THANK YOU FOR YOUR INTEREST IN TASSTA!

Who we actually are?
Well, the name TASSTA is build up of 3 key words:

“TA” stands for the first two letters of the word: TALK

“SS” stands for sending meSSages

“TA” are the last two letters in the word: DATA.
WE OFFER VOICE COMMUNICATIONS, EMERGENCY, MESSAGING AND DATA SOLUTIONS.

The core of the existing TASSTA team has a strong extensive expertise in the professional mobile radio market. Our developers have been working as on field service engineers for the main TETRA providers in different projects all over the world. TASSTA’s CEO, Kaveh Hosseinzadeh, has over ten years of experience in managing companies in professional mobile radio communications.

Based on this, the team put all its efforts in bringing a revolutionary product on the market - an innovative PTT (Push-to-Talk) solution for PoC/IP users which is meeting all requirements in respect of communication, organization and security. All features of digital mobile communication are conserved and will be usable on common Smartphones, Tablets and PCs.

Already employed TETRA or DMR networks can easily extend their coverage by connecting TASSTA.

The development of the TASSTA’s product range started in 2012. Meanwhile our system consists of different types of components:

- **T.Lion** the Communication Server, **T.Brother** for critical redundancy, **T.Commander** our professional configuration and administration tool, **T.Recorder** the software solution for secure recording, **T.Flex** the application running on client devices like smartphones, tablets but also desktop PCs, **T.Rodon** our Command & Control center desktop solution and **T.Bridge** as a gateway to other existing networks.

**IF YOU CAN THINK IT, YOU CAN DO IT!**

Being always one step ahead and offering a product which cannot be seen in the portfolio of our competitors like this, this is the vision TASSTA’s team is committed to. We are continuously working to improve TASSTA to make it a perfect integrated communication solution for our customers.
TASSTA vs. TETRA / DMR

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>TASSTA</th>
<th>TETRA / DMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUSH TO VIDEO</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>MANDOWN</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>MULTIPLEXED CLIENTS AND ACCESSORIES</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>BROADCAST CALL</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>GROUP, INDIVIDUAL &amp; PRIORITY CALL</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DYNAMIC GROUP CALL</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>MESSAGES / SDS &amp; STATUS MESSAGES</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DATA TRANSFER</td>
<td>✔</td>
<td>limited transfer rate</td>
</tr>
<tr>
<td>TASK MANAGEMENT</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>GPS LOCATION, GPS ROUTE, GEOFENCING</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>INDOOR LOCALIZATION</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>CRITICAL COMMUNICATION</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>FAST CALL SET UP</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>SECURITY / ENCRYPTION</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>EMERGENCY CALL</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>REMOTE FEATURES (PICTURE &amp; VOICE)</td>
<td>✔</td>
<td>Voice</td>
</tr>
<tr>
<td>ALARM NOTIFICATION</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>VOICE RECORDING AND CALL HISTORY</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>REPLAY ON END DEVICE</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>NETWORK COVERAGE</td>
<td>worldwide</td>
<td>for extension additional base stations required</td>
</tr>
<tr>
<td>INDIVIDUALIZATION</td>
<td>limitless</td>
<td>✔</td>
</tr>
<tr>
<td>QR CODE, BAR CODE, NFC</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>LONE WORKER PROTECTION (LWP)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DYNAMIC GROUP NUMBER ASSIGNMENT</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>EMPLOYED STANDARDS</td>
<td>CDMA, GSM, UMTS, LTE, WIFI</td>
<td>TETRA / DMR</td>
</tr>
<tr>
<td>CONNECTION TO EXTERNAL SYSTEMS</td>
<td>different system interfaces on end device &amp; system over API</td>
<td>PEI interface on end device or a switch over API</td>
</tr>
</tbody>
</table>
TASSTA SOLUTION

- TASSTA offers a modern Push-To-Talk solution which uses all technical capacities of ordinary smartphones.
- TASSTA provides a full package of Individual-, Group- and Priority Calls, Messages including Data Transfer, Voice Recording, GPS- and In-House Tracking, Alarm, Emergency Solutions and any other features. By connecting to the public IP network TASSTA customers have no geographical limits.
- By employing standard hardware each organization is able to prepare for a convenient day-to-day business by reasonably investing in our TASSTA Solutions and Technology.
TASSTA FEATURES

PROFESSIONAL COMMUNICATION!

- GPS LOCATION, GPS ROUTE, INDOOR LOCALIZATION
- REMOTE CAMERA AND MIC CONTROL
- PUSH-TO-VIDEO FOR SITUATIONAL AWARENESS
- VOICE RECORDING AND CALL HISTORY
- BRIDGE TO PMR
- MESSAGES, FILE EXCHANGE AND ALERTS
- EASE OF ADMINISTRATION
- GROUP, INDIVIDUAL, PRIORITY CALLS
- AES 256 ENCRYPTION, INDIVIDUAL KEY MANAGEMENT
- TASK MANAGEMENT SYSTEM
- MULTIPLATFORM CLIENTS AND ACCESSORIES
- EMERGENCY SOLUTION ALARMING, MANDOWN, LONERWORKER PROTECTION
TASSTA FEATURES

- Group Call
- Status Message, Text and Data Exchange
- Task Management
- Individual Call
- GPS Localization
- Geofencing
- Priority Call
- GPS Route
- E2E Encryption
- Dynamic Group Call
- Indoor Localization
- Emergency Call & Lone Worker Protection
- Voice Recording and Call History
- Video
- Broadcasting
T.LION

CLOUD AND DEDICATED COMMUNICATION SERVER

T.Lion is a TASSTA communication server - the main component of the overall tassta communication network. Heart and brain of the system. Shares resources on requests between the clients and provides reliable communication with sub-second performance. Available as SaaS (software as a service) or as standalone / own in-house installation.

STANDALONE

TASSTA services are hosted on your in-house servers in your data center. Maximum flexibility and full control over your data on your server.

CLOUD

Hosted on top-notch powerful web servers, designed as a Higher Availability system. The service is always up and running. Scheduled backups of all data stored in accounts.

T.COMMANDER

The T.Commander is a Web-based application created to control resources and features on TASSTA Servers. Designed for a large number of servers and nodes. The nodes are the logic representation of hosted resources, that handle groups of servers. With this approach T.Commander allows flexible maintenance and system expansion, deployment of new servers and nodes.

This way you have only one tool to control your environment. In details, T.Commander allows the administrator to create/delete/edit new users, teams, groups or manage functions for each individual user. All the functions that T.Flex and T.Rodon have, can be individually managed via T.Commander as well as turned on / off.
T.LION FEATURES

SCALABILITY

The T.Lion system is enormously scalable, and can be run on nearly any combination of computing hardware and software. It allows the system architecture to enable multi-server connectivity, as well as cost efficiency and system redundancy in its design.

DATA & VOICE ENCRYPTION

In order to guard T.Lion against advanced threats in complex and evolving cloud services, organizations must increasingly take a data-centric approach to safeguarding their sensitive information. TASSTA offers a full encryption portfolio that provides persistent protection of voice and data for a higher secure level of communication.

DATA SECURITY

The TASSTA network security is a more comprehensive solution than just asking for username and password. The T.Lion server provides the ability to selectively manage and administrate access to a variety of TASSTA services and features, manage and administrate rights of each user and each group.

REDUNDANCY

Improved availability and performance of TASSTAs communication facilities. By using T.Brother, the redundant TASSTA server in different geographically dispersed datacenters, you ensure that end users use TASSTA services with maximum reliability.

FLEET MANAGEMENT

The T.Lion server provides fleet and operations staff with specialized monitoring and tracking tools, grants them the ability to trace and record the movements of their mobile assets and workforce, record accurate GPS data and keep their voice and data communication in history for a long time.

FALL BACK OPERATION

The Node can be started in field environments and act as a standalone Fallback mode server. Furthermore, the node can be configured as a part of the TASSTA cluster and be connected to the system back on link availability.
T.Flex is TASSTA’s application designed for smartphones or tablets but also for desktop computers. T.Flex is running on IP networks (2G/ 3G/ 4G/ Wifi) powered by the most popular operating systems Android, iOS and Windows. It grants users maximum operational capability with a modern user interface and keeps high availability even on slow data networks.

T.Flex provides “always on” PTT operation, Messaging & Status Messages, Voice Recording and GPS location management. T.Flex can run in parallel with your other business applications, allowing device integration capability. Fully managed by T.Commander, the T.Flex application is always in your control.

The application is provided with additional features for a better functionality and more possibilities in critical situations.
T.FLEX FEATURES

- Group Call
- Individual Call
- Priority Call
- Emergency Call & Lone Worker Protection
- Status Messages, Text and Data Exchange
- E2E Encryption
- Dynamic Group Call
- Remote Control
- Video
- Voice Recording and Call History
- GPS Localization
- GPS History Tracker
- GPS Route
- Task Management
- Indoor Localization
T. Rodon is TASSTA’s Command & Control Center Solution supplied with powerful and flexible features. These features bring TASSTA’s solution to a higher professional level of communication. T. Rodon can be organized as a Desktop Application or be running on the field in mobile environments. It has an easy and intuitive installation process and can be setup on a wide range of PCs in minutes.
T.RODON FEATURES

- Group 1
- Group 2
- Group Call
- Individual Call
- Priority Call
- Dynamic Group Call
- Emergency Call Receiving
- Remote Control
- Status Messages, Text and Data Exchange
- Lone Worker Protection
- E2E Encryption
- Voice Recording and Call History
- Map Tools
- GPS Localization
- Guard Tour
- Task Management
- Indoor Localization
TASSTA BRIDGE TO PMR

Professional middleware solution interconnecting TASSTA and PMR networks. Cost-efficient and expandable application to extend a radio solution.

SUPPORTING NETWORKS

| TETRA HYTERA ® | KENWOOD |
| TETRA DAMM ® | NEXEDGE ® |
| TETRA SEPURA PEI ® | P25 ® |
| DMR HYTERA ® | MPT 1327 ® |
| MOTOTRBO ® | ANALOG RADIO ® |
| KENWOOD CONVENTIONAL ® | TAIT ® |
| KENWOOD DMR® | ICOM ® |

T.BRIDGE: BENEFITS AND KEY FEATURES

T.Bridge provides a middleware solution to help businesses to overcome the challenges of integration by interconnecting a PMR System with TASSTA’s features.

The T.Bridge application is based on middleware technology that securely connects the enterprise. Easy-to-use and easy-to-scale. T.Bridge is designed to integrate TASSTA with a PMR radio network over voice (group and individual calls) and message communication.

Furthermore, it is created as a supplementary part of T.Rodon’s Command and Control Centre Solution.

FLEXIBILITY

T.Bridge will extend the flexibility of your network.
You can connect two different PMR systems (e.g. TETRA and MOTOTRBO™). On the other hand, TASSTA can connect users who are actually working outside of your coverage and that way increase your range. Users connected by TASSTA have a choice in choosing their own device - Smartphones, Tablets or Desktops - across the operating systems including iOS, Android and Windows.

COMPATIBILITY

T.Bridge is a universal solution connecting PMR networks with each other over an API interface and expand the PMR network with TASSTA. T.Bridge concept keeps the idea to provide users with vendor independence.

SCALABILITY

There is no limitation to expand an existing PMR solution. With T.Bridge you are able to connect another PMR or TASSTA network to an existing one. Adding other resources can expand your system as desired – anytime and everywhere.

HARDWARE

T.Bridge solution is optionally accomplished with the Hardware unit.
- Case: aluminium & dust-proof
- Interfaces on rear side: 1 x VGA, 2 x Gigabit-LAN, 4 x serial, 2 x USB 2.0

Input Voltage 100-240 VA C (47.63Hz)
Operational temperature 0 ºC to 60 ºC
Weight 1.25 kg
Dimensions (HxWxD) 21 cm x 5.5 cm x 12.6 cm

Group Call
Voice communication in group. One of the main features supported by any T.Bridge configuration.

Individual Call *
Individual voice communication. One-to-one simplex call.

Individual Message/ Group Messages *
The feature allows to send/receive messages. T.Bridge handles all the routine to route messages between PMR and TASSTA networks: to send/receive the messages between PMR networks as well as to send/receive messages from TASSTA to PMR and vice versa.

GPS tracking*
This feature provides an opportunity to obtain GPS coordinates from PMR terminals and TASSTA Clients. The GPS data can be displayed on the TASSTA Desktop Client map or routed to specified interfaces.

Intelligent hub
The PMR networks can be interconnected to each other via the TASSTA’s bridge application even from different corners of the world.

Interface to PMR
The PMR networks can be interconnected to each other via the TASSTA’s bridge application even from different corners of the world. T.Bridge is connected to PMR radio infrastructure via defined interfaces (e.g. API, PEI, XCMP or any other). The features and functions of T.Bridge are defined in the scope of the according PMR interface and its possible functionality.

Different Frequency Bands
T.Bridge is not limited by frequency band. It fully depends on radio network infrastructure.

Configuration

<table>
<thead>
<tr>
<th>Bridge Configuration</th>
<th>Description</th>
<th>On request:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital-TASSTA</td>
<td>Interconnection between TASSTA and Digital Network</td>
<td>Analog-TASSTA, Analog-Analog, Analog-Digital, Analog-TASSTA-Digital</td>
</tr>
<tr>
<td>Digital-Digital</td>
<td>Interconnection between two or more Digital Networks</td>
<td></td>
</tr>
<tr>
<td>Digital-TASSTA-Digital</td>
<td>Interconnection between two or more Digital Networks and a TASSTA Network</td>
<td></td>
</tr>
</tbody>
</table>
Professional middleware solution for interconnecting different channels from different radio solutions, which run on the same server.

T.Connector serves as the interface between the radio transmitter/receiver A and the radio transmitter/receiver B, so two-way radio users can send and receive PTT group calls from different radio systems.

The T.Connector is a radio-to-radio interconnect. Designed for radio common carriers, co-ops, utilities and private systems where a number of different users need to communicate between different radio systems. This provides flexible operation as a radio patch between different radio vendors.

TASSTA’s PATCHING solution allows receiving PTT and voice flows between several bridges (connected to different brands) in one communication solution with TASSTA’s applications on smartphones.
T.CONNECTOR FEATURES

Any PMR Network

PTT / VOZ

T.Bridge

T.Rodon

T.Flex

T.Lion Server

T.Connector

Any PMR Network

Any PMR Network

SUPPORTING NETWORKS
T.Recorder is a smart, reliable and easy-to-use TASSTA software solution for secure recording, rapid voice replaying and data communications in the TASSTA network. It is designed to help organizations to keep the records and enhance their mission-critical responses.
T.Recorder provides a great set of tools to sort, search and replay voice records, view the messages’ history and monitor user activity in the channels. Furthermore, T.Recorder grants the ability to analyze user movements based on the GPS location history.
In order to keep data secure, all the data and voice records are stored on the separate TASSTA server. However, T.Recorder provides an opportunity to backup all voice communication on a local drive.
T.Recorder is designed to be a user-friendly application and grants the possibility to easily navigate through the software’s GUI. The software is set up to make monitoring and collecting data easy for anyone to use, thus you do not have to be tech savvy. Everyone will benefit from the fact that it is designed to suit the consumer’s needs with ease.
An operator can quickly access the movement history and keep tracking the selected T.Flex user. The coordinates are displayed with reference to the time of change. T.Recorder has the ability to export popular GPS data formats, such as CSV, and importing data into the mapping software, such as Google Earth or any other similar software, to create a 2D virtual artwork on a large scale.

View the history of login changes. Allows to keep tracking of what point in time the user data has been modified.

T.Recorder Users can track and export every individual and group call to the computer. Call data, time, duration, channel data, login and alias are also available. This data can be provided by both, calling user and accepting user.

With the function of tracking and recording every emergency call, all the emergency calls can be examined for compliance with applicable procedures in critical situations. The data for each call with the possibility to export it, will be displayed.

With T.Recorder, you have the ability to export all data in CSV format and download the recordings in .wav file format.
You have the task - we have the solution.

TR.Pro Compact Dispatcher is a dispatcher from radio users for radio users. TR.Pro provides a dispatching solution with all the most valuable features of the radio to all radio users. TR.Pro Compact Dispatcher is supporting group and individual calls, messaging and status messages, GPS localization, voice recording, emergency calls and group changing.

For supporting further groups, you can simply use our multi connect hardware to work with many groups in parallel. Easy to use and easy to scale: TR.Pro Compact Dispatcher is designed to optimize the usage of your TETRA network. Add your TASSTA TR.Pro today and continue to improve efficiency to your vendor independent TETRA network with one difference:

Joy.
TR.PRO COMPACT DISPATCHER
SUPPORTING RADIO SYSTEMS

SUPPORTING NETWORKS

Hytera

KENWOOD

MOTOTRBO™

sepura

Tait

DAMM
TR.PRO DISPATCHER BENEFITS

TR.Pro provides a dispatching solution including all main PMR system features. The TR.Pro application is based on T.Bridge middleware technology plus T.Rodon. Easy-to-use and easy-to-scale. TR.Pro is designed for PMR radio networks for voice (group and individual calls), messaging (including status messaging), GPS Localization and Emergency.

FLEXIBILITY

TR.Pro will extend the flexibility of your network. You can use it as a dispatching central software for the following PMR systems: SEPURA Radios (TETRA), HYTERA (DMR II, DMR III), KENWOOD (ANALOG, NXDN CONVENTIONAL, NXDN TRUNKING, P25, DMR), MOTOROLA (ANALOG, MOTOTRBO DMR), DAMM (TETRA). It runs on Windows 7 and above + Android/iOS devices (on request).

SCALABILITY

TR.Pro enables you to connect to PMR networks. You can expand your system as desired – anytime and everywhere.

PROFITABILITY

TR.Pro is a perfect extension and dispatching solution to any PMR system. It gives cost-efficient advantages and is the best compact solution for your daily needs.

INTERFACE TO PMR

TR.Pro is connected to the PMR radio infrastructure via defined interfaces (e.g. API, PEI, XCMP or any other). The features and functions are defined in the scope according to PMR interface and its possible functionality.
### TR.PRO DISPATCHER FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GROUP CALL</strong></td>
<td>The core function of any 2-way Radio system. PTT allows a single person to reach hundreds of users in groups with a single button press.</td>
</tr>
<tr>
<td><strong>INDIVIDUAL CALL</strong></td>
<td>Allows users to communicate privately outside of a group. A one-to-one simplex call is easy and fast to setup.</td>
</tr>
<tr>
<td><strong>MESSAGING</strong></td>
<td>Allows to send/receive text messages including status messages. Handles text messages in your PMR network.</td>
</tr>
<tr>
<td><strong>STATUS MESSAGES</strong></td>
<td>Add your predefined status messages from your radio system into TR.Pro configuration and be prepared to use them as you do during your daily operation.</td>
</tr>
<tr>
<td><strong>EMERGENCY CALL</strong></td>
<td>The activation of Emergency will immediately send an acoustic and visual alarm to the dispatcher, alerting him of an emergency situation.</td>
</tr>
<tr>
<td><strong>GROUP CHANGING</strong></td>
<td>TR.Pro offers the list of existing groups which are programmed into the radio. Simply change the group of the radio by choosing any group on the screen.</td>
</tr>
<tr>
<td><strong>GPS LOCALIZATION</strong></td>
<td>Provides an opportunity to obtain GPS coordinates from PMR terminals and TASSTA clients. The GPS data can be displayed on the TR.Pro desktop client map or routed to specified interfaces.</td>
</tr>
<tr>
<td><strong>RECORDING</strong></td>
<td>All voice communication can be recorded on your hardware. Without adding any other additional tool. Simply switch on your recording without any additional costs. GPS recording is also coming soon.</td>
</tr>
<tr>
<td><strong>MULTI-GROUPS &amp; MULTI-LISTENING</strong></td>
<td>Use the Multi-Groups support to communicate with different groups in your network and Multi-Listening to listen to several groups at once!</td>
</tr>
<tr>
<td><strong>ALL CALL / BROADCAST CALL</strong></td>
<td>With one PTT click you can communicate through all groups and reach radio users in your own group plus all other radio users in other groups and the whole organization.</td>
</tr>
</tbody>
</table>
INDOOR LOCALIZATION

OPTIMIZE PROCESSES
OF INTERACTION OF PERSONNEL AND VEHICLES

REDUCES THE NUMBER OF ACCIDENTS AND PRODUCTION RISKS

TECHNOLOGY

An actual and promising addition to GPS. Allows you to accurately indicate the location of users inside the buildings and underground structures. Unlike GPS, Indoor localization does not provide global coverage, however, it is more accurate, efficient and adaptive in places such as airports, subway stations, tunnels. Technologies used in indoor-localization, allow you to detect the user even in places where the GPS signal is completely absent. Fingerprinting is the most well-known approach for solving these problems.

GPS-positioning is based on signals sent by satellites. The more satellites the GPS receiver can see, the higher the accuracy. Like satellites, fingerprinting requires the presence of active WLAN access points and / or Bluetooth tags. This technology is based on “fingerprints” - a database of measured signals from wireless LAN access points (WLAN) or Bluetooth tags on various areas of the object.

Using fingerprinting technology and implemented functionality in TASSTA allows you to determine the position of one person or the whole group with an accuracy of one meter. Moreover, the built-in tools of TASSTA-clients allow to deploy Indoor-navigation on objects in the shortest possible time. Nowadays TASSTA solution is being used in various industries at various enterprises.
The ability to locate personnel and/or movable objects within buildings and structures allows optimizing existing production processes and making work more secure. Along with public GPS, Indoor localization is actively used in warehouses, factories and logistics companies, airports, railway stations, hospitals, fairs and museums.

Moreover, Indoor localization can be an excellent addition to systems for various purposes, and the transfer of location to the control desk (T.Rodon) will allow centralization and increase safety of work.

TASSTA Indoor localization helps to solve production problems of various levels of complexity. From the full automated localization of cargo pallets to the localization of mobile operating terminals. Implementation of TASSTA solutions at the enterprise increases efficiency and coordination of employees, improves their interaction.
LONE WORKER PROTECTION

LONE WORKERS ARE THOSE WHO WORK BY THEMSELVES WITHOUT CLOSE OR DIRECT SUPERVISION.

- MAN DOWN
- NO MOVEMENT ALARM
- PERIODIC CHECK
- EMERGENCY CALL
- REMOTE CAMERA / RECORDING
- CRISIS TEAM

Establishing a healthy and safe working environment for Lone Workers can be different from organizing the health and safety of other employees. They should not be put at more risk than other people working for you. It will often be safe to work alone. However, the law requires employers to think about and deal with any health and safety risks before people are exposed to their work environment. TASSTA’s Lone Worker Protection is an emergency feature in your employee’s pocket. Whether your lone workers are working in a remote or dangerous location or they are just temporarily away from their team, TASSTA’s Lone Worker Protection feature keeps you connected to your team.

following the requirements of BGR 139 STANDARD
LWP KEY FEATURES

MANDOWN

An automatic emergency option uses an accelerometer on the mobile device to detect a fall and sends a text message alert to the emergency contact. The text message indicates username, group membership and GPS coordinates with a link to a map and the exact location.

PERIODIC CHECK

LWP Periodic check provides a pop-up dialog window “Everything fine?” after a specified time interval that can be set in T.Commander.

If a worker doesn’t respond, the application initiates an Emergency Call and an Emergency Alert.

REMOTE CAMERA / RECORDING

An operator is able to access the microphone or camera of the desired user remotely. It might be very important for critical environments like security services or military where the person can be attacked or working in high-risk conditions.

NO MOVEMENT ALARM

An effective way to make a pathway of workers safer. Being active, the app uses GPS location data obtained from a mobile device to detect a user movement.

If a user remains motionless for a certain period of time, an Inactivity Timer will start. If there is still no movement, the application sends an Emergency Alert and automatically initiates an Emergency Call.

EMERGENCY CALL

For use in emergency or distress situations. A user initiates this feature from the display or a pre-programmed emergency button on the device. The activation of Emergency will immediately send an acoustic and visual alarm to the dispatcher, alerting him of an emergency situation.

CRISIS TEAM

A user is provided with the possibility to include the other members of the team to a crisis team. They will receive an Emergency Call in case of an accident or an emergency situation. The members of the crisis team are defined in T.Commander.
The MCS TASSTA solution is applicable primarily to mission critical services using LTE access. Certain MC service functions such as dispatch and administrative functions could also be supported via non-3GPP access networks. The solution can be used for public safety applications and also for general commercial applications e.g. utility companies and railways.

**MCPTT - Mission Critical Push-to-Talk**

A Push To Talk service provides an arbitrated method by which two or more users may engage in communication. Users may request permission to transmit (e.g., traditionally by means of a press of a button). The Mission Critical Push To Talk over LTE (MCPTT) service supports an enhanced PTT service, suitable for mission critical scenarios, based upon 3GPP Evolved Packet System (EPS) services. The requirements for Mission Critical Push To Talk (MCPTT) service defined within can also form the basis for a non-mission critical Push To Talk (PTT) service. The MCPTT Service is intended to support communication between several users (a group call), where each user has the ability to gain access to the permission to talk in an arbitrated manner. However, the MCPTT Service also supports Private Calls between pairs of users. The MCPTT Service builds on the existing 3GPP transport communication mechanisms provided by the EPS architectures to establish, maintain, and terminate the actual
MCVideo defines a service for Mission Critical video communication using LTE transport networks. Mission Critical refers to meeting the needs of agencies providing Public Safety services such as, but not limited to, Police, Fire and Ambulance services. Those needs include high reachability, availability and reliability of the service, low latency, realtime operating capabilities, highly secured operations, inter-operability with other services and systems, private and group communications, handling of emergencies and ability to provide prioritization, pre-emption, queuing and QoS.

Although the service is designed for transport over commercial and dedicated LTE networks it is not expected to be limited to use over LTE.

- Video capture and encoding;
- Secure streaming and storing of the video;
- Video decoding and rendering;
- Processing of the video, including the ability to annotate video frames and recognize video features;
- Mission critical and public safety level functionality (e.g. group sessions, affiliations, end-to-end confidentiality, emergency type communications) and performance (e.g. low latency);
- Transmission and control of the parameters relevant to those functions;
- Secure operation such that video information can be reasonably un-impeachable when used in evidentiary procedures;
- Definition and configuration of MCVideo groups and applications;
- Configuration of the MCVideo users’ profiles and of the MCVideo UEs; and
- Interoperability with other services and systems.

The MCPTT Service also builds upon service enablers: GCSE_LTE and ProSe. To the extent feasible, it is expected that the end user’s experience to be similar regardless if the MCPTT Service is used under coverage of an EPC network or based on ProSe without network coverage. To clarify this intent, the requirements are grouped according to applicability to on-network use, off-network use, or both.

MCVideo - Mission Critical Video

MCData defines a service for Mission Critical Data services. As well as voice services, current mission critical users have been increasing their use of data services, including low throughput services on legacy networks and data services on commercial networks. This need will continue to grow with the creation of the new multimedia services. The MCData service needs to provide a means to manage all data connections of mission critical users in the field and provide relevant resources to the ones who need it. For example mission critical users already use event manager software along with the voice system. The migration to LTE networks will allow mission critical users to operate current and new data services whilst relying on the fundamental capabilities of mission critical communication such as defined for MCPTT.

MCData - Mission Critical Data
UNLIMITED FEATURES FOR
ANY USER GROUP OR
INDUSTRY

User Interface
• Logical, friendly and intuitive GUI with modern
design and high usability;
• Multi-functional interfaces;
• Multi-language support;
• Multi-screen operation, and custom window
sizes;
• Secure access and communication;
• Integration with external devices and
accessories;
• Favourite PTT.

Amazing voice communication facilities
• Group Call;
• Individual Simplex Call;
• Direct Call;
• Inactivity Timeout;
• Priority Call;
• Dynamic Group Call;
• Dispatch of Emergency Call with GPS location
notification;
• Multigroup communication and listening;
• Silent mode – mutes the user or group;
• Group Call to PMR over T.BRIDGE.

Messaging
• Text and file exchange;
• Status messages;
• MCGW (Multi communication gateway);
• Recent messaging history;
• Message exchange with PMR via T.BRIDGE;
• Emergency Journal.

Voice Recording and Call History
• Call details: time, date, user and group;
• Voice records replay;
• Save records to an external storage device;
• Read records from the external storage device;
• History filtering and sorting tools.

Map interface
• Graphic and visualization on the map;
• Map zoom in/out;
• Customizable map window size (designed for
multi-screen use);
• Detailed street view;

• Real-time positioning and precise location of
TASSTA users on Map;
• WHO IS TALKING status and a user
identification;
• Fast Call Setup from the Map Interface;
• Integration with other interfaces (messaging,
add to a task, dynamic groups, center on the
map, mute);
• Centering user on the map.

Powerful Map tools
• Include all Map interface features;
• Geofencing (create/edit/delete virtual zones on
the map);
• Define new zone;
• Define zone properties;
• Zone control (Monitoring In/Out);
• Modify zone shape/border;
• Export/import zones (backup/restore);
• List of all available zones;
• Track History (Routes) for each user;
• Shared users with online status;
• Dynamic groups;
• Emergency messages;
• Integration with Groups, Messaging, Task
Manager, Dynamic Group.

In-House Localization

Task Manager
• Task/order/issue tracking in real time;
• Customer service data;
• Combinable and customizable filters.

Remote control functions
• Remote taking photo;
• Ambience listening.

Lone Worker Protection (LWP)
• Sensor Check;
• Periodick check;
• Mandown;
• Movement;
• Detect Impact and Fall Monitor;
• Battery control;
• Connect/Disconnect;
• Emergency Contact.
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