Trialling a new emergency alert system Cabinet Office

The Civil Contingencies Secretariat in the Cabinet Office had to find a way to swiftly deliver messages to the public, alerting them to emergencies and providing information on what to do to stay safe. The team decided to trial different approaches. They worked closely with local emergency responders, industry and the public to find a solution that would make the most of new technologies and, most importantly, keep people safe.



Testing their way to a solution

The coalition Government committed in the 2010 Strategic Defence and Security Review to evaluate options to improve the way it alerted the public in case of emergencies. The Civil Contingencies Secretariat was tasked with finding a capability that would enhance current arrangements and provide responders with a way to quickly and effectively alert members of the public. The team pursued different approaches in parallel: real time testing, working with international counterparts and a more traditional academic review.

In February 2012 the Secretariat trialled a landline system used by the Environment Agency to issue flood warnings. This system was the only national system in place. Although it could deliver warnings via SMS and email for those who had opted into this service, the Civil Contingencies Secretariat only trialled the landline component of the system due to the scope of their project. They reached over 6000 people in Ellesmere Port, Cheshire (c. 10% of the population). The main issue with the trial was that people on the move could not be reached and it was decided that the cost of expanding the system to cover risks other than flooding would not provide a sufficient step change in capability to warrant investment at that time.

In parallel, the team commissioned literature reviews and explored international examples from the USA, Netherlands and Australia to find out more about different technologies used and the rationale behind these. The team gathered some very useful research, particularly from those countries that were already rolling out or had in place a system that targeted mobile devices to warn citizens.

The team concluded from their trial and wider research that focussing on a system that would target mobile devices and address the challenge of contacting people on the move would provide the most significant opportunity for enhancing current

arrangements. Although it was clear that this approach had great potential, it presented big challenges and would require the co-operation of all mobile network operators in the UK and local emergency responders.

Creating a common ground

The team brought Ministers and the four major mobile network operators together to discuss the project and explain its importance in protecting the public. It was an opportunity to explain how the trial fit into the wider national security context and demonstrate that it was a priority for government. This helped to secure the network operators involvement. Three of these committed to trial the technology on their systems in specific local areas and at no cost to the taxpayer.

Trialling the technology

From September to November 2013, three local areas and mobile operators worked with the team to trial two different technological options: cell broadcasting in North Yorkshire and location based SMS in Glasgow and Suffolk. They sent approximately 35,000 messages in total to the public. The aim was to test the technologies for their capacity to deliver messages to all mobiles in a specific geographical area within the target time and without requiring members of the public to provide their contact details.

The team are now evaluating the results in close cooperation with their partners on three main levels:

- The technical aspect: the mobile operators are reporting on how each technological approach performed in the trial as well as the implications of a potential national roll out on the networks.
- The emergency responders: the team is holding workshops with the local emergency responders to find out how the alert system fits with local processes and to understand how useful the system could be to them in protecting the public.
- The public: the team has enlisted the support of experts from Public Health England to organise public workshops and set up online surveys in the areas where the trials took place. They will gather citizens' thoughts about the technology, usefulness of the alert system in an emergency situation and their concerns, if any.

The trials were the largest test of potential new emergency arrangements with the public in the UK.

The outcome

Although the team is analysing the evaluation results, they have found trials to be immensely helpful. They have been invaluable in shaping the direction of the work.

The trials have also identified areas of potential risk, such as the security standards for the system and the reach that it can have.

Ministers have also been very positive about the trials, in particular the practical and useful evidence that they generated that will help inform their decisions on the future of this work.

Lessons learned

- Be clear about the feedback and the data that you need to collect and provide participants with a variety of ways to give feedback so as to make it as easy as possible for them.
- Invest time in building relations with your collaborators and participants whether
 through formal catch ups (such as a project board) and more informal methods
 (like regular phone calls). People appreciate to be kept up to date even if they're
 not all involved at every stage.
- Take the opportunity to understand first-hand what collaborators and participants are experiencing by visiting test sites and getting involved. This will increase your understanding of the feedback, and crucially the operational context and its value to developing the final policy solution.
- Enter into the partnerships that will enable you to deliver a full solution(s). In
 doing this, make sure you that you are working with the right people in the
 partner organisations. The team quickly found that to make the trials a success,
 it needed to build relationships with senior leaders, technical experts and
 communications leads.
- Keep an open mind to the suggestions that your partners will make. These ideas
 can help you break from common assumptions and strengthen your skill set. The
 Civil Contingencies Secretariat got some great insights from Public Health
 England on running stakeholder engagement.

Find out more

Gov.uk announcement of the trials BBC news article on the trials Gov.uk guidance on the trials