congestion. In this way, it can work with most of the terminals available on the market.

The localization messages are received from a dedicated CSP-SRV-ALS and then dispatched to ALS clients according to the distribution of mobiles. The ALS is based on a CSP-SRV-ALS (one) and several ALS clients running a specialized tracking application.

This application manages the fleet of mobile units and provides a graphic display of tracks on a map background. All the most widely deployed map formats are supported.

MAIN FEATURES

- Fleet management
 - Fleet partitioning according to separately treat subsets of assets when displayed all together
 - Vehicle selection via configured attributes
 - Search of the closest vehicle to a specified location
 - Map centering on a selected vehicle
 - Dynamic map calculation according to the movement of a selected vehicle
 - Positioning update for a selected vehicle
 - Sending and receiving of free text/status messages
- Management of points of interest
- Web-based administration tool

Optional features

- Extensive tool set for real-time and historical analysis, including distance measurement.

LOCALIZATION SERVICES

Localization services are obtained by means of the CSP-SRV-ALS and Client providing integrated mobile localization services also for LTE devices.

In case of very small networks the two components can be deployed in the same machine. The localization CSP platform can be accompanied by a SES Geographic Information System (GIS). However, the solution is open to support third-party GIS clients as well.

Main performances

Main performance items:

- Fleets may range in size from 1 to 2,000 units (for each server)
- Up to 10 ALS clients supported per server
- Up to 200 users tracked per ALS client.

TECHNICAL DATA

HW platform

Typical PC workstation configuration for CSP-SRV-ALS:

Equipment Description	
Operating System	Genuine Windows® 7 Professional 32-Bit (English)
CPU	Intel Xeon
RAM	4GB
Hard drive	2 x HD 500GB (minimum) RAID1 controller, 7200rpm (redundant)
Networking	LAN Server Adapter PCI - 10/100/1000 Mbit/s Dual (redundant)
Storage controller	RAID 0/1/5/10, SATA and PCI
Graphics controller	1GB DDR3 (video resolution 1280x1024)
Audio output	Stereo high definition, 24 bit conversion
I/O (input/output) ports	<ul style="list-style-type: none">• USB 2.0• RS-232 serial• LAN• VGA
Optical drive	1 x 8x DVD+/-RW
Mouse	Optical
Power consumption (fully equipped)	About 150 watt maximum
Power requirements	Input voltage 100-240VAC , 47/63Hz

Proposed PC workstation platform configuration:

Environmental Conditions	
Storage	ETSI ETS 300 019-1-1 class 1.2
Transportation	ETSI ETS 300 019-1-2 class 2.2
Operation	ETSI ETS 300 019-1-3 class 3.1 (+5° to +40°C)
EMC	PC workstation shall be compliant to the standard EN 300 386. This standard concerns both emissions and immunity requirements. Emissions limits shall be those of the standard EN 55022 class A.
Safety	PC workstation shall be compliant to the standard CENELEC EN 60950-1
CE marked	PC workstation shall be compliant to the essential requirements of the directive 2004/108/EC and then it is CE marked

