Hoox
new generation in communications

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?
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
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.
Hoox for mission
Atos highly secure and resilient tactical LTE solution
# 4G/LTE communication

To answer current and future operational challenges

<table>
<thead>
<tr>
<th>Today</th>
<th>Tomorrow:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Real time position sharing</td>
<td></td>
</tr>
<tr>
<td>- Communication</td>
<td></td>
</tr>
<tr>
<td>- Video</td>
<td></td>
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<tr>
<td>- Multimedia exchanges</td>
<td></td>
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<tr>
<td>- Event management</td>
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<tr>
<td>- Sensors (on human or for environment)</td>
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<tr>
<td>- IoT</td>
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<td>- Drone control &amp; feedback,</td>
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<tr>
<td>- Augmented reality</td>
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<td>- Data analytics</td>
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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 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
Device-to-device

Hoox LTE Bubble

Connection to HQ

One single handheld for mission apps and voice
Always-on communication access
No voice break
Deployable mission support

Clear communication with standard phones
Secure communication with Hoox for business solution
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

Customer infrastructure

- Hoox security platform
- Non-Hoox
- LAN
- Hoox
- Hoox
- Operator network
  - 2G, 3G, 4G
  - Wi-Fi
- Secured communications
  - Encrypted voice SRTP
  - Instant Messaging based on TLS
  - Data based on VPN

Standard communications
Voice and SMS based on operator
5 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
Thank you

For more information please technical contact

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