Notes from Augsburg session of the Innovation & Security working group 26-6-19

by Paul Ekblom, Visiting Professor, Dept of Security and Crime Science, University College London

About 15 people attended from cities/regions in a wide a range of European countries. Professional interests ranged from general public safety to cybercrime, policing to civil defence and fire safety, and psychological development.

Elizabeth Johnson chaired the session, and introduced the topic by describing the origins of the current WG in the Media4Sec project in which Efus was a partner. This had suggested how technological/social networks could help improve public security, law enforcement and crime prevention more generally. It had identified many interesting and challenging practical issues, for example how fire departments seemed better at communicating with each other than with citizens.

This had started a conversation on what is innovative and how local governments should respond. There was evidence that many public officials mistrusted new technologies, seeing them as risks and not necessarily opportunities to be seized. There was debate, too, about the scope of innovation: a new add-on tool, for example, or a fundamentally different way of working?

The challenge of thinking prospectively needed to be faced, because too many tools and working practices focus on the past and present – and the two things we know for certain about the future are that it will be very different from today, and that these differences will be more complex and emerge ever faster.

Innovation needed to move beyond the purely technical to cover social interventions and processes, and to explore and exploit new forms of co-production, with a wider range of partners. Unlike many of the themes pursued by Efus and its members, innovation was a 'transversal' topic which cuts across every content-focused issue or project.

I then gave a brief presentation on innovation, drawing on my own experience in crime prevention research and practice, horizon-scanning, technological evolution and working with designers of products, places and services. An extended version is here [link]. Aspects covered included:

- Why should we innovate in urban security?
- What is innovation?
- How does Efus view it?
- Innovation as a process
- Innovation and anticipation
- How important are human/ social factors in innovation?
- What is social innovation?

The discussion that followed was lively and varied. These are the themes that emerged:

- **Artificial Intelligence/Machine Learning (AI)**. How far will this be a game changer in delivering security and justice? How can we identify and correct the biases which stem from the way AI learns how to make decisions by drawing on huge databases of (biased) human choices, actions and documents? How can we evaluate and control AI if the principles it evolves to guide its decisions remain obscure; and can ways to make these principles explicit be developed?
- **Vulnerability of ICT to criminals and accidental failures.** A recent example was presented of the shutdown for several hours of the NL emergency 112 number (https://www.bbc.co.uk/news/world-europe-48753095). Besides highlighting a worrying lack of resilience in the system, on the bright side some emergency measures were deployed including sending police and firefighters onto the streets to enable the public to report incidents. As we become ever more technology-dependent, preparedness for such failures needs to be developed as part of the resilience strategy.
- **Misuse of social media.** In Brussels, there was experience of mass vandalism and flashmobs including Gilets Jaunes exploiting social media.
- **Intelligent customers**. There was general concern that security/justice practitioners were poorly equipped to enter dialogue with suppliers of new technologies – to judge the need for their products/services, and the appropriateness, costs and benefits of what they were offering. It was important to avoid being driven and seduced, even, by what the supply-side had on their shelves, and confused by technical details. Strong attention is needed to the *functionality* of new technologies (what do they do, rather than how do they work), so customers can be guided to ask the right questions, and to do so with confidence not intimidation. Frameworks such

as the *Security Function Framework* [link] can help here, by supplying systematic, structured descriptions (e.g. What is the purpose of this innovation? How does it fit with other security measures? How does it work – i.e. how does it influence the causes of criminal events? How is it technically constructed and operated?)

- **Focus on human social behaviour and how this is changing rather than starting with technology**. However it is possible to blend both a demand-led functional approach to innovation with the intelligent use of supply-led technological approach (What do we need to prevent crime vs what can this new technology do for us?).
- **The local dimension.** Innovation is not necessarily about novelty on a global scale – some practice that is established elsewhere could be 'new-for-my-locality'. But it is important to avoid 'cookbook' or 'cookie-cutter' replication – what works in one context may not work so well in another. Every attempt at replicating a success-story should involve sensitively customising it to the new location.
- **Linking security and fire safety.** In Setubal, Portugal, it became clear that these two emergency/preventive services were poorly connected. An app was developed to alert citizens to active situations on the roads, etc, and to guide them out of the danger area. There was discussion on how far this was just an increase in efficiency of communication, or something more transformative, such as reaching new target groups. Additional efforts to do so involved talking to young people in schools, capitalising on their greater tech-awareness.
- **Embedding security in the wider society.** In Belgium it is increasingly acknowledged that there has been too much focus on innovation purely within the security sector: security should be embedded more widely, for example an 'escape-room' Virtual Reality experience was developed for use in hospitals to help drunk drivers reflect on its impact on themselves and other people.
- **Surveillance and reporting of incidents.** In Riga, Latvia, the wave of innovation centring on CCTV has been supplanted by one based on apps and gadgets. (While this trend is in step with the young it does raise the question whether older people may be left behind, and thus how to cater for their needs, at least with the current generation of elderly. This could be by maintaining the more traditional services/resources or by 'inclusive design' e.g. see https://www.designcouncil.org.uk/resources/guide/principles-inclusive-design.)
  Apps for reporting problems/incidents can have downsides, e.g. misused by neighbours in disputes over parking places.
- **Predictive use of CCTV through Big Data technology.**
- **Questions and discussions on regulations and policies.** On the plus side, citizens in Riga have been using such apps to raise queries about permissible activities, e.g. 'Can I make a barbecue in a public place?'. Responses and policies can

be developed and debated in discussion fora; and if sufficient public interest is revealed, the police can move to proactive preparation and dissemination of advice on such issues. Social-media-aware politicians can also get involved in discussion of the issues. Altogether the indications are that such technologies/apps can indeed be transformative.

- **Managing/regulating drones.** In Riga, apps are available for users to see protected areas on a map, where they may not fly (but is there the risk of criminals/terrorists misusing this information to look for sensitive sites?). An app also exists – presumably only available to security services – to locate the drone operator.
- **Positive climate-setting for security.** In Latvia, police are using social media to show police successes – e.g. videos of arrests, suitably obscuring faces for justice/privacy purposes.
- **Combating fake news.** In Brussels, experience with police bodycams and live-streaming from police cars was found to be useful in this respect. (But AI will make fake footage increasingly realistic.)
- **Use of new reporting technologies for domestic violence/abuse.** This is to counteract the real/perceived risk of victims who may be inhibited from seeking help. The Dawes Centre for Future Crime at UCL held two 'sandpit' meetings on DV – the first to identify the needs of practitioners (e.g. 'what practical factors are stopping you from helping victims'?) and the second, presenting this material to technologists/crime scientists to develop a research and development agenda and project proposals.
- **Possibility of innovating at each stage of the crime prevention process**. This can be mapped out in a structured way, e.g. using the 5Is framework, a process model for doing crime prevention (http://5isframework.wordpress.com). How can we innovate our processes of Intelligence, Intervention, Implementation, Involvement and Impact? This resembles the field of 'business process re-engineering'.

Discussion of follow-up

Suggestions included:

- Arrangements

  > A predominantly virtual Working Group.

  > Meeting at next executive committee session in Riga?

  > Meeting 6 months before the November 2020 conference

  > How to seek funding e.g. through H2020?

- Objectives

> Gain content information on innovations

> Develop a more structured view of innovation, its definition and use, including a template which could draw on 5Is framework to cover innovation in all the prevention/security processes including involvement (partnership, mobilisation, climate-setting)

> Recommendations on how members can innovate, and transform city practices more generally

> Highlight the innovation dimensions of current and future projects

> Identify the special aspects of innovation in the *security* field, e.g. ethics, arms races with criminals

> Consider harmonisation of regulations for social media capture/sharing of security-related information?