PSCE Conference in Paris, France

On 25-26 November 2014, PSCE organised one of its largest biannual conference addressing key topics within the domain of crisis communication. Co-organised and hosted by CISCO, the conference offered an interesting format, this time focused on public alert systems, critical infrastructures risk management, internet of everything and future communication networks.

The event featured a diverse programme composed of interesting debates, roundtable discussions, collaborative session and networking possibilities. The event was organised in conjunction with the SALUS 1st Conference that discussed future communication demands on Public Protection and Disaster Relief, taking into account the current levels of use and proposing plausible scenarios for growth and adoption of new services over the coming 10-20 years. More information about SALUS is available at: http://www.sec-salus.eu/.

The conference material is now available for all participants on a temporary platform. PSCE Institutional Members have the opportunity to download all presentations at any time from the restricted part of the PSCE website. The next PSCE conferences will be held on 27-28 May 2015 in Graz (Austria) and on 9-10 December 2015 in Oxford (UK).

Forum for Public Safety Communication Europe is to foster, by consensus building, excellence in the development and use of public safety communications and information management systems as well as to improve the provision of public safety services and the safety of the citizens of Europe and the rest of the world. The PSCE provides a common platform for researchers, industry and users to meet and network, learn about technologies used for public safety and influence policy makers at European level.

OPENING SPEECHES

- ❑ **10.20 – 10.25 – Opening of the Conference by Harold LINKE, President of PSCE**

- ❑ **Welcoming by Eyal BAVLI and Luc IMBERT, CISCO, host of the conference**

- ❑ **10.25 10.50 – Presentation of the French Internal Security system and the technologies trends, Fabrice TAUPIN, French Ministry of Interior**

The conference was inaugurated by Harold LINKE, PSCE President, who began by welcoming and thanking over 100 guests, with different background, for engaging in the dialogue within the public safety communications domain. He expressed gratitude to their commitment of users, industry and research communities with special accent on the upcoming funding opportunities in the framework of the DRS-18 Security call related to the Communication technologies and interoperability topic 1 which addresses the interoperable next generation of broadband radio communication system for public safety and security. He underlined the increasing role of PSCE members either through EU-funded projects or the feedback provided to the European Commission via position papers, public consultations or dedicated workshops and events. At the end of his speech, PSCE members were invited to provide their feedback on the SATCOM policy.

Harold LINKE

Eyal BAVLI and Luc IMBERT

After his speech, Eyal BAVLI and Luc IMBERT welcomed the participants on behalf of CISCO. Their intervention was followed by the presentation of the French Internal Security system and technologies trends given by Fabrice TAUPIN, from the French Ministry of Interior. The presentation focused on these three topics:

1. The situation of the French PMR networks for Law enforcement agencies and first responders.
2. An increasing need for mobility and broadband professional services.
3. Towards a 3GPP-based hybrid system.

Fabrice TAUPIN

Public Emergency Alert Systems

- ❑ *10.50 – 11.10 – Needs and challenges of the BE-Alert project, Thierry DAVIER, Belgian Ministry of Interior*

- ❑ *11.10 – 11.30 – Cell Broadcast Wireless Emergency Alerts. An overview of technology and worldwide implementations, Manuel CORNELISSE, One2many, The Netherlands*

- ❑ *11.30 – 11.50 – A multi-channel Approach to Early Warning Systems, Morten GUSTAVSEN, UMS*

- ❑ *11.50 – 12.30 – Roundtable on Alert to the population, moderated by Manfred BLAHA, PSCE.*

Over recent years, the increase in both the frequency and destructiveness of disasters has led to a heightened focus on the implementation of disaster preparedness measures. According to the World Bank, one of the three key sectors where investment can be focused to help minimize the effects of, or even prevent, disasters is that of early warning systems. Although the exact value of early warning systems is difficult to calculate, there is little doubt that an effective Public Warning System (PWS) can substantially reduce deaths and damage from certain disasters by giving the population time to flee a tsunami, flood or severe storm and enabling them to protect their property wherever possible. Effectively delivered early warnings also give governments and infrastructure providers more preparation time and hence a better chance of protecting critical infrastructure. The presentation of Manuel CORNELISSE provided an introduction to Public Warning Systems and background to one of technologies used to deliver them, the Cell Broadcast Service.

Early Warning Systems (EWS) has become a critical element of securing the safety of citizens before, during and after incidents. Public Warning (PW) is the part of EWS that allows emergency authorities to inform and alert the population affected by an emergency. A variety of channels such as cell phones, fixed-line phones, email, sirens, radio, TV, electronic boards and social media such as Twitter and Facebook may be utilized for such purposes. A PW system can also be integrated upstream with sensors measuring and evaluating potential threats such as flooding, landslides and chemical leaks. This integration makes it possible to automate the alert process completely, if that is required. Morten GUSTAVSEN presented a comparison of the different technologies available comparing SMS and Cell Broadcast.

Thierry DAVIER, Belgian Ministry of Interior, also noted that a rapid warning of the population is crucial in many emergency situations. The way of notification depends on the available channels at municipal, provincial and national level. He presented BE-Alert, a new alerting tool whose main principle is expressed in the image below and for which testing in a pilot phase was undertaken this year in 33 municipalities across Belgium, including the City of Brussels.
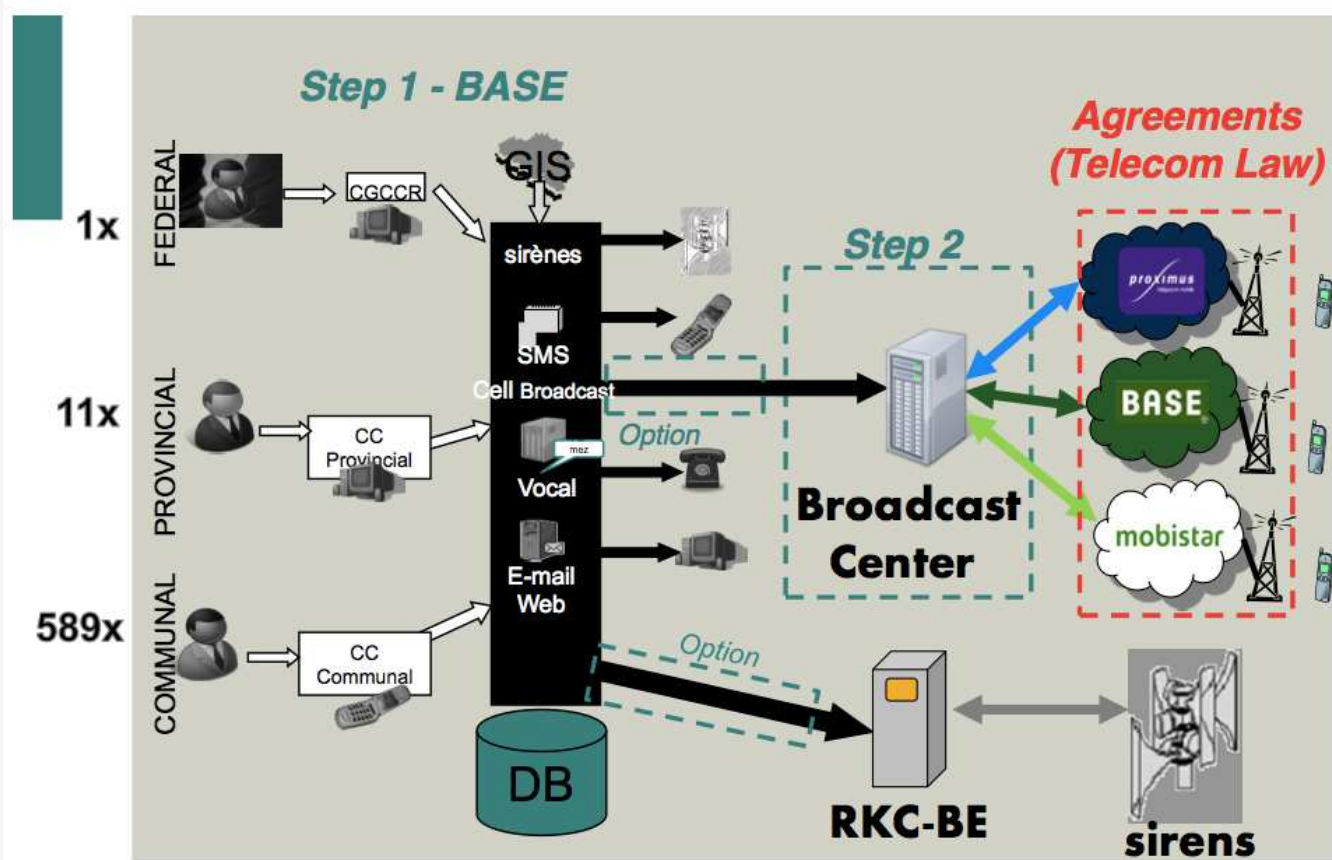
After the three presentations, all the speakers answered questions from the participants. This was done in the form of a roundtable moderated by Manfred BLAHA.

Thierry DAVIER   *Manuel CORNELISSE*   *Morten GUSTAVSEN*

After the roundtable, Jelle GROENENDAAL (Crisislab) provided participants with the latest set of COSMIC (Contribution of Social Media in Crisis Management) guidelines for the use of social media for public organizations. He noted that recent years have marked a watershed in the use of new communication media during crisis situations and disasters. Citizen journalism has proliferated around the world, where news, events and oddities are recorded by ordinary people and shared globally through media such as YouTube, Twitter, Facebook and other outlets. The COSMIC project identifies the most effective ways in which these new technologies and applications are being used by citizens and governments. The project will provide instruments for all relevant stakeholders to use new information and communication technologies for the benefit of the security of all citizens. All participants were invited to visit http://www.cosmic-project.eu/about_cosmic, read the latest version of COSMIC guidelines and provide feedback according to the instructions.

Roundtable moderated by Manfred BLAHA   *Jelle GROENENDAAL*

The information related to the Australia's telephony-based National Emergency Warning System, disseminated during the conference is available here.

CRITICAL INFRASTRUCTURES RISK MANAGEMENT

- ❏ **14.10 – 14.35 – Physical Dimension - "Protecting physical assets of a Critical Infrastructure through Risk Management", Kassim BABATUNDE, HW Communications**
- ❏ **14.35 – 15.00 – Cyber Dimension - "Protecting the Critical IT infrastructure", Andrea NOWAK, Austrian Institute of Technology**
- ❏ **15.00 – 15.25 – "The insider threat to critical infrastructure - a social dimension of Risk management",**

Michael GOLDSMITH, Oxford University

❑ **15.25 – 15.50 – Geography, the physical aspect of cyber, Wojtek GAWECKI, ESRI**

The thematic focus on critical infrastructure started off by the presentation of Kassim BABATUNDE, HW Communications, who focused on how to protect physical assets of a critical infrastructure through risk management. His speech was followed-up by the presentation of Andrea NOWAK, AIT, who emphasized the need to protect critical IT infrastructure. Among others, she mentioned the major 2013-cyber security incidents outlined on the picture below.

Cyber Security Incidents 2013 …

| PANASONIC | SPARKASSE | THYSSENKRUPP | AFCLC |

| RENAULT | NASA | APPLE | BURGER KING |

| TURKISH GOVERNMENT | MICROSOFT | NBC | ADOBE |

| US GOVERNMENT | VODAFONE GERMANY | BANKS SOUTH AFICA |

| NEW YORK TIMES | AIRPORT ISTANBUL | POLICE SOUTH AFRICA |

| US ENERGY MINISTRY | PEUGEOT | TURKISH MINISTRY OF FINANCE |

| WASHINGTON POST | EGYPT GOVERNMENT | FERRARI |

RIP

The provider of the well-known antivirus protection Norton evokes the end of classic anti-virus solutions . New methods of attackers require new measures.
06.05.2014 | 11:31 | (DiePresse.com) - Symantec/Norton

28.11.2014

QUELLE: www.qgroup.de/galerie

The floor was then given to Michael GOLDSMITH, Oxford University, who talked about the insider threat to critical infrastructure. He informed participants that Oxford University has developed a detection prototype that proves effective for their initial testing on available data sets but there is a need to ensure that their system is widely applicable, and can cope with varied scenarios and different organisational data structures in order to be effective. He continued by stating that they are currently deploying it against real data to experiment on and invited participants to share anonymized data or experiences to further test this prototype.

Wojtek GAWECKI, ESRI, whose presentation was centered around the geography of cyber, stated that existing GIS capabilities can be used to integrate all mission data and that the 'whole of organization' response is required to effectively combat threats while shared situational awareness is required for efficient cross-domain collaboration in this field.

Kassim BABATUNDE   Andrea NOWAK   Michael GOLDSMITH   Woitek GAWECKI
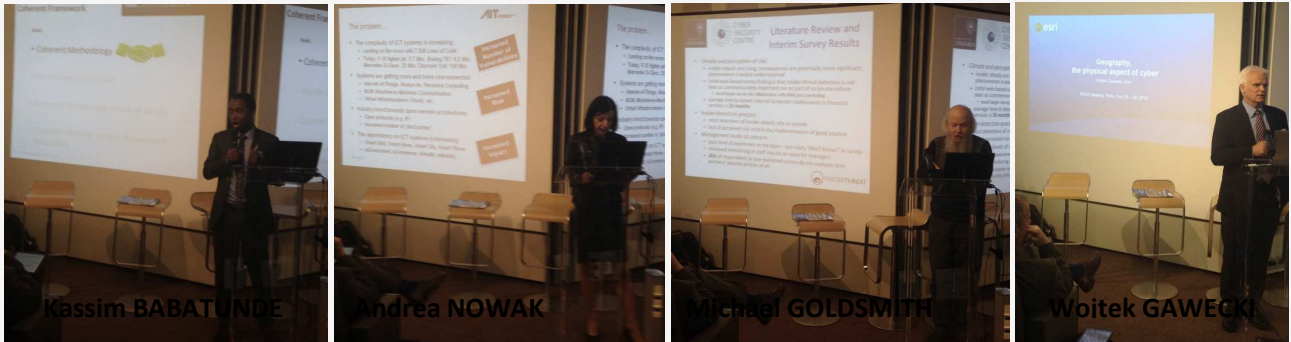
❑ **16.10 – 16.40 – PSAPs and Third Party Call Centers – Working together before eCall is deployed, Gerrit RIEMER, Adam Opel AG/OnStar**

With over 18 years of experience and over 6 million customers, OnStar is the world's leading provider of connected in-vehicle safety and security services. Opel plans to introduce the OnStar services across its passenger car range in selected European countries, beginning in 2015 and well ahead of the eCall mandate. The presentation given by Gerrit RIEMER, Adam Opel AG/OnStar, showed how OnStar works together with the Public Safety sector, including emergency dispatch, law enforcement, fire and rescue services.

A stand was also available outside of the conference room as Onstar. Participants had the possibility o get additional information during the two days of the conference.

Satellite Communications

❑ **16.40 – 17.00 – Satellite Communications: An integral part of any modern Emergency Services Networks, Matthew CHILD, Eutelsat**
❑ **17.00-17.55- How PSCE can improve Satcom usage for Public Safety?**
❑ **Presentation of policy and Roundtable**
▪ *Latest updates on the ETSI SatEC group activities, Matteo BERIOLI, ETSI*

The conference then continued with the presentation of Matthew CHILD, Eutelsat, who provided the following arguments highlighting the importance of satellites for public safety communication:

1. When disaster occurs on earth, satellite communications continue to operate
2. Where the topology of the terrain restricts terrestrial communications, satellite can often be the only mean
3. When the economics do not justify the build of terrestrial infrastructure, satellite can provide a cost effective backhaul
4. When there is a requirement for high bandwidth on the move or pause, satellite can provide Gb/s
5. When privacy and information security are a priority, satellite can provide a dedicated point-to-point link
6. When there is a requirement to deliver common information to multiple sites in real time, satellites are best

for point to multipoint

In his conclusions, Matthew Child stated that:

1. Satellites are an essential element of your network design
2. There are a number of models that could be used to ensure assured availability at that right price
3. Technology continues to develop to enable smooth interoperability
4. PSCE could take a leading role in creating a cooperative resource management centre

Following the discussions in the previous PSCE Conference held in Gothenburg, PSCE informed its members that the association has prepared the draft PSCE SATCOM Policy that is currently under consultation procedure. SATCOM is making an increasingly important contribution to the security of Europe. Europe therefore needs to have access to the best affordable capabilities for the effective conduct of its actions. SATCOM provides a significant contribution to overcome these threats and should be part of the network design of PPDR communications. The document identifies the main associated challenges and calls for concrete actions near the EU institutions related to these challenges in order to federate the needs.

ROUNDTABLE: How PSCE can improve SATCOM usage for Public Safety?
Harold LINKE, PSCE President, Christine LEURQUIN, SES, Dave ROBERTSON, Inmarsat, Philippe BOUTRY, Airbus DS, Matteo BERIOLI, ETSI SES/SatEC, Matthew CHILD, Eutelsat

Internet of everything, IP LTE in the operational field

The second day of the PSCE conference featured the following presentations:

❑ **09.00 – 09.20 – IoE and LTE for Safety investigations, Luc IMBERT, Public Safety Lead EMEAR CISCO**

❑ **09.20 – 09.40 – Hub One experiment & perspectives, Soline OLSZANSKI, VP Strategy & Innovation, Hub One**

❑ **09.40 – 10.00 – Network programmability in Safety, Nicolas MOTTE and Emmanuel CHAMBRIER, Thales Communication & Security**

❑ **10.00 – 10.20 – Operational Application Framework in Defence, LTN Jean-Baptiste COLAS, French Land Army, 2014 Winner of the Innovation Award from the Ministry of Defence for the Auxylium project (multi-use**

communication interface)

❑ **10.20 – 10.45 Panel on network development for the PPDR sector**

The session on LTE technologies was opened by Luc IMBERT, CISCO, who delivered a presentation on the Internet of Things. He highlighted that the adoption rate of digital infrastructure to date has been five times faster than when electricity and telephony were introduced. By drawing examples from a variety of different industries, he explained that connectivity will ultimately become a critical part of the enterprise infrastructure and networks will become increasingly converged, secure and collaborative.

The floor was then given to Soline OLZANSKI, HubOne, who presented an experiment that is currently being carried out within the aviation industry in France. The experiment includes more than 500 technical tests and more than 100 airport application scenarios. LTE PMR solutions, professional and security application, as well as broadband communications between the aircraft and the ground are all used to ensure maximum safety and security of communications. The view put forward by HubOne was that 4G/LTE technologies can replace low-speed specialist critical and professional networks that providing broadband and video.

Nicolas MOTTE, Thales Communications & Security, also recognized the beneficial aspects of LTE technologies. The requirements of professional PMR users have expanded and, most importantly, include the need for improved situational awareness for better decision-making and improved efficiency. This can be delivered by 4G/LTE technologies. They can also deliver improvements in terms of resilience, guarantee of service, security, dedicated applications, and flexible and scalable architecture.

Another practical example of the use of LTE technologies was then presented by LTN Jean-Baptiste COLAS, French Land Army, who focused on the defense sector and a new multi-use communications interface.

The session culminated with a question and answer roundtable, monitored by Manfred BLAHA.

During the conference, COSMIC and AIRBEAM leaflets were distributed in order to inform participants about ongoing relevant EU-funded projects.

More information about COSMIC is available here: www.cosmic-project.eu

Panel on network development for the PPDR sector : Nicolas Motte, Thales, Soline Olszanski, Hub One, Jean-Baptiste Colas, French land army, Luc Imbert, CISCO

Collaborative Session on Apps

❑ **10:45 – 12:00 – Coffee and collaborative session: Apps for the PPDR sector, Animated by David LUND, PSCE, and Laurence CLAEYS, iMinds, Digital Research and Business Incubator, Belgium**

During the interactive session on apps, participants were divided into six groups, each led by a table host, to brainstorm ideas for new apps that could be useful in all phases of a crisis situation, namely, preparedness, response, and recovery. Coordinated by David LUND, PSCE, and Laurence CLAEYS, iMinds, the session put at the focus the users, their everyday work and life environment, their goals and needs. By bringing knowledge and expertise together, the session sought to inspire, ideate and create new apps that will help to visualize and

communicate in creative ways.

For more information about this event, please contact secretariat@psc-europe.eu.

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