



# TASSTA SOLUTION

COMMUNICATION, LOCALIZATION,  
ORGANIZATION AND SECURITY



+49 30 5771 0674  
hello@tassta.com  
tassta.com

GMC TASSTA GmbH  
TASSTA Technologies FZE  
TASSTA Americas

TASSTA Asia  
TASSTA India

TASSTA NIPPON  
TASSTA TASSTA

v. 1.25

# INNOVATIVE & RELIABLE COMMUNICATION

- PTT-based radio system
- For Android, Windows & iOS
- For mobile and desktop clients
- User-friendly and intuitive design

- 2G
- 3G/4G
- E1
- DMR
- BLUETOOTH
- IP
- LTE
- TETRA
- WIFI
- NFC





## TRUSTED BY THE WORLD'S MOST INNOVATIVE BUSINESSES



Customize **TASSTA** for your  
**business and organization**

Emergency & Alarming Solution

Tactical  
Maps

Command  
& Control Center

GPS 

Map Tools 

For **various industries**



Police



Governmental  
Organization



Oil & Gas



Transport



Emergency



Hospitals

Mission Critical  
**DATA**

Mission Critical  
**VIDEO**

Mission Critical **Push-to-Talk**



**TASSTA**  
Mission Critical Solutions

**Lone Worker Protection**

Guard Tour 

Software company

Based in Germany

Over **50 partners** globally



Cloud  
Server



On-premise  
Server



Redundancy  
& Recording



Task  
Manager



Messaging



Indoor  
Localization

**End-to-end Encryption**



Any Devices

CERTIFIED

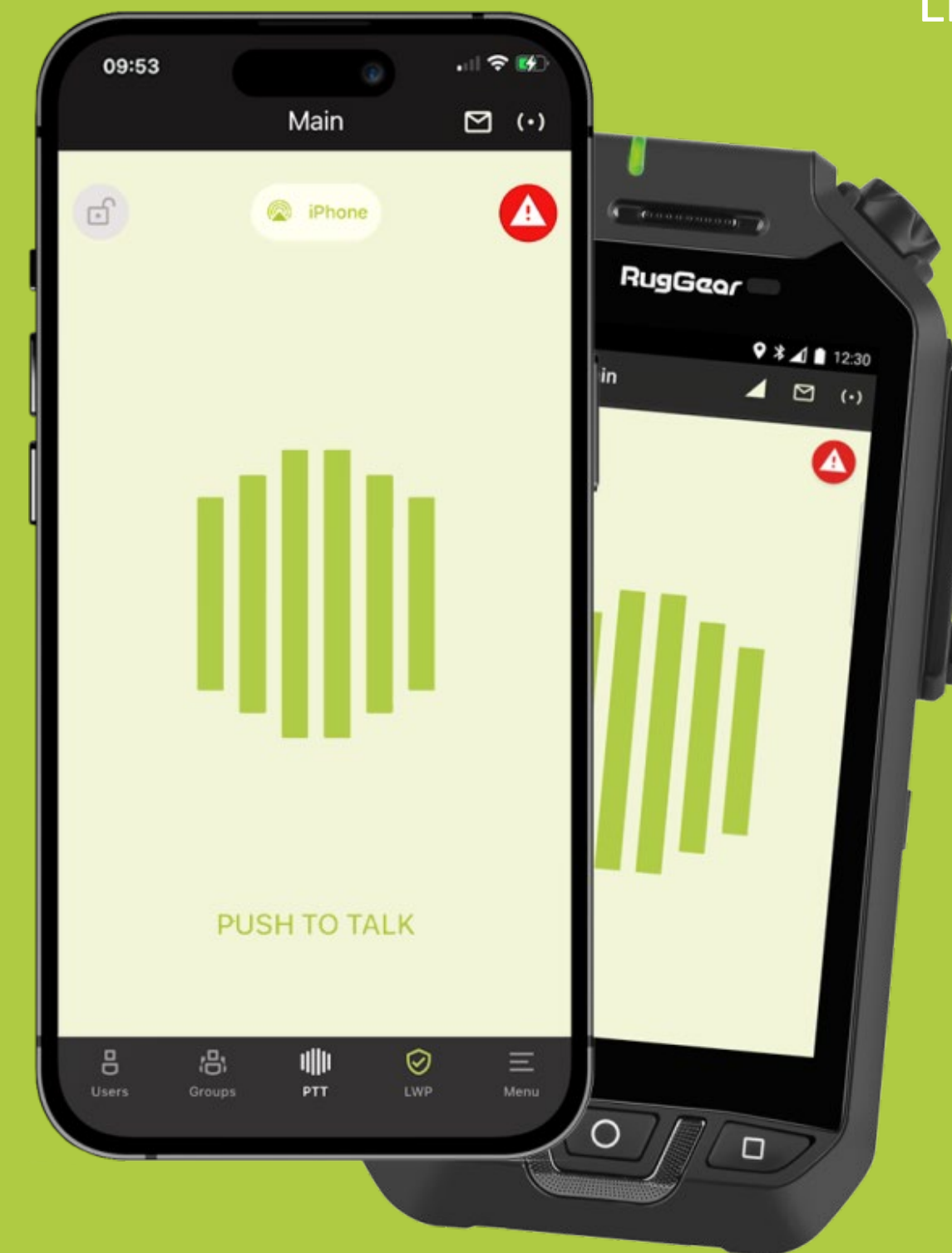


3GPP MCX ETSI Plugtests



## FLEXIBLE HARDWARE

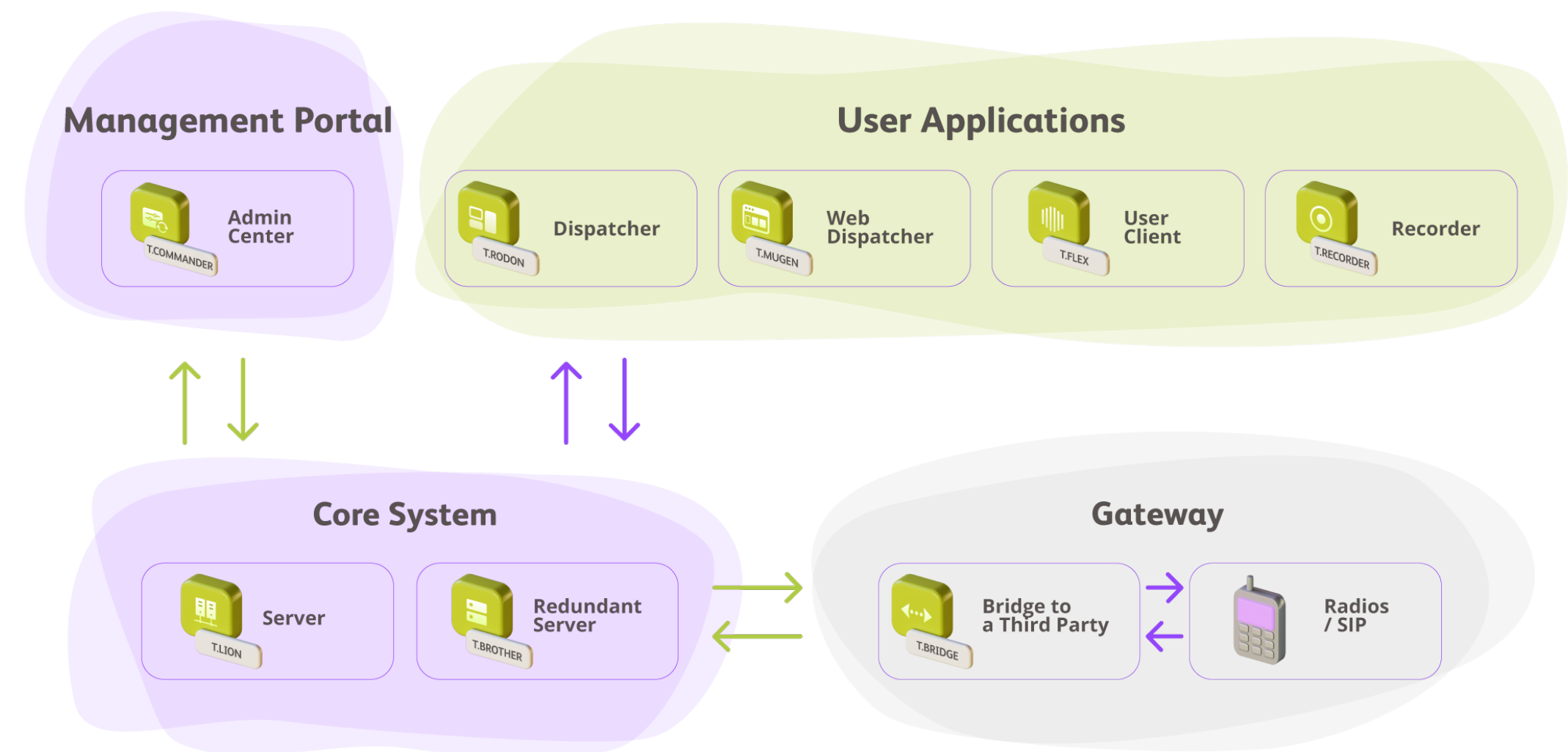
- Applicable for different hardware
- Professional Bluetooth handsfree equipment
- Compatible with different smartphones
- Special solutions for different carriers
- Employment of IP certified devices  
(special outdoor devices: fire-, water-, dust-resistant)



# TASSTA PRODUCTS

Since mobile technologies changed our lives and the world became faster, TASSTA brings changes in the world of communication with an application for smartphones and computers that becomes an alternative affordable solution for classical radio with numerous additional functions.

TASSTA is a professional Push-to-Talk solution that guarantees to improve the organization, coordination and communication between employees.



## T.FLEX

Professional Push-to-Talk over broadband solution

- For Android and iOS
- Excellent communication with different mobile networks
- Complete package for Data and Voice Transfer
- Innovative PTT in mobile radio



## YOUR MOBILE CAN DO

[TO WEBSITE](#)

- GROUP CALL
- INDIVIDUAL CALL
- PRIORITY CALL
- EMERGENCY CALL
- LONE WORKER PROTECTION
- E2E ENCRYPTION
- DYNAMIC GROUP CALL
- STATUS MESSAGES
- TEXT AND DATA EXCHANGE
- INDOOR LOCALIZATION
- REMOTE CONTROL
- VIDEO
- VOICE RECORDING
- CALL HISTORY
- GPS ROUTE
- GPS HISTORY TRACKER
- GPS LOCALIZATION
- TASK MANAGEMENT

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## ENSURE SAFETY WITH LONE WORKER PROTECTION

LWP

Lone Worker Protection (LWP) is a comprehensive set of safety features designed to meet industry standards and ensure the well-being of lone workers. With LWP, you can work independently with peace of mind, knowing that you are connected to your team and protected in critical situations.



## 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.

## 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.

## 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.

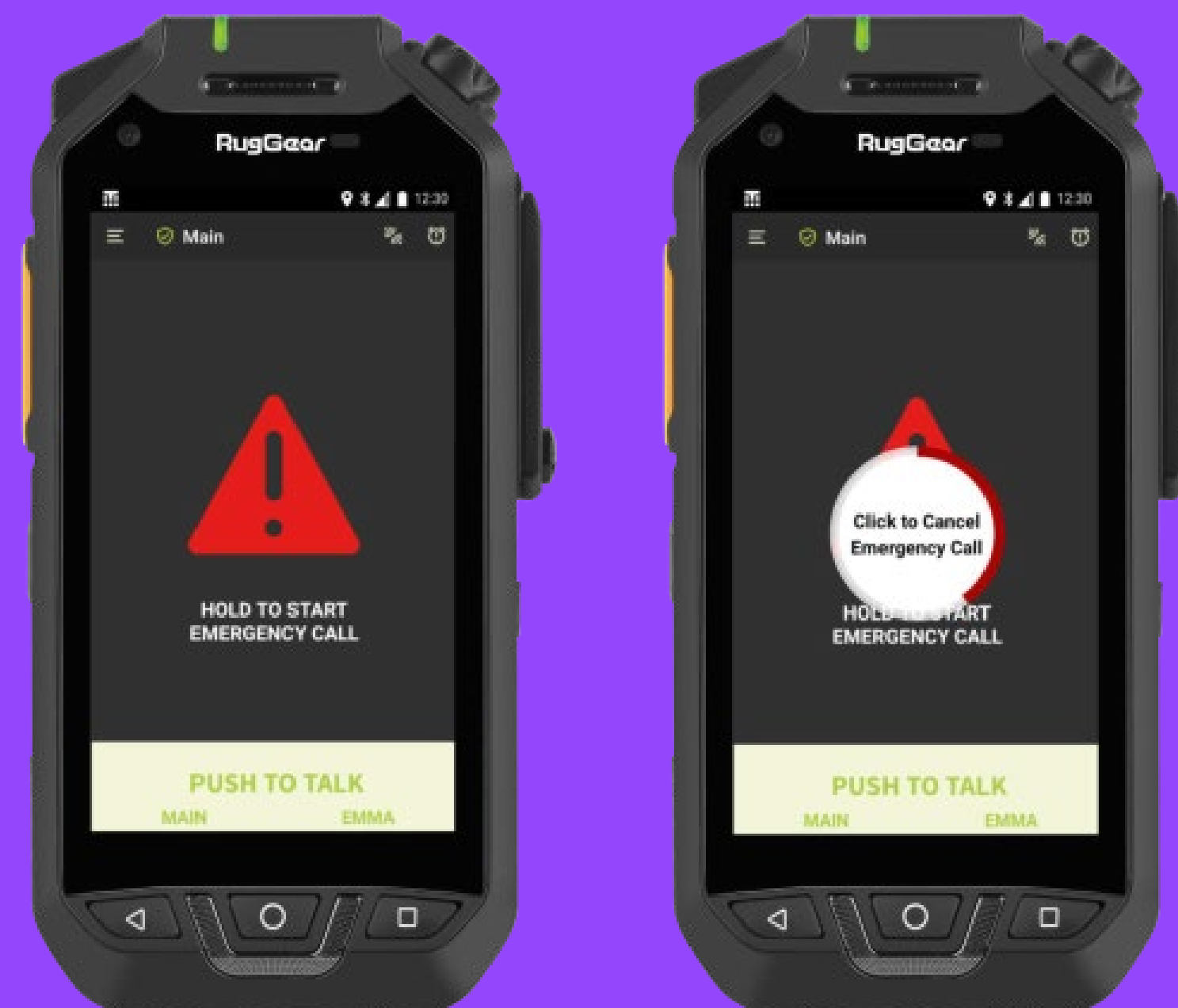
If a user remains motionless for a certain period of time, an Inactivity Timer will start. If there is still no movement, the application sends an Emergency Alert and automatically initiates an Emergency Call.

## 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.

## 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.



# T.RODON

Command and control center dispatcher solution.

T.Rodon can be deployed as a desktop application, or it can run in the field in mobile environments. It has an easy and intuitive installation process and can be set up on a wide range of Windows computers in minutes.



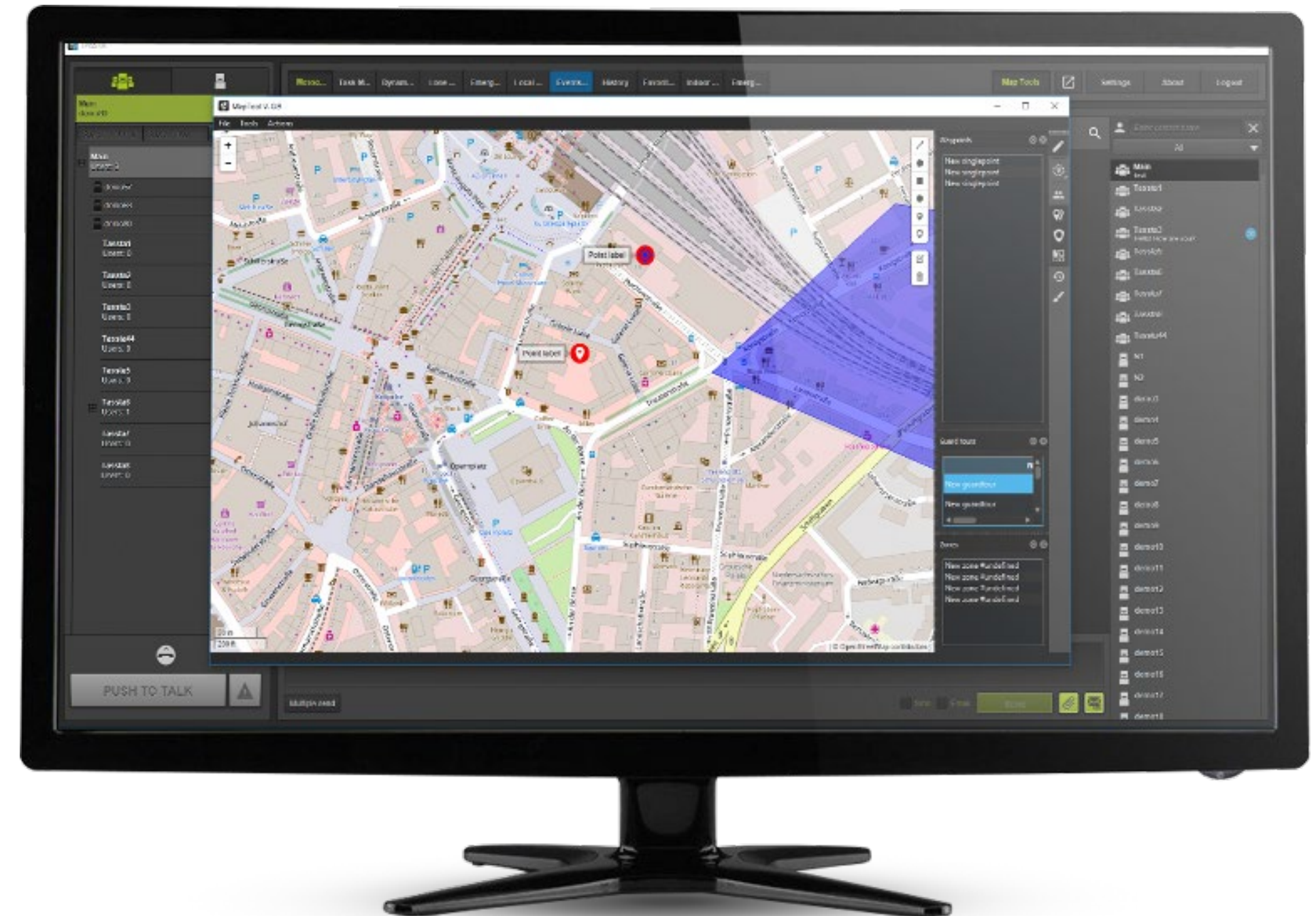
## YOUR DESKTOP CAN DO

[TO WEBSITE](#)

- GROUP CALL
- INDIVIDUAL CALL
- EMERGENCY CALL RECEIVING
- DYNAMIC GROUP CALL
- REMOTE CONTROL
- PRIORITY CALL
- LONE WORKER PROTECTION
- STATUS MESSAGES, TEXT AND
- DATA EXCHANGE
- E2E ENCRYPTION
- VOICE RECORDING
- CALL HISTORY
- MAP TOOLS
- GPS LOCALIZATION
- GUARD TOUR
- TASK MANAGEMENT
- INDOOR LOCALIZATION

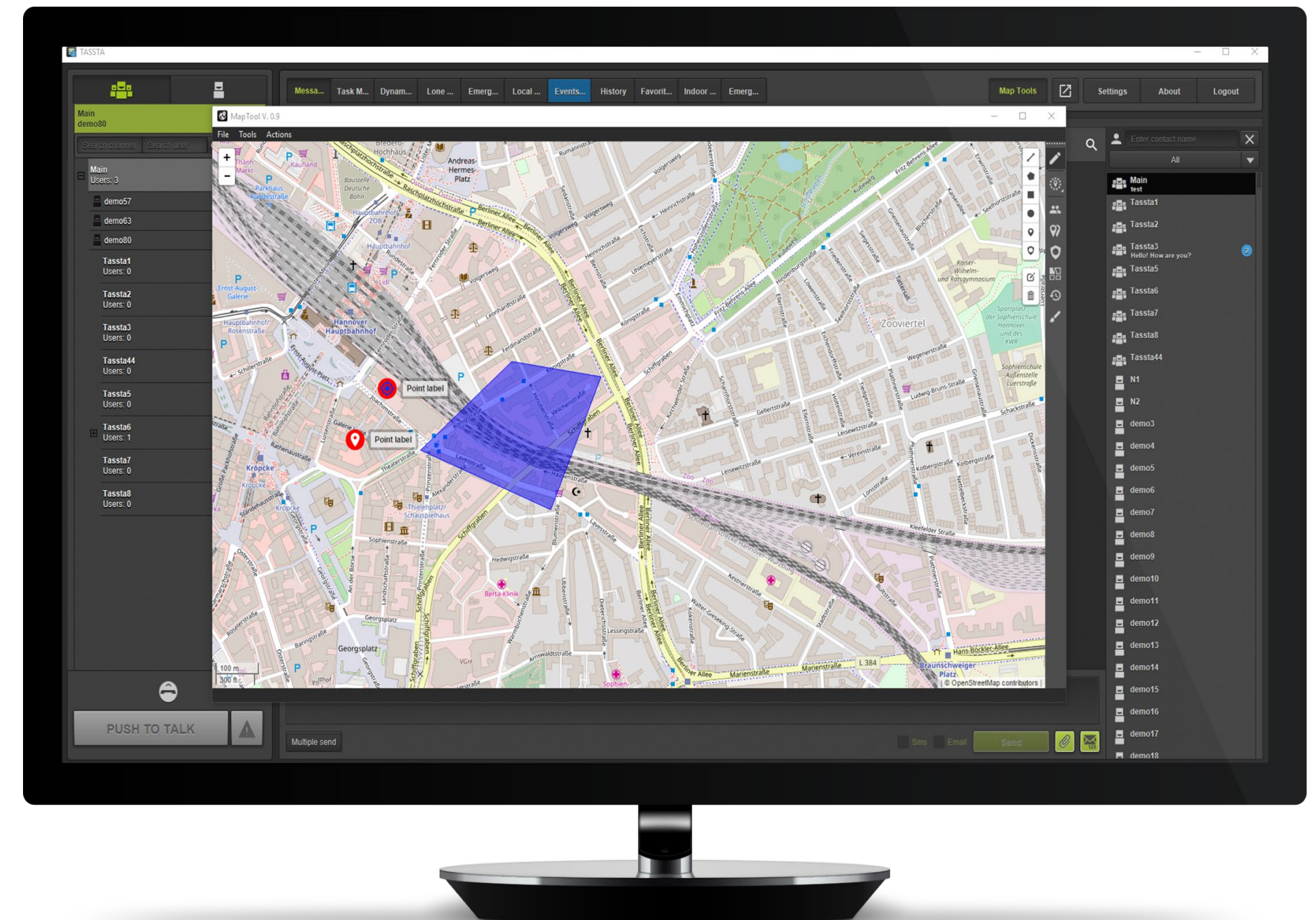
# GPS TRACKING ON WIDE SCREENS

- Real-time visualization of the user coordinates on the map
- Allocate the nearest user for placing the order and increase your productivity



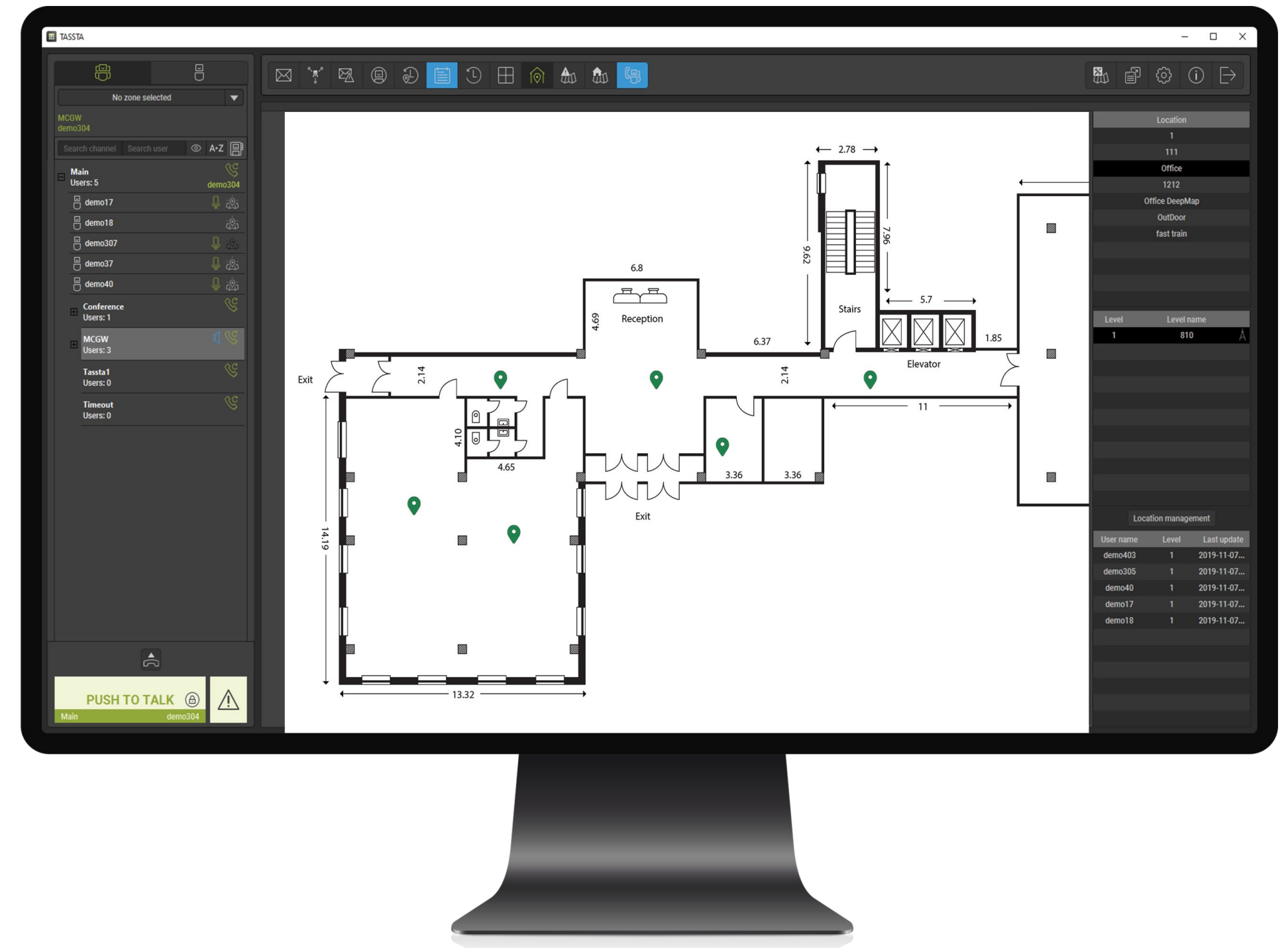
# DEFINE GEOGRAPHICAL ZONE

- User tracking
- Assignment of consequences if a specified zone border is crossed
- Dynamic group formation when changing geo-zones



# INDOOR TRACKING IN WLAN, GSM, UMTS

- Localization in buildings as extension to GPS
- High accuracy also in multistoried buildings
- Support of new services



# WITH THE ORDER MANAGEMENT SYSTEM:

- Distribute orders (to multiple users)
- Specify orders while sending files
- Different order-types and priority

## Real time:

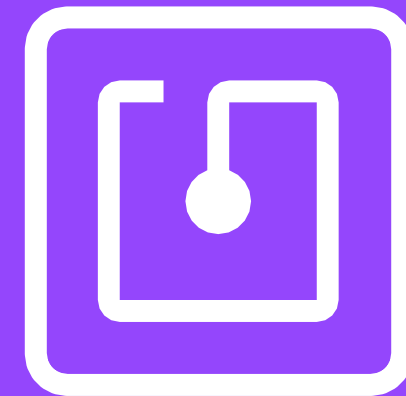
- Track the status of the orders
- Configurable fields
- Guard tour system
- Close order-types



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## WITH THE ORDER MANAGEMENT SYSTEM:

- Scanning of ID by QR code or NFC
- Verification of ID by requesting information from the database
- Time & Location Registration
- Access Control



## T.BRIDGE

- Extend your existing PMR system
- Connect different PMR systems
- Low technical and financial investment

### Supporting networks:

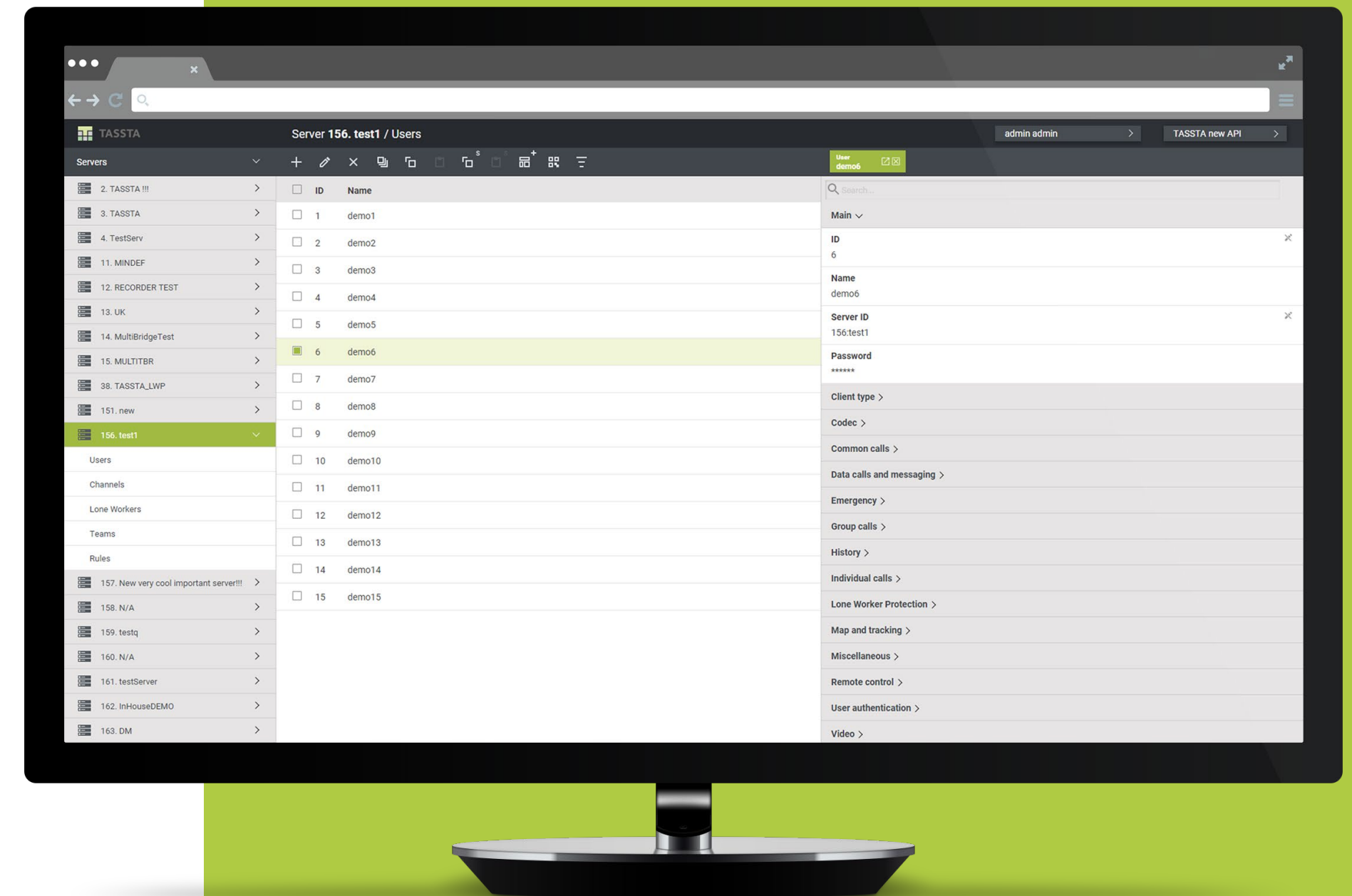
- |                                    |                             |
|------------------------------------|-----------------------------|
| • TETRA HYTERA <sup>®</sup>        | • KENWOOD                   |
| • TETRA DAMM <sup>®</sup>          | • NEXEDGE <sup>®</sup>      |
| • TETRA SEPURA PEI <sup>®</sup>    | • P25 <sup>®</sup>          |
| • DMR HYTERA <sup>®</sup>          | • MPT 1327 <sup>®</sup>     |
| • MOTOTRBO <sup>®</sup>            | • ANALOG RADIO <sup>®</sup> |
| • KENWOODCONVENTIONAL <sup>®</sup> | • TAIT <sup>®</sup>         |
| • KENWOOD DMR <sup>®</sup>         | • ICOM <sup>®</sup>         |



# T.COMMANDER

Everything is in your hands with the account manager.

- Define the framework of your system
- Select your functions
- Manage users and groups



## T.COMMANDER

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.

- **USER-FRIENDLY INTERFACE**
- **ADMINISTRATION**
- **SERVICE**
- **MANAGEMENT**

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## T.LION AND T.BROTHER

T.LION is a main component of the overall TASSTA communication solution. It shares resources on request between the clients and provides reliable communication with sub-second performance.

By using T.Brother, the redundant TASSTA server in different geographically dispersed datacenters, you ensure that end users use TASSTA services with maximum reliability.

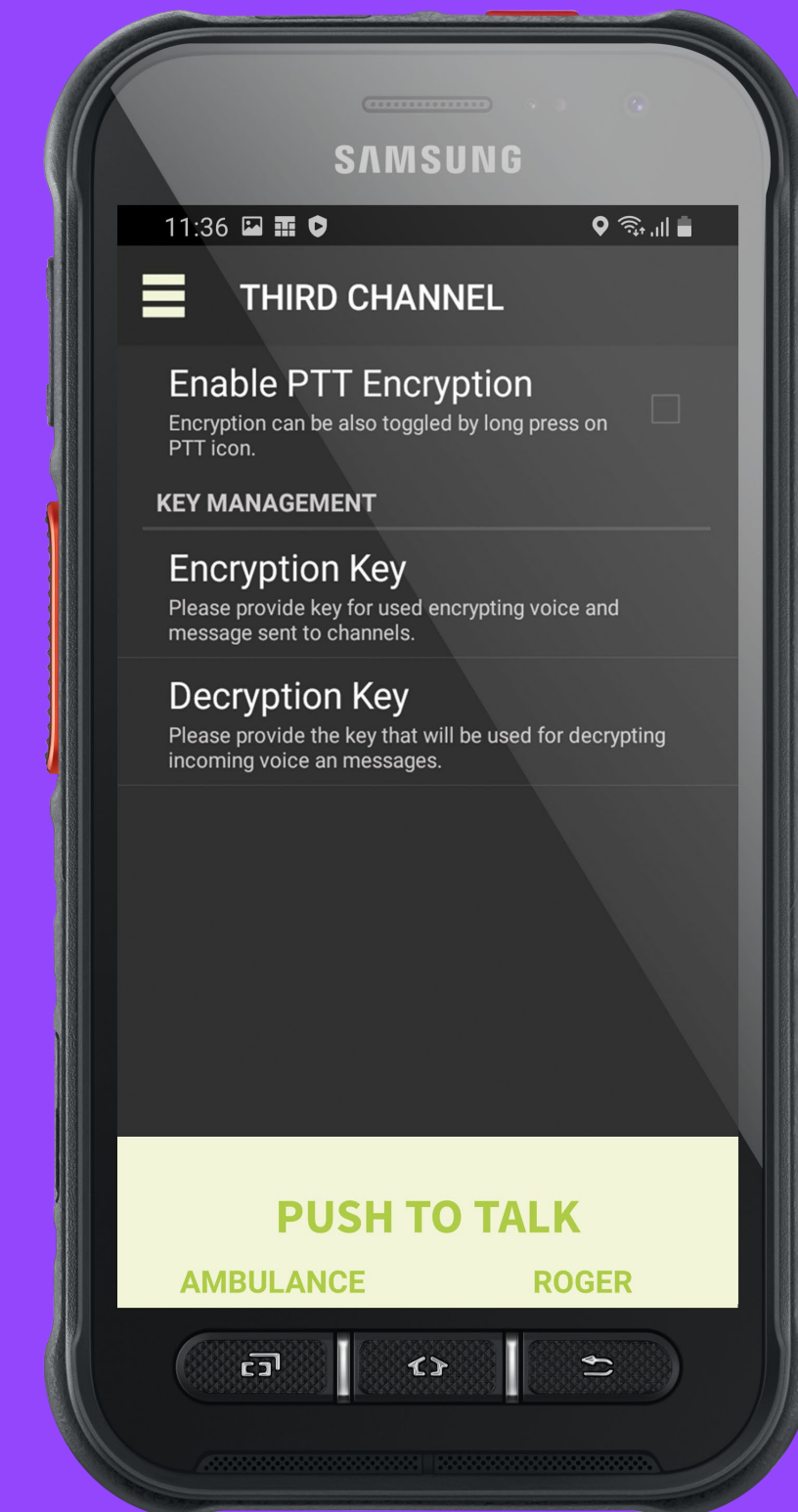


# SECURE COMMUNICATION

- E2E Encryption
- Authentication
- IMEI number verification

Prevents potential eavesdroppers from being able to access the encrypted conversation even they are illegally intercepting the communication channel.

The E2EE in TASSTA provides a way of communication where only the communicating users with a right set of user's keys pair (encryption and decryption keys) can hear the voice messages. It is an additional level of protection to ensure that no third parties can intercept the voice data being communicated or stored without having the keys.



## 3GPP MISSION CRITICAL LTE SOLUTION:

The MCX TASSTA solution is applicable primarily to mission critical solutions using LTE access.

Certain MC service functions such as dispatch and administrative functions could also be supported via non-3GPP access networks.



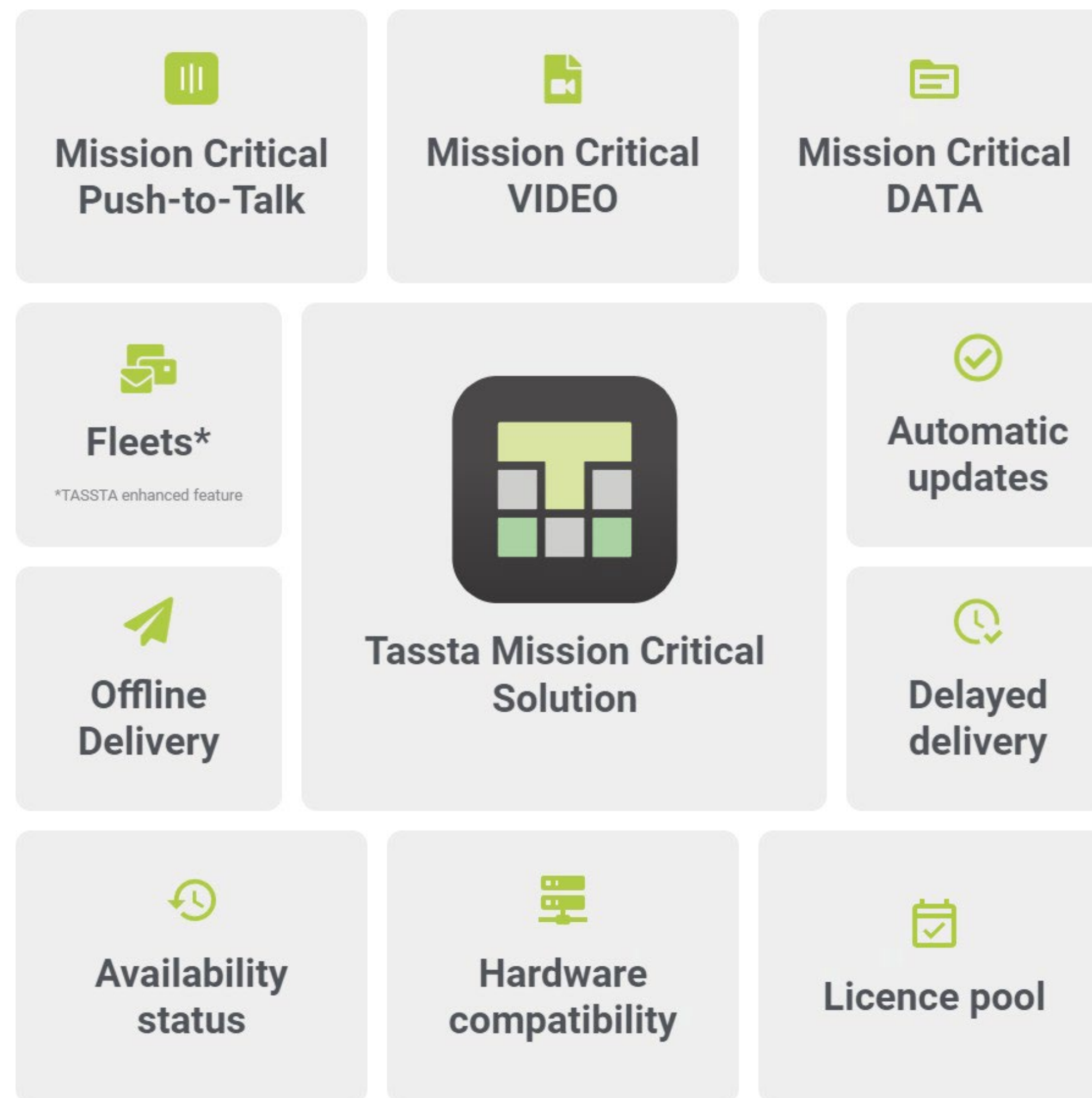


## FEATURES:

TASSTA MCX solution offers a full range of services fully compliant with 3GPP specifications: Mission Critical Push-to-Talk (MCPTT), Mission Critical Video (MCVideo) and Mission Critical Data (MCData).

The compliance and interoperability are validated through MCX Plugtests Programme, which TASSTA regularly attends since 2017.

[TO WEBSITE](#)



## 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 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



## **MCVIDEO: MISSION CRITICAL VIDEO**

Mission Critical refers to meeting the needs of agencies providing Public Safety services such as Police, Fire and Ambulance services. Those needs include high reachability, availability and reliability of the service, low latency, realtime operating capabilities, highly secured operations, private and group communications, handling of emergencies and ability to provide prioritization.

MCVideo service includes:

- Video capture of the video information;
- Secure streaming and storing of the video information;
- Processing of the video information, including the ability to annotate video frames and recognize video features;
- Transmission and control of the parameters relevant to those functions;
- Interoperability with other services and systems.

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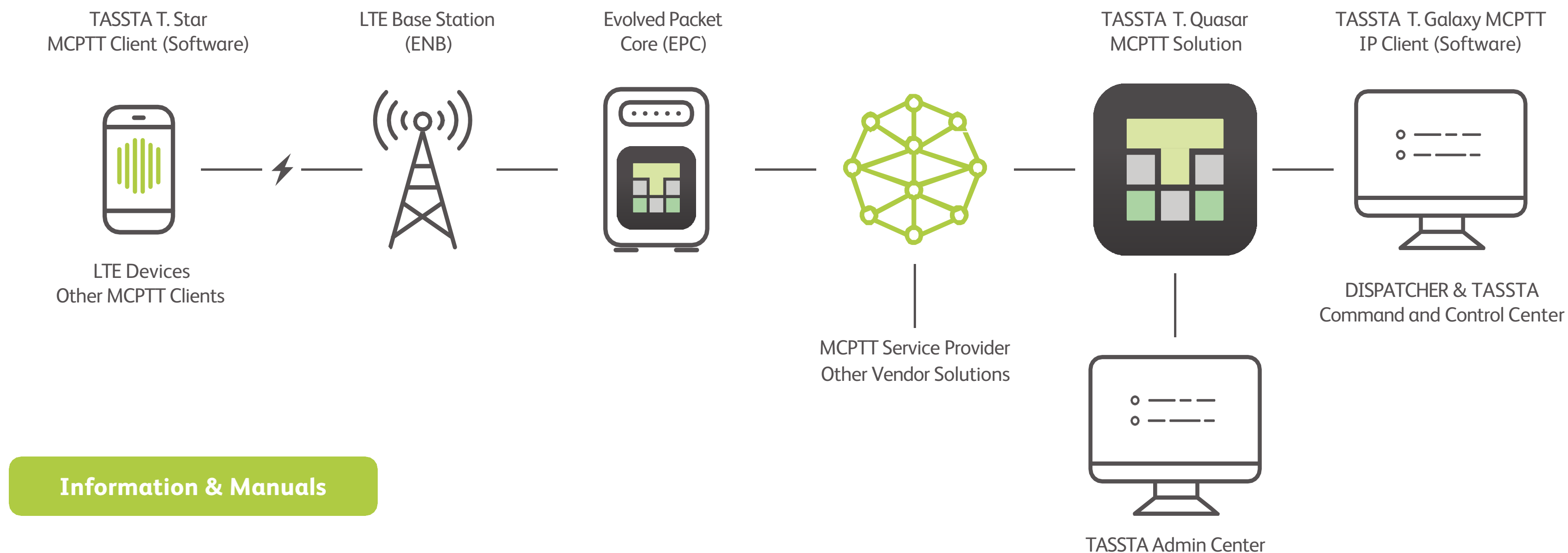
## **MCDATA: MISSION CRITICAL DATA**

MCDATA is a service for Mission Critical Data Operations. In addition to voice services, today's 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 new multimedia services. The MCDATA service needs to provide a means to manage all data connections by Mission Critical Users in the field and provide relevant resources to the ones who need them.

- Short Instant Messaging (private / group)
- File Sharing
- Location Sharing

# TASSTA MCPTT SCHEME



# T.QONNECTOR

## TASSTA's patching solution.

Professional middleware solution for interconnecting different channels from different radio solutions, which run on the same server.

## Supporting networks:



```
1 func patchChannels(ctx context.Context, chn1, chn2 *radio.Channel) {  
2     for {  
3         select {  
4             case <-ctx.Done():  
5                 return  
6             case a1 := <-chn1.audio:  
7                 chn2.Send(a1)  
8             case a2 := <-chn2.audio:  
9                 chn1.Send(a2)  
10            case sig1 := <-chn1.signaling:  
11                chn2.Signal(sig1)  
12            case sig2 := <-chn2.signaling:  
13                chn1.Signal(sig2)  
14        }  
15    }  
16 }
```

## WHY TASSTA?

- Fast call set-up
- Secure communication
- Communication in groups (Group Call) and Individual Calls
- Assigning different priorities (Priority Call)
- Independent management of permissions
- Fast and reliable data transmission
- Order management system for easy procurement and tracking
- Low investment costs for infrastructure and hardware
- Low maintenance time
- High level of acceptance among users by convenient terminals
- Integration into existing PMR systems
- Expansion of the already available and existing systems by an almost global reach

## TASSTA OFFICES

**MORE  
THAN** **50** **partners  
worldwide**





**TASSTA**

**LIMIT  
LESS** 

+49 30 5771 0674  
hello@tassta.com  
tassta.com

 Tasstaworld  
 t-a-s-s-t-a  
 TASSTA\_GmbH  
 TASSTAGmbHHannover  
 tassta\_now