SECRICOM
Seamless Communication for Crisis Management

Demonstration

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SEVENTH FRAMEWORK PROGRAMME

SECRICOM

Seamless Communication for Crisis Management

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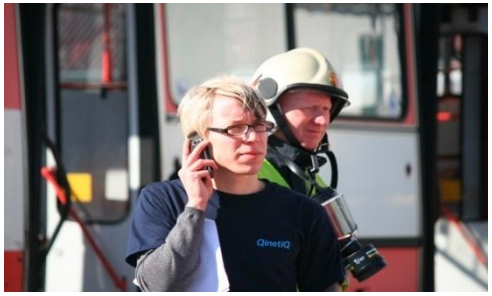
Demonstrations of SECRICOM

Demonstrations in SECRICOM

- Technical objectives
  - Show integrated results at certain time
  - Prove the integration status

- Scripted demonstrations (scenarios)
  - User - plausible context

Secricom on NATO CP Exercise 2010, Slovakia

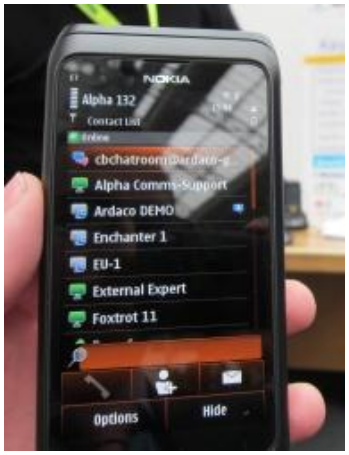



- SECRICOM capabilities proven to function effectively in a multi-agency/multi-national live Civil Protection Exercise (CBRN)

- SECRICOM solution proven to operate in an integrated and cohesive manner
  - Legacy radios: Land-Mobile-Radios and CB Radios
  - Along side previously tested devices: PCs, Laptops, Mobile Phones, PDAs

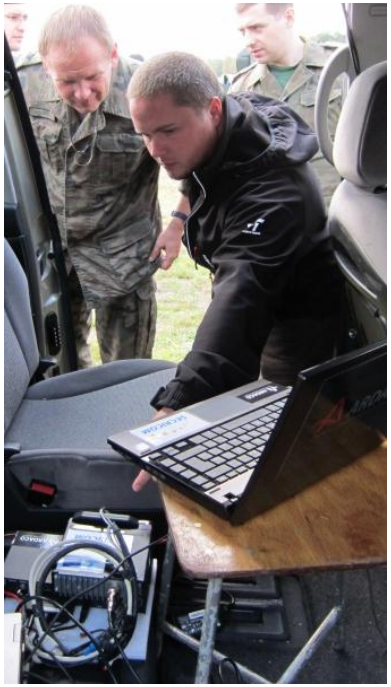
Secricom on BAPCO 2011 exhibition, UK




- **Hands-on presentations of capabilities to exhibition visitors:**
  - **Secure Push-To-Talk** introduced by Ardaco - group communication on different platforms covering CB radio, mobile phones, touchscreen desktop and ruggedized devices. Dynamic group management, transmission of hand drawings and pictures, instant messaging and wide interoperability allow better coordination of emergency response.
  - **Multi-Bearer-Router** managed by Qinetiq - is an intelligent adaptive routing device enabling seamless inter-networking in a multi-bearer, multi-node, mobile environment designed to optimise network performance wherever users operate in environments where connectivity is poor.
  - **Network monitoring centre** operated by Nextel - with improved detection and network forensic solutions. As presented, it allows faster recovery for crisis communications.

Secricom on ASTER 2011 workshop, Poland



- Fast-deployable Nomadic Node presented
  - Inter-connectivity on CB radio, WiFi, satellite
  - Communication applications Secure PTT on different platforms (Symbian, Android, Win Mobile, Windows)

Final Demonstration, 2012

- 2 Live Scripted Exercises
- Integrated demonstration of project results
- More than 40 emergency response stakeholders from UK and abroad
- Chance to consider SECRICOM implications for technology in use and business procedures.
- 8th March 2012 at Qinetiq premises in Portsdown Technology Park, Portsmouth, United Kingdom

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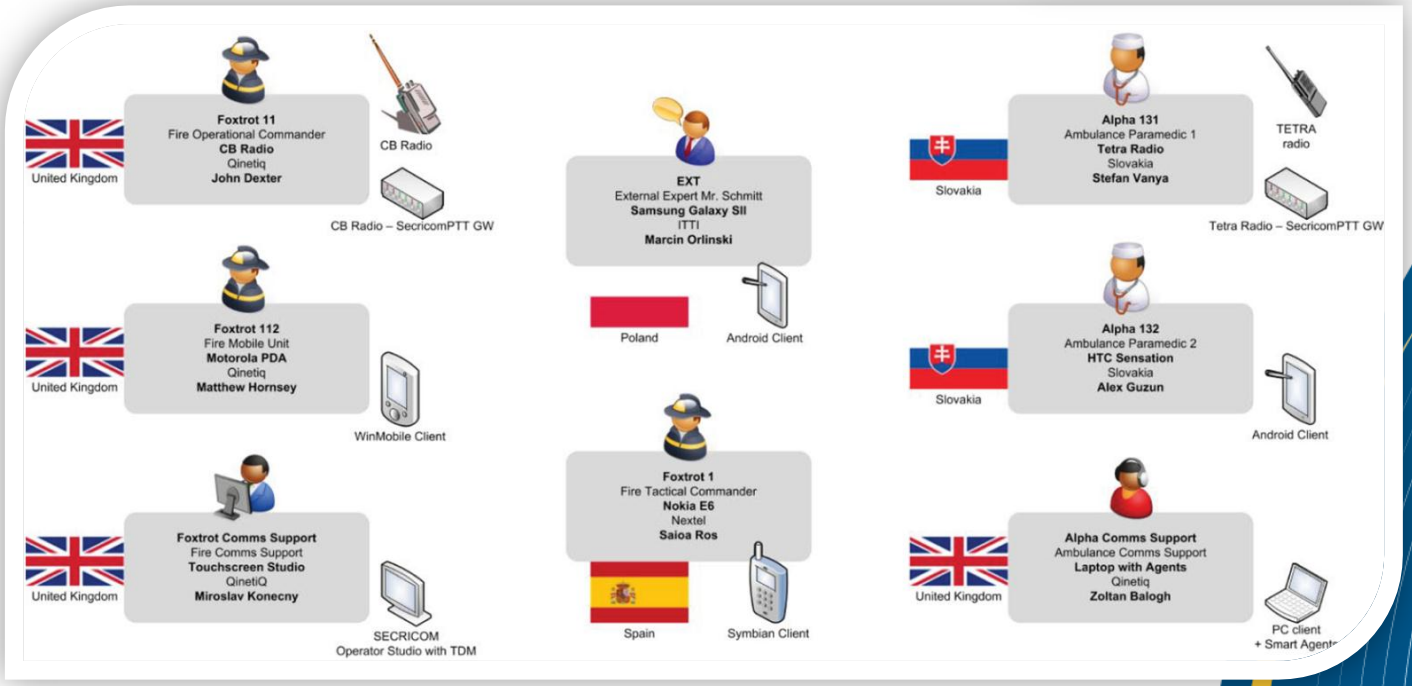
Introduction of Final Demo

★ PLOT Exercise 1 – Evacuation with Medical Support

- ★ The exercise starts during a major reservoir flooding that causes a chemical plant explosion and associated noxious cloud near a state border.
- ★ Various agencies respond to this disaster setting up their individual commands with inter-agency strategic, tactical and operational command groups also forming.
- ★ For demonstration purposes the Ambulance Service was situated in another country ostensibly because of the effect of the noxious cloud on the Ambulance HQ and its units in the country where the incident has occurred.

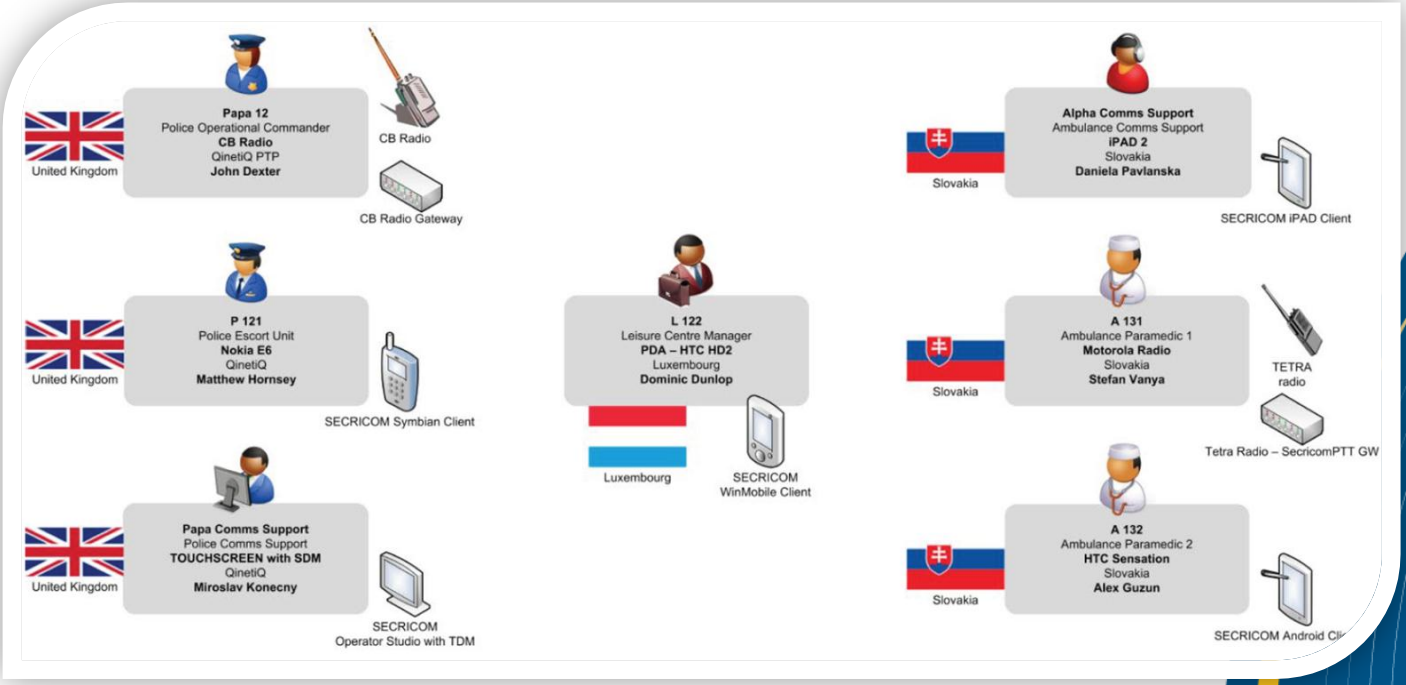
★ Roles



PLOT Exercise 2 – Chemical Incident

- Second exercise begun at some point following the chemical plant explosion. Foxtrot 112 discovers an abandoned lorry with a container holding a hazardous chemical. The markings on the container 'ACME LTD –are unfamiliar to Foxtrot 112.
- A search of the vehicle's vicinity also reveals a collapsed person nearby. Following the communication of the details of the chemical container to the Foxtrot Comms Support a search of the Fire Agency's databases reveals that the manufacturer is based in a neighbouring country.
- After an urgent telephone call, arrangements are made for a local Police Officer to attend the home of the company's resident expert (Mr Schmitt) with a Secricom enabled tablet/iPad to join a talk group supported by imagery with Foxtrot 112, his operational commander Foxtrot 11 and the Fire agency's tactical commander Foxtrot 1.
- Later in the exercise the assigned ambulance arrives at the scene with its full Protection equipment and commences treatment to the collapsed male. They will seek advice on which hospital is available for specialist burns treatment from the Ambulance Comms Support. The Ambulance Comms Support will access the hospital databases to determine to which hospital the ambulance will be directed

Roles

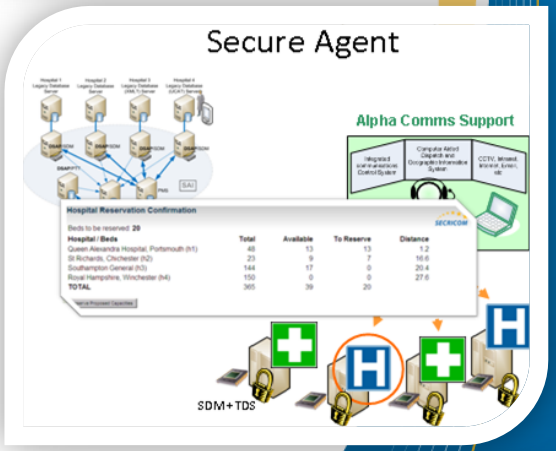


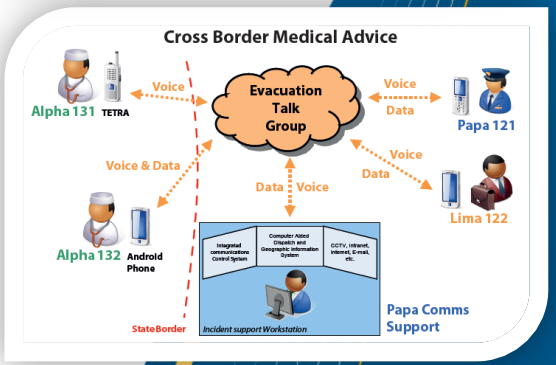
Video Record

Demonstration Conclusions

Demonstration Achievements

- **Secure and resilient multi-way discussion, involving specialist out of theatre sources hosted across state borders**
  - This could relate to CBRN incidents that need specialist technical or medical advice urgently to enhance the effective of response
  - The capability of including all concerned parties in one conversation/talk-group negates the need for communications to travel up across and down command structures thus saving time and reducing the risk of misinterpretation of important information
- **Secure instant written data and picture exchange with audit trail to support decision making and post incident reviews**
  - Instant messaging, or traceable secured messages
  - Secure Agent – instant access to live information about bed availability (could be other key asset information such as body bags, etc) reduces need and resource for regular telephone calls seeking required information thus improving times to get patients to right hospitals





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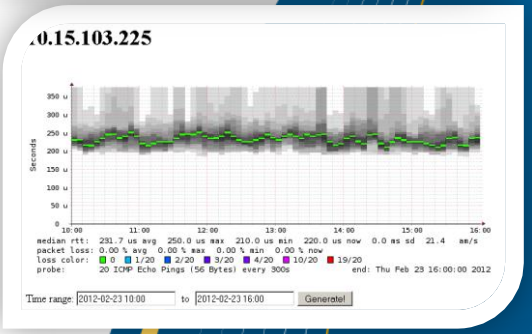
Integrated Performence of Capabilities

- **Use of secure wireless communication system SECRICOM Silentel as the main communication system during crisis situation**
  - Communication server with encryption functions
  - Client applications on various mobile devices (iOS, Android, Symbian, Windows mobile)
  - Operator studio with touchscreen
  - Gateways to Tetra Radio system and Citizen Band radios
  - Services including, voice, text, multimedia, long messages, group moderation, actor status, etc.

- **Resilient network infrastructure**
  - Multi bearer router (MBR) for seamless connectivity
  - Network monitoring for safety and quality of service
  - Network management by use of distributed computing

- **Advanced functions of communication system**
  - Search in various databases based on Secure Agent system
  - Trust ensured by Secure docking module



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Project Technical Achievements

1) Cross system/platform communication – SECRICOM Silentel

- Communication servers and gateways
- Services and applications for various types of modern devices
- Interoperability with legacy systems
- Distributed computing and process automation – smart agents

2) Security

- Non-repudiation, authenticity, integrity, confidentiality, accountability
- User authentication, state-of-the-art encryption
- Trust in hardware platform and execution environment
  - Trusted docking station concept
  - Chip-level security – Secure docking module (SDM)
- Threats and intrusion detection/monitoring

Project Technical Achievements

3) Quality of service

- ★ Ready for internet protocol version 6
- ★ Monitoring, prioritization – Monitoring and Control Centre
- ★ Comfort of use – hide security from users

4) Resilient connectivity

- ★ Multi-Bearer-Router
- ★ Extendable and on-site deployable network

5) Show results in hand-on-fashion

- ★ Integrated and demonstrated

Invitation to Individual Demonstrations in the Lobby

Lobby Demonstrations

- **Multi Bearer Router – QinetiQ**
  - For seamless communication over heterogeneous bearers
- **Secure Wireress Communication – Secricom Silentel – Ardaco**
  - Collaborative features hands-on demonstration
- **Network Monitoring Centre – Nextel**
  - Ensuring quality of service and protection
- **Agent infrastructure – Slovak Academy of Sciences**
  - Search of resources supporting performence of responders
- **Attack techniques - CEA-LETI**
  - Security aspects
- **FPGA Hardware – UoP**
  - Security aspects


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