Building the NG911 Ecosystem

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The Power of Ecosystems

- Ecosystems are the most powerful force in technology.

- Together, mobile and cloud platforms form a powerful ecosystem that has enabled realtime communications applications to rapidly evolve and experience explosive growth.

- Can we harness the power of this ecosystem in emergency services?

- We can – and we should.

1. Harness Technological Evolution

- Harnessing technology trends is key to building and maintaining a successful technology ecosystem.

- Five key principles pioneered commercially by Skype, now underlie many "next generation" realtime communication services (and are encapsulated in standards).

- Incorporating these principles (and keeping up to date as technology advances) could improve the reliability and accessibility of NG9-1-1 standards.

2. Keep it Simple

- Proliferation of widely varying PSAP implementations will complicate testing and deployment of emergency applications.
  - The United Kingdom has a single "virtual" PSAP.
- We need to go further to simplify NG9-1-1 standards and improve the uniformity of PSAP behavior.

3. Protect Against Predators

- An healthy technology ecosystem can exhibit unexpected innovation and evolves to encourage the good and protect against the bad.

- To build a vibrant technology ecosystem it is important to design for security from the start.

- Simplicity also serves to minimize the attack surface.

For More Information

- New technology and next generation 911:
  - [Cost effective NG911 services](Hookflash)
- Object Realtime Communications API for WebRTC:
  - [Object RealTime Communications (ORTC) API Update](Microsoft, Google, Hookflash)
  - [ORTC API library](Hookflash)
- IETF RTCWEB WG:
  - http://tools.ietf.org/wg/rtcweb/
- Opus Codec performance:
  - http://www.opus-codec.org/comparison/
- UK PSAP architecture:
  - http://www.eena.org/ressource/static/files/112_in_uk.pdf