

ATS TELCOM

Secure LTE communications

Atos



20 years in



ISSS – Hradec Králové, 1. dubna 2019

Hoox

new generation in comunciations

Presentation for ISSS



For a global approach to security



▶ Hoox: your trusted solution

- Secure smartphones dedicated to cover enterprise and government needs
- A range of terminals to cover all customer needs based on the expected security level

▶ Hoox: business security for professional use

- Secure smartphones to keep you efficient and productive in all circumstances
- Provides new usage such as conference call, instant messaging and recording

The security of smartphones

A strategic challenge for your company



The smartphone is a real “mobile office”
It is the extension of your company

68%

of companies were
affected by cyber crime in
the last 24 months

3.36

billion euros

of financial impact

**Source: PwC study on corporate fraud published on March 7, 2016*

Banks

Protect clients' sensitive data



► Description

- Private international bank specializing in wealth management
- More than 200,000 employees
- Very frequent travel abroad

► Needs

- Availability of secure smartphones
- Easy-to-use devices
- Reduction of the operational risk linked to the management of client portfolios

Absolute confidentiality in regards to banking secrets

Small or large companies

Protect your company's critical data



► Description

- A French SME with 5 affiliates worldwide
- Manufacturer of aircraft parts
- Very frequent travel in France and abroad

► Needs

- Secure mobility
- Exchange R&D procedures via email with their clients in complete security

Absolute confidentiality regarding manufacturing secrets

Public institutions

Protect governmental exchanges



► Description

Multiple profiles :

- Chief of State
- Ministers
- Secretaries of State

► Needs

- Protect the confidentiality of strategic communications
- Ensure the security of trades linked to national sovereignty

Complete confidentiality in governmental exchanges

Mobile security

A strategic challenge for your daily activity



Questions regarding my devices and applications:

- Is my smartphone secure? What will happen to my data if my smartphone is lost or stolen?
- Can we trust the software vendors? Is there a risk of intrusion on my smartphone when downloading applications?
- Is access to my information system secure on my smartphone?

Have you measured the impact of mobile security on your business?

1

Hoox for business

Your real protection



Hoox secure smartphones

Don't let risks drag down your productivity

Unhindered productivity

- Call all your contacts
- Make conference calls
- Exchange information via email
- Access your information system
- Download applications

Protected against security risks

- Listening, interception
- Loss or theft of the device
- Intrusive applications
- Intrusion on the telephone



Hoox: complete protection

- **Secure communications** prevent eavesdropping on phone calls
- Emails are **protected from interception**
- **Secure access to IT**
- **Use of controlled applications**, all applications are secured
- **Protected device**, prevents the extraction of sensitive information

Hoox for business, a new dimension of security



Native security: enter a secure universe from the unlock screen!

Hoox is designed for business.
Easy to use, intuitive and user-friendly

Security with complete transparency,
a unique experience in the market

Hoox for business

Communicate and share with complete peace of mind



**Keep working as usual,
Communicate simply**

The hexagonal shape of the icons shows you that these applications are **secured**:

- Protection from listening
- Protection from interception (text, email, etc.)

Benefits

- Maintain confidentiality of exchanges
- Preserve your financial and commercial information

Hoox for business

Communicate securely



See the security status on-screen

Benefits

- Maintain the confidentiality of your team's sensitive interactions
- Keep your peace of mind

Hoox for business

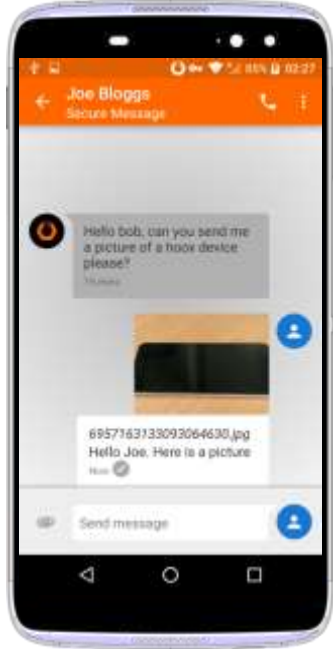
Stay connected with complete security

Wherever you are,
stay connected with your team.

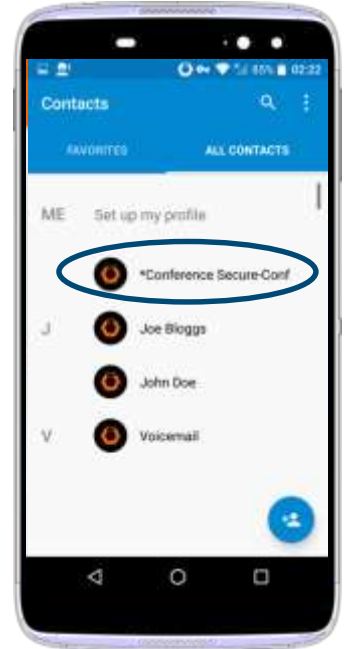
Join your secure meetings while on the
move

Benefits

- Gather your team instantly and without limitations
- Effectively communicate, even from long distances
- Maintain the confidentiality of exchanges



secure group messaging
with file sharing



secure conference call

Hoox for business

Stay productive



**Hoox is the extension
for your **mobile office!****

Your time is precious!

Use your usual applications securely
and access your data while maintaining
the productivity you want.

2

Hoox for mission

Atos highly secure and resilient
tactical LTE solution

4G/LTE communication

To answer current and future operational challenges

Today

- ▶ Real time position sharing
- ▶ Communication
- ▶ Video
- ▶ Multimedia exchanges
- ▶ Event management

Tomorrow:

- ▶ Sensors (on human or for environment)
- ▶ IoT
- ▶ Drone control & feedback,
- ▶ Augmented reality
- ▶ Data analytics
- ▶ ...

New usages will guide the migration process from PMR to LTE

The migration path begin today, with first implementations over the world, and will end in 2025-2030

Tactical communication – situational analysis

Leading usage of Professional Mobile Radio (PMR)

PMR is widely used in tactical communications

- ▶ **MoI:** police, intervention forces, border guards...
- ▶ **MoD:** homeland security & peacekeeping...
- ▶ **Other public services:** MoJ, firefighters, medical emergency services,
- ▶ **Private services:** transports

PMR offers:



Network availability

Highly resilient network and wide coverage



Confidentiality of voice communication

Private radio network



Critical communication features

Push-to-talk, closed user groups...

BUT ... PMR network data sharing capacity is highly restrictive

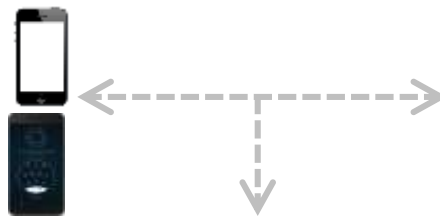


LTE or LTE over PMR solutions

Hoox for mission Overview

Clear communication
with standard phones

Secure communication with
Hoox for business solution



Connection to HQ



Hoox Smartphone

Secure Android phone with
mission-oriented features:

- Push-to-talk
- Blue force tracking



Hoox Hub

Carry-on module ensuring
connection to multiple networks

Public network



Hoox LTE Bubble

Device-to- device



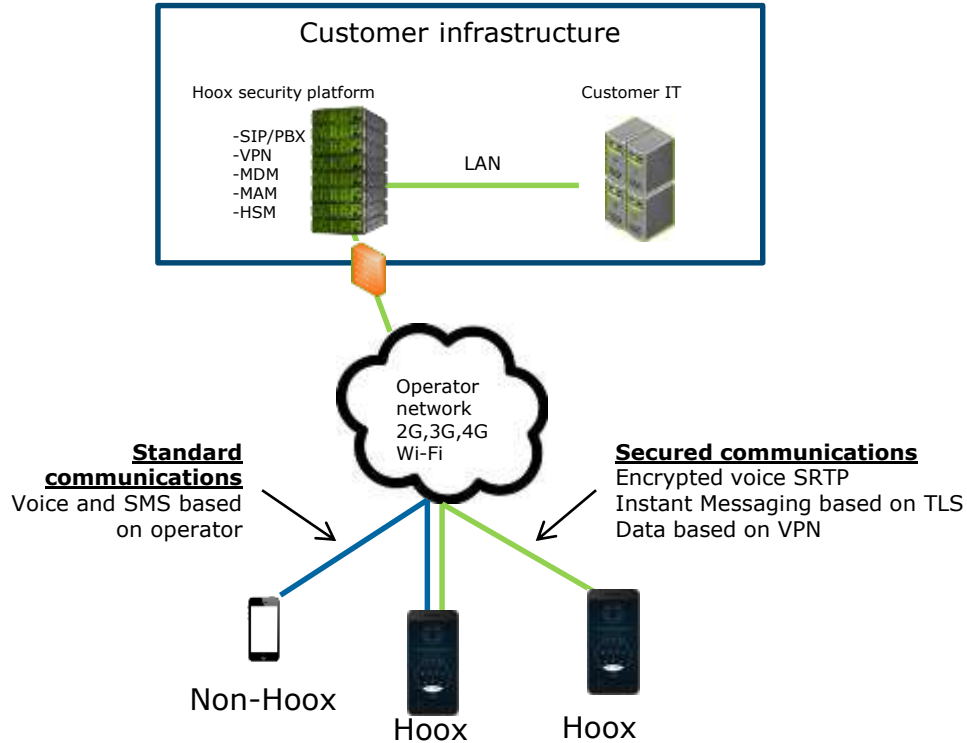
**One single handheld
for mission apps
and voice**

**Always-on
communication access
No voice break**

**Deployable
mission support**

Hoox "on premises"

Full integration with your IT



The on-site solution

Which benefits?

- Full integration with your information system
 - Total sovereignty on your organization's data
 - Control over of all network flows
-
- Scalability
 - CAPEX model
 - Volume >1000

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Zoom on security

Secure communications

Prevention from eavesdropping and interception

▶ Two ways to communicate with Hoox:

- **Secure communication with other Hoox users**
- **Standard communication** (standard calls, standard SMS): same risks as with a standard smartphone

▶ Hoox secured channel of communication:

- **Secure calls or conference calls:** voice calls are encrypted. Signaling uses SIP/TLS and voice data transfer uses SRTP Pass-through protocol (end-to-end encrypted call), 256-bit AES
- **Instant messaging:** SIP/TLS, 256-bit AES
- **Data:** all data exchanges (e.g. web browsing and mails) are going exclusively through a VPN. There is an IP tunneling which forces all connections from the mobile phone to the central system through the VPN; TLS.

Protected device

Prevention from extraction of information

USB

- ▶ USB is strictly controlled
- ▶ Only fundamental features are kept
 - File transfer (with security code)
 - 4G connection sharing
- ▶ All other functions are removed from the Hoox (not just deactivated)



A secure boot

- ▶ Data is encrypted
- ▶ Prevents from penetrating or changing something in the system

Security code

- ▶ After five tries, the Hoox is reset

Secure connections

Prevention from over-the-air intrusion

- ▶ All **wireless** features are strictly controlled
- ▶ Only fundamental features are kept
- ▶ All other functions are removed from the Hoox (not just deactivated)



**4G/3G: IP tunneling
and no MMS**



Totally removed



**Audio profile only
(for car connection)**



**Hotspot connection only
No Wi-Fi tethering
Other profiles removed**

Private store

Prevention from unsafe applications

▶ **Hoox smartphones include a private store**

- **No public store** installed on the Hoox
- **Only “signed by Atos” applications up for installation:** no other possibility to install an application (i.e. downloading by a file transfer)

▶ **Atos audits all applications for download in your private store**

- Security policy compliance
- Rights and permissions
- Most inappropriate behaviors are detected (malware, virus, rootkit, unwanted connection to servers etc.)

▶ **Your own applications for download in your private store**

- Possibility to **add your own applications** after an Atos audit and test.
- Available **for your employees only**

ATS TELCOM



Thank you

For more information please technical contact

Vladimir.Brenkus@atstelcom.cz

+420 602 226 229