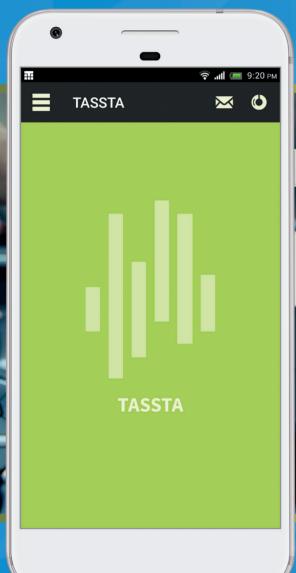


2018

PRODUCT PORTFOLIO





Thank you for your interest in TASSTA!

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



stands for the first two letters of the word: TALK



stands for sending meSSages



are the last two letters in the word: DATA.

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TASSTA World FZCO

Office LB 13030, JAFZA Dubai United Arab Emirates



The name exactly describes what we do.

WE OFFER VOICE COMMUNICATIONS, 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.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.

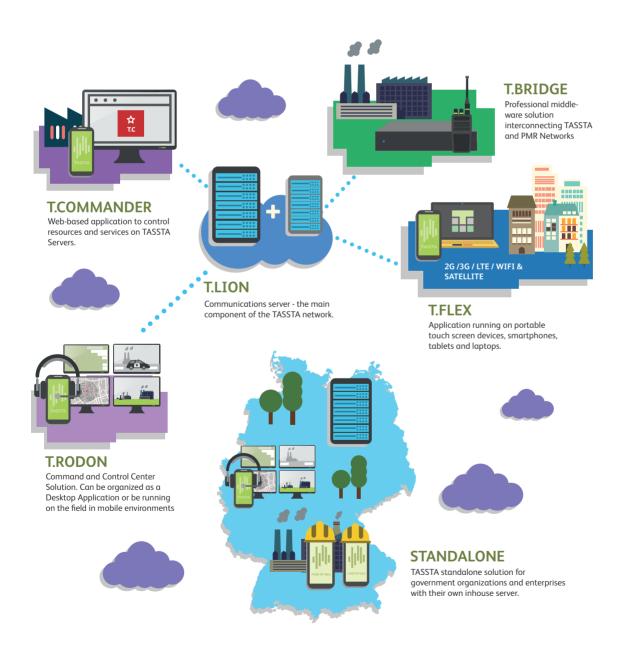
PROFESSIONAL COMMUNICATION PLATFORM FOR ANY ORGANIZATION OF ANY SIZE



TASSTA vs. TETRA / DMR

Feature TASSTA TETRA / DMR Group-, Individual- & Priority Call Dynamic Group Call Messages/ SDS & Status Messages **Data Transfer** limited transfer rate Task Management **GPS** Tracking **In-House Tracking Critical Communication** Fast call set up **Security / Encryption Emergency Call** Voice Remote Features (Picture & Voice) Alarm Notification Voice Recording Replay on end device for extension additional worldwide Network Coverage base stations required limitless Individualization QR Code, Bar Code, NFC Lone Worker Protection (LWP) Dynamic Group Number Assignment CDMA, GSM, UMTS, LTE, WiFi TETRA / DMR Employed standards different system interfaces on end device & system over API PEI interface on end device Connection to external systems or a switch over API

- TASSTA offers a modern Push-To-Talk solution which uses all technical capacities of ordinary Smartphones.
- As a result customers enjoy a complete package of individual-, group- and priority calls, messages including data transfer, voice recording, GPS- and In-house tracking, Alarm and a lot more 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 TASSTA's App.



TASSTA FEATURES FOR PROFESSIONAL COMMUNICATION



TASSTA KEY FEATURES

GROUP CALL



STATUS MESSAGES, TEXT / DATA EXCHANGE



ENTERPRISE MANAGEMENT AND CONTROL (EMC)



INDIVIDUAL CALL



GPS LOCATION & TRACKING



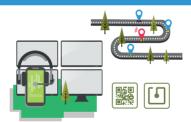
GEOFENCING



PRIORITY CALL



GPS ROUTE



E2E ENCRYPTION



DYNAMIC GROUP CALL



LOCAL POSITIONING SYSTEM



LONE WORKER PROTECTION



VOICE RECORDING & CALL HISTORY



EMERGENCY CALL



BROADCAST CALL





T.FLEX

PROFESSIONAL PUSH-TO-TALK OVER BROADBAND SOLUTION



T.Flex is TASSTA's application designed for Smartphones or Tables but also for Desktop PCs. T.Flex is running on IP networks (2G/ 3G/ 4G/ Wifi) powered by the most popular operating systems Android, iOS and Windows.

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.

T.FLEX KEY FEATURES

GROUP CALL



STATUS MESSAGES, TEXT / DATA EXCHANGE



ENTERPRISE MANAGEMENT AND CONTROL (EMC)



INDIVIDUAL CALL





GPS LOCATION & TRACKING



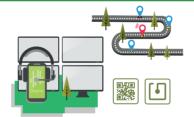
GEOFENCING



PRIORITY CALL



GPS ROUTE



E2E ENCRYPTION



DYNAMIC GROUP CALL



LOCAL POSITIONING SYSTEM



LONE WORKER PROTECTION



VOICE RECORDING & CALL HISTORY



EMERGENCY CALL



BROADCAST CALL





T.RODON

PROFESSIONAL COMMAND AND CONTROL CENTER SOLUTION









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 KEY FEATURES

GROUP CALL



STATUS MESSAGES, TEXT / DATA EXCHANGE



ENTERPRISE MANAGEMENT AND CONTROL (EMC)



INDIVIDUAL CALL



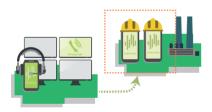
GPS LOCATION & TRACKING



GEOFENCING



PRIORITY CALL



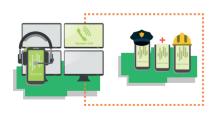
GPS ROUTE



E2E ENCRYPTION



DYNAMIC GROUP CALL



LOCAL POSITIONING SYSTEM



LONE WORKER PROTECTION



VOICE RECORDING & CALL HISTORY



EMERGENCY CALL







T.LION

PROFESSIONAL COMMUNICATION PLATFORM FOR ANY ORGANIZATION OF ANY SIZE





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

TASSTA services are hosted on top-notch powerful web servers, designed as a High Availability (HA) system. This means the service is always up and running. We make scheduled backups of all data stored in TASSTA accounts.

The T.LION is a TASSTA communication server - the main component of the overall tassta communication network.

It is the heart and brain of the system. It shares resources on requests between the clients and provides reliable communication with subsecond performance. Available as SaaS (software as a service) or as standalone / own in-house installation.



T.COMMANDER: Manage Server Resources

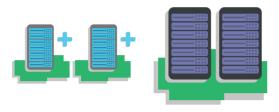
The T.COMMANDER is a Web-based application created to control resources and features on TASSTA Servers. It is designed for a large number of servers and nodes. The nodes are the logic representation of hosted resources, that handle groups of servers. With this approach T.COMMANDER allows flexible maintenance 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 KEY FEATURES

SCALABILITY



The T.LION system is enormously scalable and can run on nearly any combination of computing hardware, software and even multi-server architectures. This allows operators to plan and expand the TASSTA system cost efficiently and add redundancy in its design. All the TASSTA resources will be managed via T.COMMANDER.

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.

REDUNDANCY - T.BROTHER



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.

NETWORK SECURITY



The TASSTA network security is a more comprehensive solution than just asking for user name 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.

FLEET MANAGEMENT – T.COMMANDER



The T.COMMANDER provides operators with the ability to manage all the TASSTA resources on each server or each node. It offers operators a flexible tool to manage the fleets and share T.LION resources between multiple organisations worldwide.

FALLBACK 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.BRIDGE

TASSTA BRIDGE TO PMR

Professional middleware solution interconnecting TASSTA and PMR Networks

Cost-efficient and expandable application to extend a radio solution





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 differrent 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.

PROFITABILITY

T.BRIDGE is a perfect extension to any PMR. It gives profitable advantage to keep the radios and add new communication end points from any corner of the world.

HARDWARE

T.BRIDGE solution is optionally accomplished with the Hardware unit.

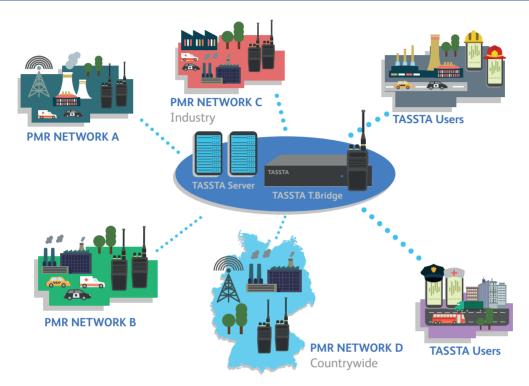
- Case: aluminium & dust-proof
- Interfaces on rear side: 1 x VGA, 2 x Gigabit-LAN, 4 x serial, 2 x USB 2.0



Input Voltage 100-240 VAC (4763 Hz)
0 °C to +60 °C
1,25 kg
21 cm x 5,5 cm x 12,6 cm



T.BRIDGE FEATURES



FEATURES

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 TASSTA's bridge application even from different corners of the world.		
Interface to PMR	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.		

 $^{^{*}}$ for some PMR systems this option is currently under development. Please contact us and check on availability.

CONFIGURATION

Depending on the customer requirements T.BRIDGE can have several configurations:

Bridge Configuration	Description	On request:
Digital-TASSTA	Interconnection between TASSTA and Digital Network	Analog-TASSTA, Analog-Analog, Analog-Digital, Analog-TASSTA-Digital
Digital-Digital	Interconnection between two or more Digital Networks	
Digital-TASSTA-Digital	Interconnection between two or more Digital Networks and a TASSTA Network	

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T.RECORDER

ADVANCED VOICE, DATA AND CALL RECORDING



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 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.



T.RECORDER KEY FEATURES

GPS RECORDING



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) for 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.

CHANNEL CHANGING



View the user's movements through the channels. This feature allows you to track the user's actions, the titles and time of the visited channels.

LOGIN CHANGING



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

CONNECTION STATS



View login history of the TASSTA's clients - T.FLEX or T.RODON. Allows you to know the exact time of user's login and logout.

INDIVIDUAL & GROUP CALL RECORDING



It is available for T.RECORDER users to track and export every individual and group call to the PC. The call data is also available - time, duration, channel data, login and alias. This data can be provided by both, calling user and accepting user.

MESSAGE RECORDING



View data about all written communication on a server. T.RECORDER users can view the sender and recipient information as well as read the text of each message. All emergency messages are highlighted by red to quickly evaluate a severity status. It is possible to export the text message or transferred file to a local drive.

EMERGENCY CALLS RECORDING



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. Displays the data for each call with a possibility to export it.

DATA EXPORT



T.RECORDER has the ability to export all data in CSV format and download the recordings in wav file format.



TR.PRO DISPATCHER

Everything that is essential. Nothing that is not.



ANDROID AND IOS ON REQUEST

You have the task - we have the solution.

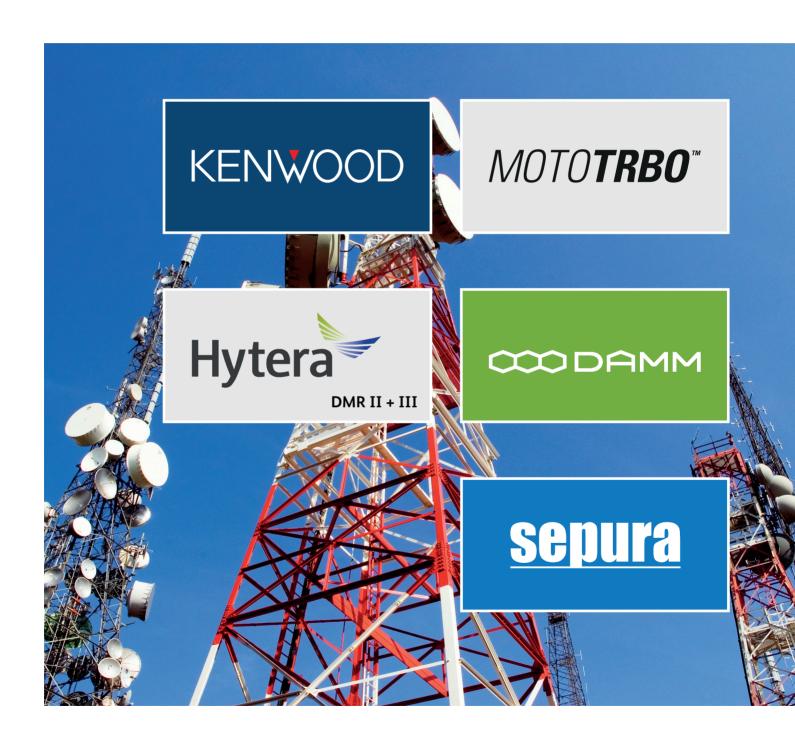
TR.Pro Compact Dispatcher is a dispatcher from radio users for radio users. TR.Pro provides a dispatching solution with all the most valuable features of the radio to all radio users. TR.Pro Compact Dispatcher is supporting group and individual calls, messaging and status messages, GPS localization,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



TR.PRO COMPACT DISPATCHER BENEFITS

TR.PRO: 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, TETRA), 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).

COMPATIBILITY

TR.Pro is using T.Bridge, which is a universal solution connecting to different PMR networks over an API interface and expand the PMR network with TASSTA software possibilities. The TR.Pro concept keeps the idea to provide users with vendor independence.

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 COMPACT DISPATCHER FEATURES

GROUP CALL

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.

INDIVIDUAL CALL



Allows users to communicate privately outside of a group. A one-to-one simplex call is easy and fast to setup.

MESSAGING



Allows to send/receive text messages including status messages. Handles text messages in your PMR network.

STATUS MESSAGES



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

EMERGENCY CALL



The activation of Emergency will immediately send an acoustic and visual alarm to the dispatcher, alerting him of an emergency situation.

GROUP CHANGING



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.

GPS LOCALIZATION



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.

RECORDING



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.

MULTI-GROUPS & MULTI-LISTENING



Use the Multi-Groups support to communicate with different groups in your network and Multi-Listening to listen to several groups at once!

ALL CALL / BROADCAST CALL



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.

IN-HOUSE LOCALIZATION



BENEFITS OF TASSTA IN-HOUSE LOCALIZATION

- » Continuous positioning in multi-story buildings and underground constructions
- Easy handling with T.Rodon or directly from your smartphone
- » Exact localization of your floor and room position

WHAT IS IN-HOUSE LOCALIZATION?

The TASSTA In-house Localization enables an exact localization and positioning of you and your member's position within buildings. With TASSTA's In-house Localization for in- and outdoor you also get additional features. You are able to allocate the position of a whole group or just a single person precisely up to a few meters. The function is easily adaptable to certain needs of different industries.

TASSTA's In-house Localization is the perfect solution for the determination of position. The localization happens irrespective of the used broadcast technology of your company.

No matter which communication network is available (WiFi, GSM, UMTS, etc.), mobile devices are able to determine their positions based on any network.

HOW SAFE IS TASSTA'S IN-HOUSE LOCALIZATION?

TASSTA supports the localization in communication networks and offers the perfect addition to the satellite-based GPS positioning system. While developing this new feature, TASSTA set a high value on privacy protection and legal guidelines. This allows easy operations on a wide range with location independent features.



POSSIBLE APPLIANCES

The accessibility of a real-time in- and outdoor localization allows an optimization in many industries of existing processes and furthermore the possibility of new features and offers e.g. in storerooms.

Generally, TASSTA's In-house-Localization can be the basis for every location- and context-based application, such as guiding systems for co-workers, guests or patients, for example for navigation at airports, railroad stations, hospitals, fairs, museums or harbors.

The transmission of your position to TASSTA's T.Rodon allows a central organization and knowledge of every group member's position and other features.

LOCALIZATION IN AD HOC NETWORKS

With TASSTA's In-house solution the security on concerts and events can also be increased. This will help security and event forces. In order to enable an ad hoc network in those places, you have to define fixed spots. This can be supported by Wi-Fi or Bluetooth based presence detection.

LOCALIZATION IN INDUSTRIES

Industrial applications can be very different. From a full automatic localization of pallets or other goods up to the localization of mobile operational terminals. With TASSTA's localization an efficient and effective coordination of employees can be achieved.

LOCALIZATION IN HOMESTEADS

Especially for wireless homesteads an adaption of the Wi-Fi localization was made, which allows nursing and rescue services to aid elderly and needy people in case of emergency.

- Localization of individuals e.g. guards and other team members
- Localization of mobile devices, e.g. measurement devices in manufacturing
- System for application planning, e.g. in facility management
- Emergency recognition, e.g. dead man's control

A SELF-SUFFICIENT DETERMINATION OF POSITION ON END DEVICES:



- **✓** Increases security
- ✓ Optimizes processes
- **✓** Improves orientation
- ✓ Allows self-sufficient operating systems
- ✓ Doesn't cause any provider costs

LONE WORKER

PROTECTION





following the requirements of

STANDARD

BGR 139

MAN DOWN

☑ NO MOVEMENT ALARM

☑ PERIODIC CHECK

☑ EMERGENCY CALL

▼ REMOTE CAMERA / RECORDING

☑ CRISIS TEAM

Lone Workers are those who work by themselves without close or direct supervision. 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.



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 you can 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.

NOTES

NOTES

You see things and say

"WHY?"

but I dream things that never were and I say

"WHY NOT?"

