



CabinetOffice

Extended Floodline Warnings Direct Trial

A report to summarise the findings of the EFWD trial

May 2012

FINAL REPORT

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EXECUTIVE SUMMARY

1. The Civil Contingencies Act 2004 (CCA)¹ places a statutory duty on category one responders to: “maintain arrangements to warn the public, and to provide information and advice to the public, if an emergency is likely to occur or has occurred”. The level of capability to meet this requirement across the United Kingdom is variable. As such within the 2010 Strategic Defence and Security Review the Government committed to evaluating options for a Civil Alert System.
2. The Civil Contingencies Secretariat (CCS) in partnership with the Cheshire Local Resilience Forum (LRF) and the Environment Agency (EA) conducted a trial to assess the viability of using the ‘Extended Direct Warnings’ (EDW) component of the Floodline Warnings Direct system to alert the public to the onset of other types of emergencies.
3. The trial was held on 1st February 2012 and involved the transmission of audio messages to 5,738 landlines in the Ellesmere Port area in Cheshire. Approximately 12% of these calls were acknowledged and a further 56% connected but were unacknowledged. In total 349 people volunteered to participate in a follow-up survey to better understand their thoughts and experiences.
4. Of these 349, 230 interviews were completed yielding a 66% response rate or 4% of the initial population. Findings from the survey suggest that the message was well received as participants found the message helpful, trustworthy and reassuring. The findings corroborated previous research suggesting that the Police and the Fire Service would be the most trusted sources of information.
5. Slightly different messages were sent to local emergency responders. These were also received positively with comments that this would have resulted in the quicker notification of an incident to all relevant responders and therefore the improved activation of the wider response arrangements. The trial identified other issues that would present themselves regardless of the alert method adopted – primarily the command and control arrangements for activating the system.
6. The performance of the trial was reviewed against a number of criteria identified by research for an effective alert system. The service performed well against these, except the limited nature to which it notified all local residents and the value of the delivery information produced.
7. Next steps will see the findings of this trial shared with other LRFs, and their devolved equivalents to understand to what extent these might be validated and

¹ *Civil Contingencies Act*, Cabinet Office, 2004

to better understand the rationale for the current levels of capability.

8. This trial has determined that use of EDW as a warning capability for a risk other than flooding, in this instance an incident at a COMAH site, could be an effective form of alerting. The system's ability to issue alerts to a large, targeted population in the time immediately after an emergency is crucial to this. This is important as it offers a solution to the perceived gap nationally in current alerting capabilities to do this. In addition, the fact that the majority of UK homes (85%) have a landline connection (although it is unclear exactly how many have phones connected) suggests there would be wide coverage for such an alerting system.

INTRODUCTION

9. On the 1st February 2012, a test alert message was sent to 5,738 public landlines in the area surrounding the Innospec Speciality Chemicals site in Ellesmere Port. This message was sent as part of the Extended Floodline Warnings Direct (EFWD) trial, with the aim of assessing how appropriate the system might be for alerting the public about risks other than flooding

10. This report will look at the background to the trial, considering current alerting capabilities and the EDW component of the Environment Agency FWD system as it stands, before outlining how and why the EFWD trial was conducted. Finally this report will present the findings from the trial and will make recommendations regarding future expansion of EDW for risks other than flooding.

11. The Civil Contingencies Secretariat would like to take this opportunity to thank all stakeholders involved in the project, particularly the Cheshire Local Resilience Forum and Innospec Speciality Chemicals. Without the close cooperation of all project stakeholders this trial would not have been possible.

BACKGROUND

– one of which is “providing resilience for the UK by being prepared for all kinds of emergencies, able to recover from shocks and to maintain essential services.”

What is Civil Alerting?

12. The Civil Contingencies Act 2004 (CCA)² places a statutory duty on category one responders to: “maintain arrangements to warn the public, and to provide information and advice to the public, if an emergency is likely to occur or has occurred”.

13. The Defence Science Technology Laboratory (DSTL) classifies a civil alert system as ‘the primary mechanism by which the public receive warning of the presence of an emergency or hazard in their proximity.’³ By alerting the public to an emergency in a timely and effective manner, responders can enable individuals to take action and help themselves, reducing the likelihood that they or others may come to harm. Effective alerting can also build public trust and avoid unnecessary panic.

Government Policy for Civil Alerting

14. The National Security Strategy⁴ and the Strategic Defence and Security Review⁵ set out a series of National Security Tasks

15. The Strategic Defence and Security Review recognises the need for the UK to assess its capability in this area: “[The Government] will also develop arrangements for warning and informing members of the public: for this we will evaluate options for an improved national public alert system for use in major emergencies.”

16. This project forms part of this option analysis. Other components include research to further understanding on alert messages and public perceptions on the issue. There is also an intention to conduct a similar trial utilising mobile devices as the primary alert channel.

Current Alerting Capabilities

17. There are a number of different ways to warn people following the onset of an emergency. Current capabilities include mobile device based alerts, fixed landline based alerts and loud hailers. More traditional alerting capabilities such as the use of sirens and door knocking are also employed. Changing trends around the use of technology have made it far easier for people to get information on the move. In turn, this has changed the way emergency responders can communicate with the public during the course of an emergency and suggests that existing ways of working may need adapting.

² *Civil Contingencies Act*, Cabinet Office, 2004

³ *The Effectiveness of Civil Alert Systems: A Review of the Literature*, Defence Science Technology Laboratory, 2012

⁴ *A Strong Britain in an Age of Uncertainty, National Security Strategy*, HM Government, 2010.

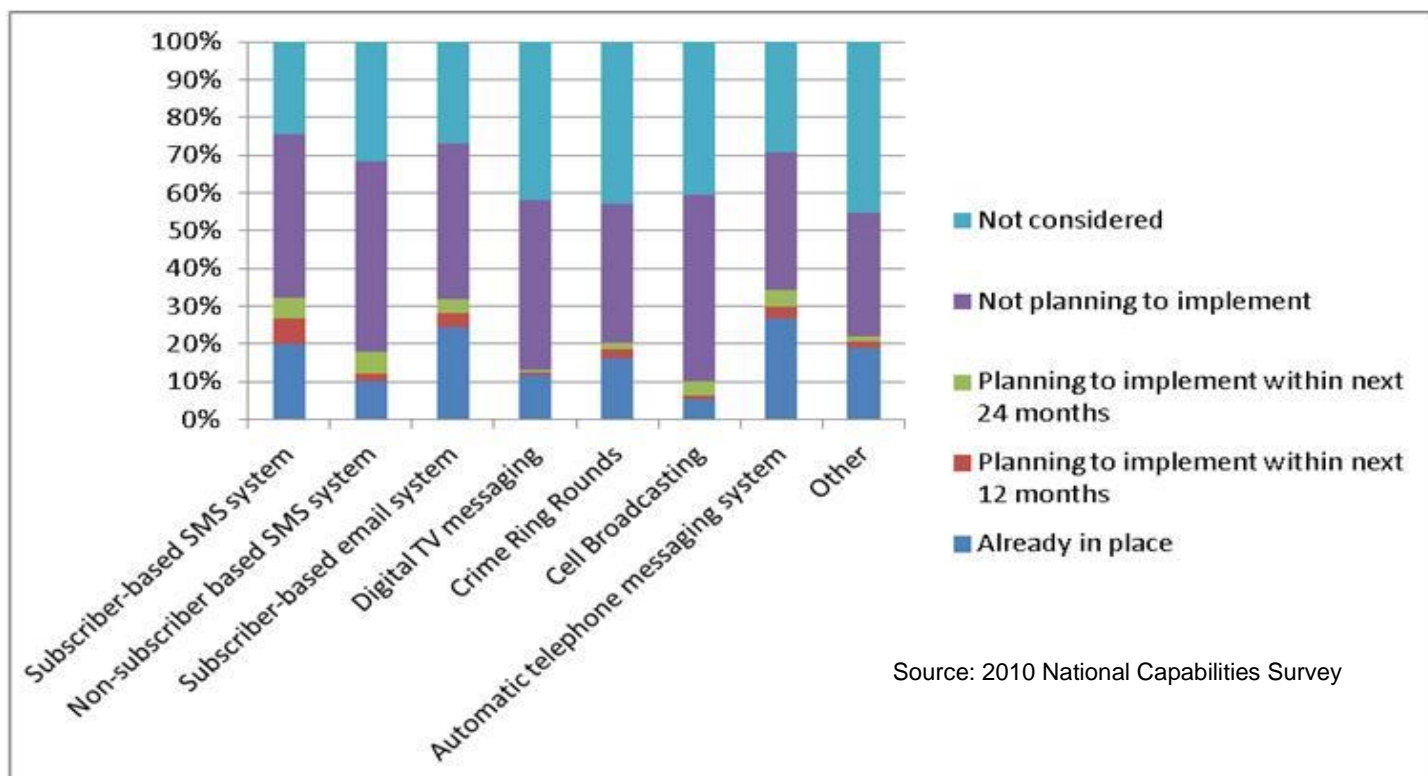
⁵ *Securing Britain in An Age of Uncertainty: Strategic Defence and Security Review*, HM Government, 2010.

18. There has been a steady rise in mobile phone ownership and internet access since 2005 across all age ranges.⁶ The soaring popularity of social networking sites such as Facebook and micro blogging services such as Twitter mean that these forms of internet based interactions can be employed to transmit alert messages quickly to large numbers of people. Conventional media alerts using radio or television can have significant reach although coverage will vary at different times of the day and at different times of the year. Research has shown that they are better suited to conveying further, more detailed information later on in the emergency cycle.

19. Despite the availability of these varied capabilities, the latest available evidence suggests that many of these methods are not currently being used or even considered by Category 1 responders for the purposes of warning and informing.⁷ The graph below, taken from the 2010 National Capabilities Survey demonstrates this. It shows that LRFs have limited plans to improve or even consider a number of alerting capabilities.

20. The reasons for this are unclear although could include financial restrictions, aversion to some of the perceived drawbacks such as lack of coverage (geographically or demographically), lack of technical capability or simply lack of desire or will to evaluate.

The Alerting Capability Gap



⁶ UK adults' Media Literacy Survey, Ofcom 2011

⁷ National Capabilities Survey, 2010

time immediately after or during an emergency.

21. Whilst these capabilities are useful in notifying the public of an emergency, their penetration can be limited and they are often used after the first 60 minutes of an incident. This identifies a clear gap in alerting the public, quickly and effectively in the immediate period following an emergency. It is hoped that by examining the effectiveness of EFWD in alerting the public to emergencies other than flooding, that a national system could be developed to fill this gap. It is not intended that such a system would replace existing alerting methods, but rather enhance the current warning and informing toolkit.

22. There are a number of 'opt in' alerting systems in operation at present, however these can vary in success and are dependent on public buy in. Birmingham City Council have established a city wide SMS, email and landline alerting system which has been well received by the public. Over 6,700 users have signed up and positive feedback regarding the scheme has been received via email and social media. The system was used during the public disorder in August 2011 to keep people up to date with events. An internal report into the use of the system during the disorder identified the majority of those surveyed reported favourably on the system. Notably feedback on the speed of the alerts, message content, accuracy and frequency was very good. These findings highlight the potential benefit to the public of an alerting system capable of sending out messages in the

23. The challenge with such systems is getting people to opt in, even if it will benefit them. An alerting system set up by Glasgow City Council which offers a similar service, is contracted to run until 2013. Upon completion of the contract there are no plans for renewal due to the low number of opt ins. As of February 2012, 140 businesses and 167 residents have signed up. As such, the council are now exploring alternative alerting options.

24. These case studies demonstrate the challenge of persuading members of the public to opt in to an alerting service, even if it has been proven to work. This is backed up by research indicating people are not inclined to opt in to alerting services, even if they are free, and of clear benefit. Possible reasons for this could be a 'perceived lack of usefulness, lack of clarity relating to the purpose of the alerts and lack of control over what alerts are received.'⁸ This suggests that to achieve maximum impact alerting systems should automatically enrol the public.

⁸ *The Effectiveness of Civil Alert Systems: A Review of the Literature*, Defence Science Technology Laboratory, 2012

THE FWD SYSTEM

25. The Environment Agency (EA) operates the Floodline Warnings Direct (FWD) service to notify households if they are at imminent risk of flooding. In March 2010, a new service - Extended Direct Warnings (EDW) - was launched which provides a 'reverse-999' capability. This enables automated calls to be made to all landlines within pre-defined flood-risk areas with the capacity to issue 60,000 alerts within one hour of activation. This trial looks to test this capability of the wider FWD system.

26. The areas prone to flooding are identified through modelling and then through agreements with the principal telecommunications companies (BT, Cable and Wireless and Kingston Communications) an anonymised list of landline numbers for these areas is provided. This process is repeated weekly to ensure the database is up to date.

27. Before March 2010, the service was an 'opt-in' service where members of the public would register their contact details to receive warning messages and suffered low levels of uptake. The Pitt review⁹ into the 2007 floods recommended that "The EA should work

urgently with telecommunications companies to facilitate the roll-out of opt-out telephone flood warning schemes to all homes and businesses liable to flooding, including those with ex-directory numbers."

28. As a result of this recommendation the system was expanded and became, in part, an opt-out service. Before March 2010, the number of FWD fully registered properties was 464,260. After the £4.3 Million expansion project there was over a 100% increase in customers to more than 952,000. This number has continued to rise; current figures show that there are just under 1.4 million customers on the system. Whilst these customers can opt out of the warning should they wish to do so, in practice this opt out rate is less than 0.1%. The original 'opt in' part of the service continues to operate, providing a superior experience through utilising additional contact methods such as mobile numbers for SMS, email addresses and fax. These details must be provided and cannot currently be uploaded automatically.

⁹ Recommendation 62; Learning the lessons from the 2007 Floods, An independent review by Sir Michael Pitt; June 2008

PROJECT APPROACH

29. In 2010 CCS asked Local Resilience Forums (LRFs) to identify risks from their community risk registers where an extended FWD system might benefit the response. The conclusions of this consultation identified that high-hazard areas - such as major petrochemical or civil nuclear installations and areas at risk of reservoir inundation - would be likely candidates.

30. The Control of Major Accident Hazards (COMAH)¹⁰ and the Radiation Emergency Preparedness and Public Information Regulations (REPPIR)¹¹ require Public Information Zones (PIZ) and Emergency Planning Zones (EPZ) to be maintained around these sites. These zones are defined as the areas where people are liable to be affected by a major accident should it occur at the site. The size of the zone varies from site to site based on the unique hazards presented at each site. Operators of these sites are required to pass information to local residents on the types of potential major accidents and the safety arrangements in place to mitigate them. Whilst sites have a duty to warn and inform the public the variety of

capabilities available are not fully exploited.

31. As a result of this consultation the Innospec Speciality Chemical site (a top tier COMAH site) in Ellesmere Port, was identified as an appropriate site for this trial as it fit the risk profile identified in the consultation. When approached the staff at Innospec kindly agreed to assist CCS with the project. Also the trial needed support and cooperation from the Local Resilience Forum; a strong partnership between CCS and Cheshire LRF was already in place which made this area a good choice for the trial.

Project Objectives

32. Project objectives were defined at the start of the project and recorded in the Project Initiation Document. These were to:

- determine the appropriateness of using the EFWD approach to areas and risks beyond flooding;
- identify the level of change needed to the existing system used for flooding purposes;
- engage a sample of users through the trial and deliver test alert messages to them;
- evaluate the overall approach so as to be in a position to provide Ministers with advice as to the likely benefit of such a system; and

¹⁰ *The Control of Major Accident Hazard Regulations, 1999*

¹¹ *The Radiation Emergency Preparedness and Public Information Regulations, 2001*

- produce a consultation pack, on which the views of other LRFs could be established.

33. These objectives will be evaluated in the conclusion of this report. The final project objective refers to future work that will be taken forward following the evaluation of this trial.

Project Delivery

34. The EFWD project was conducted in line with PRINCE2 project management principles. All project documentation was stored on the National Resilience Extranet (NRE) for future reference by all members of the project team.

35. The project team consisted of a project manager and a project support officer, who reported to the SRO (Senior Responsible Owner). The SRO (Director of Resilience Capabilities in CCS) sat as the Chair of the project board. Members of the project board included representatives from the Suppliers (Fujitsu and to some extent the EA) and the Users Chair of NSCWIP (National Steering Committee on Warning and Informing the Public), Cheshire LRF and the CCS Warning and Informing Workstream Manager. The project board was responsible for oversight of project progress and sign off of key project documentation.

36. As with all resilience initiatives successful multiagency working was crucial. Officers from the Cheshire LRF took the lead

chairing both a Tasking and Finishing group and a local Communications group. The Tasking and Finishing group consisted of local responders and emergency planners brought together to assist development of specific products and to discuss emerging project issues.

37. The Communications group was made up of local communications officers, and members of the Innospec site and was responsible for the delivery of the pre-trial public communications campaign. This involved informing the public about the trial via a letter, local websites and through local press. Two public awareness days, arranged by the Cheshire Fire and Rescue Service, were also held and provided the project team with an opportunity to engage the public in a local supermarket car park to inform them about the trial. The Communications group also took the lead in dealing with all enquiries about the trial, directed through the Cheshire West and Chester Council contact centre.

THE TRIAL

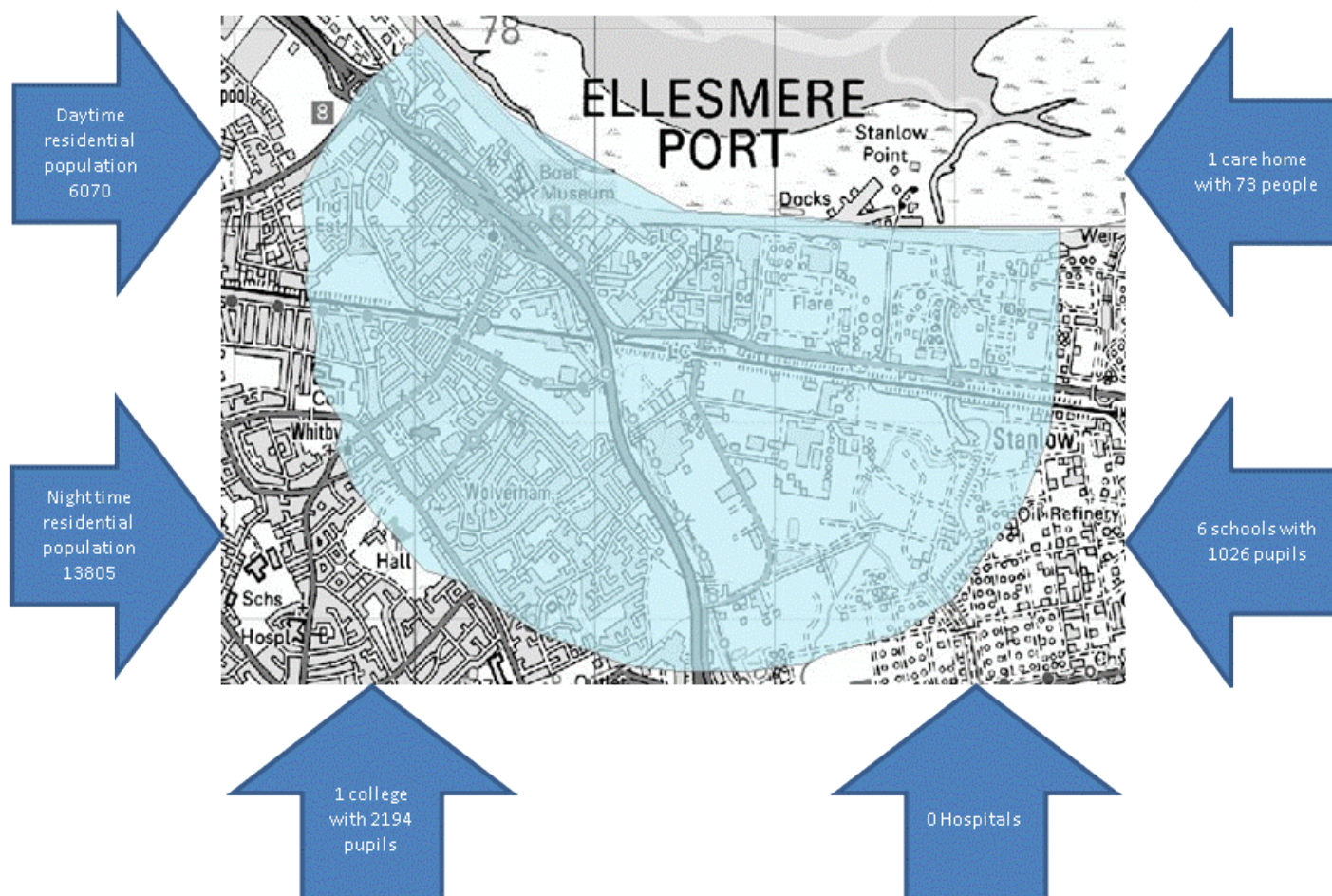
Location of the Trial

38. The Ellesmere Port area has a combination of industrial, commercial and residential areas. The map below highlights the defined Public Information Zone, of Innospec Speciality Chemicals which provided the basis for the trial target area. There are two other COMAH sites located in close proximity. All three sites use sirens as the primary method of alerting the public in an emergency.

39. The Health and Safety Laboratory were commissioned by CCS to provide

population data of the PIZ, to enable better understanding of who would receive the alert message. The PIZ had a day time residential population of 6,210 and a night time residential population of more than double of 13,805. This highlights the challenge of contacting people during the day, who would be away from their houses, at work or elsewhere in the area.

40. HSL data also showed there were 73 people in one care home in the area and 1,026 people in six schools. The challenge of contacting these potentially vulnerable groups was another consideration for the Communications group who contacted school head teachers separately to tell them about the trial and fielded a number of calls from vulnerable groups. It was recognised and



accepted at the outset that use of EDW would not be an appropriate warning method for all members of the public.

41. A complicating factor in the trial area was the high proportion of short-lease rental properties within the PIZ. Due to the high turn over of residents in these dwellings, current occupants may not understand the risk posed by the site or what do to in the event of a major accident.

42. Data was sent to the project team by the Cheshire West and Chester Council on the age profile of the trial area in order to better understand the alert recipients. As seen in the table below, the test area population has a greater proportion of younger people when compared to Cheshire as a whole.

2010 Population estimates				
	Innospec test area		Cheshire (Cheshire W, Chester & Cheshire E)	
0-4	1000	7.7%	38,900	5.6%
5-9	770	5.9%	37,200	5.4%
10-14	800	6.2%	40,600	5.9%
15-19	890	6.9%	42,300	6.1%
20-24	980	7.6%	38,800	5.6%
25-29	1010	7.8%	36,100	5.2%
30-34	820	6.3%	34,700	5.0%
35-39	870	6.7%	44,800	6.5%
40-44	1000	7.7%	53,000	7.7%
45-49	970	7.5%	54,900	7.9%
50-54	740	5.7%	47,000	6.8%
55-59	640	4.9%	44,000	6.4%
60-64	640	4.9%	48,100	7.0%
65-69	520	4.0%	37,900	5.5%
70-74	510	3.9%	31,600	4.6%
75-79	330	2.5%	25,000	3.6%
80-84	240	1.9%	18,800	2.7%
85+	230	1.8%	17,400	2.5%
Total	12960		691,100	

Establishing Existing Alerting Arrangements

43. One of the project objectives was to 'identify the level of change needed to the existing system used for flooding purposes'. In order to achieve this, a workshop was set up in the early stages of the project with local responders and emergency planners. The aim was to discuss existing command and control arrangements in Cheshire and to find out what changes would need to be made to accommodate use of EDW, and what impact this would have.

44. The current alert process as outlined by attendees was that the site operator would initiate the alarm following the onset of an emergency by activating the siren. This would be heard by those within the PIZ. At the same time as the siren was activated the site operator would contact the Fire and Rescue Service via 999 who then notify the Police of the incident. The Police then initiate an information cascade to other emergency services and professional bodies. Anecdotal evidence from across the UK has suggested that this process can take up to 1 hour to complete.

45. Another issue was the 'public information gap' between the time the siren sounded and the point at which additional information was available. While those living in the PIZ should be able to hear the siren and be aware that it denotes an incident, they may not be aware what to do or which site it has come from.

46. Workshop participants recognised that the capability gap of organisations to alert all affected members of the public and other responders and organisations in the time immediately following the onset of an emergency needed to be increased.
47. In identifying what changes would have to be made to the existing alerting arrangements in place to accommodate use of EDW, some interesting issues were raised. Attendees commented that the main issue would be deciding who has responsibility for activating the alert. It was thought that the site operator should be responsible as this would be the quickest way of getting the message out and crucially, in line with current arrangements.
48. Training emergency responders and site personnel to run the system, the resources and cost of system maintenance were flagged up as points that would need further consideration.
49. Responders felt that if a new alerting capability were to be introduced, there would have to be clearly defined trigger points for when messages would be sent out. If the public were bombarded with messages on a regular basis it is highly likely that this would reduce the effectiveness of the system in a real emergency.
50. Overall, attendees felt that the key advantages of introducing EDW for other risks would be the speed at which the initial message could be transmitted and

the ability to tailor messages for different groups. There was a concern however that this capability may be seen as a 'silver bullet', rather than complimentary to existing methods. Additionally, careful consideration about who would have responsibility for issuing the alert and how this would link with command and control arrangements was important.

51. Once existing local alerting arrangements had been established the project team were in a position to move forward with the trial. To ensure common understanding of how the trial would be conducted two short papers were produced. These were the Pilot Operating Principles (POPs) - a high level outline of how the trial would work - and the Trial Operating Procedures (TOPs) - a more detailed plan for the day. These are explained below.

Pilot Operating Principles

52. The aim of the POPs was to document the key components of the trial. Decisions on alert activation, recipients, format, content and the timing were made and recorded in here.
53. Following discussion and debate at the Tasking and Finishing group, the Communications group and the Project Board the following decisions were made:

Alert activation

54. The site operator would activate the trial from the control room of the Innospec site to provide an element of realism to the trial. As the site operator would be on scene of the emergency the intention was that the alert could be activated at the same time as the siren. Security and training were two risks with this arrangement as the site operator would need third party access to the alert system, and would require the necessary training to navigate it. For the purposes of this trial, these issues were mitigated by having representatives of Fujitsu and the Environment Agency present to supervise activation. The system was accessed on behalf of the site operator and guidance provided throughout the process as necessary.

Alert Recipients

55. It was agreed that the alert message would be sent to all residents, with a landline living within the PIZ of the Innospec site.

Alert Format

56. It was agreed that that two separate messages would be sent as part of the trial: one to the public and the second to a group of local responders. The public received a 70 second message to their landline, with an optional play back function at the end.

57. Local responders had the option to receive a landline, SMS or email message or any combination of the three. In order to utilise these additional communication channels the specific mobile numbers and email addresses of recipients are required in advance. Given the costs of collating and inputting these for the public it was agreed that this would have been an inefficient use of limited resources.

Alert Content

58. The information requirements of the public and of local responders were different and were reflected in the messages they received. The Communications group took the lead in developing the alert content for the public message. There was a risk that the public would be unduly alarmed by the message and as such there was heavy emphasis that the message was being sent as part of a trial. However, this was countered by the need for the message to be as realistic as possible to gauge how effective it might be at prompting action. As such the instruction 'go in, stay in, tune in' was included in the message.

59. The content for the responder message was based on the specific COMAH Off site emergency plan.¹² The responder message contained more detail about the hypothetical 'emergency', including the chemicals involved and wind speed. This is reflective of the information that

¹² Cheshire West And Chester Council, Control of Major Accident Hazards Regulations 2005, Offsite Emergency Plans

responders would require in a real emergency. Full scripts of both messages can be found at **Annex A**.

Alert Timing

60. To coincide with the monthly test of the site siren, it was decided to send the public message out at 10:00 and then attempt to resend the 'unsuccessful calls' (those where the call did not connect) at 18:00. It was agreed that the responder message would be sent once at 10:00.

61. A contingency date of the 8th February was agreed as a fall back date, should the trial on the 1st February be delayed for any reason, including a system failure or if there was a local emergency. This was incorporated into planning and public communication efforts.

Trial Operating Procedures

62. The aim of the TOPs was to provide a detailed brief for the trial. It was sent to all project members and local responders and contained information on the trial aims, message content, timetable, roles, responsibilities and locations of the project team as well as the feedback process for local responders receiving the message. The TOPs also contained details of those who would receive the responder message. This was included so the relevant contact information could be loaded onto the system prior to the trial.

63. The TOPs highlighted the estimated delivery time. The finite number of external lines connected to the system dictates the alert transmission rate. However, as the number of lines increases the risk of call congestion at the local exchange also increases. It was estimated that delivery of the messages would take between 10 and 30 minutes. It is important to note that this trial only utilised one third of the total lines that would normally be available. Therefore the message delivery in a real life situation would be much quicker.

THE FINDINGS

64. This section of the report will look at the findings of the trial, taking into account the trial data supplied by Fujitsu, the public evaluation – including the results of a survey conducted by an external market research company; the hot debrief sheets completed by local responders as well as anecdotal feedback since the trial date.

The Public

Message delivery

65. The results of the trial sent on by Fujitsu allows for analysis of how the EFWD system performed. The alerts sent out are split into 3 categories:

- a. Those which were acknowledged i.e. where the recipient pressed 1 or 2 to opt in or out of the public evaluation survey; or another key such as * or #.
- b. Those where the call is connected but the recipient did not acknowledge the call. This is defined as successful.
- c. Finally, unsuccessful alerts where the phone rang out despite multiple system attempts to retry the number.

66. The table below summarises the system performance data from the trial.

67. At 10:00 hours 5,738 landline messages were sent out, 693 were acknowledged and a further 3,212 were successful, taking 32:14 minutes. The successful calls in categories a) and b) were completed in the first 15 minutes, the system then retried the unsuccessful calls for the remaining 17 minutes.

	10:00			18:00		
		% of calls	Average call duration		% of calls	Average call duration
TOTAL Calls	5,738		00:01:05	1,831		00:00:26
TOTAL successful calls (Acknowledged + connected)	3,905	68.1%	00:01:29	339	18.5%	00:01:28
Acknowledged Calls	693	12.1%	00:01:20	88	4.8%	00:01:25
Connected Calls	3,212	56.0%	00:01:31	251	13.7%	00:01:29
Unsuccessful Calls	1,833	31.9%	00:00:16	1,492	81.5%	00:00:12

68. At 18:00 hours, 1,831 numbers were re-tried, 88 were acknowledged and a further 251 of the follow up calls were successful. This process took just under 24 minutes. During this time all acknowledged and successful calls had been made within the first 5 minutes, the system then retried the unsuccessful calls for the remainder.

69. A key output of this stage of the project was a sample of people who were content to be interviewed to further understanding of the public reaction to this message. A total of 239 people opted into the survey by pressing 1; a further 139 opted in at the two public awareness days held before the trial. Once duplicates had been removed a sample of 349 had been developed. A total of 463 people chose to opt out of the survey by pressing 2. Around 10 additional numbers were included after receiving a follow up 'thank you' post card.

70. Based on data produced by the system the average call duration for successful calls at 10:00 was 1 minute 20 seconds, with the vast majority being sent out within the first 15 minutes at both 10:00 and 18:00. One important point to note however is that of the 3,463 successful calls, we can not be sure exactly how many of these were listened to by a human or recorded by an answer phone. At 10:00 the average duration of calls classed as successful but not acknowledged is 01:31, 11 seconds longer than those acknowledged

suggesting that some of these might have been recorded as they were not hung up.

71. In light of this, it can be concluded that 781 people (693 + 88 acknowledged calls at 10:00 and 18:00 respectively) **definitely** heard the call and responded by pressing one to opt in or two to opt out of the survey as directed, or they pressed another key. It cannot be confirmed that the remaining 3,463 'successful' call recipients heard and listened to the message because they did not acknowledge the call as asked. This could be because they did not listen to the end, they did not want to acknowledge the call, or the message was being played to an answer phone.

Headline Survey Results

72. To understand perceptions of the alert message CCS commissioned Ipsos MORI to collate public opinion on the trial. In accordance with data protection regulations, CCS sent Ipsos MORI the contact numbers for members of the public who opted in to the survey. These members of the public were then surveyed between 10th and 25th of February 2012 to answer a number of questions about the trial.

Respondent demographics

73. The age breakdown of participants in the EFWD survey shows that of the 230 people interviewed:

- 12% (28) were between 18-34 years old,
- 27% (62) were between 35-54 years old; and
- 60% (139) were over 55.

74. Compared to the age breakdown provided earlier on, this sample is skewed towards over 55s who make up only 24% of the Ellesmere Port trial population. As such the findings of the survey must be treated with caution and may not be representative of the wider population.

75. The times chosen to send the alerts out (at 10:00 and 18:00) may have contributed to this situation. At 10:00 the call will have been heard by those at home during the day, potentially those out of work, or retired. It is also possible that 18:00 may have been too early to send the second alert message out as people may not have arrived home from work at this time.

76. Findings from the evaluation conducted by Ipsos MORI were encouraging. A total of 230 interviews were completed - 66% of the sample given.

Message Tone and Penetration

77. In general the responses were positive:

- When survey participants were replayed the message they believed it was 'helpful' (95%), 'trustworthy'

(94%) and 'reassuring' (92%). This is compared with less than one in ten rating it was 'unfriendly' and 6% who regarded it as 'pointless'. It should be noted that 45% of people found it 'concerning'. Whilst the message should not panic the public it is perhaps inevitable that an individual will feel concerned about an emergency in their area. This can be seen as positive as feelings of concern may prompt people into action.

- 69% of the sample recalled receiving the message with a further 10% saying that someone in their household had heard it. There was also evidence that those who heard the message told others about it, which is a positive finding. 61% of the 69% who received the message went on to tell family, friends or people at work about it. However the speed at which this occurred is unclear.

Message Content and Recall

78. Specific message recall varied, 30% remembered hearing that it was a test message and a very small proportion (2%) remembered that the message was from the emergency services. It is important to note however, that 30% could not remember anything about the message.

79. Six in ten (63%) of the sample remembered that they were told to 'stay

in' in the event of an emergency and 24% recalled being told to listen to the radio. However, 21% could not remember what they were told to do. This suggests that people are more likely to remember directive action about what to do in an emergency, as opposed to other information in the alert message. It is important to note that message recall, two weeks after an emergency in a real life situation would not necessarily be important, as long as the person took immediate action when they actually heard the alert.

80. One of the questions in the survey probed participants' understanding of the alert message. 92% of people agreed that they understood what the message meant for them and their community. Of this, 65% of participants strongly agreed that they understood what the message meant for them and their household while 62% strongly agreed that they understood what the message meant for their community.

Further information preferences

81. In recognition of the ability to convey a limited amount of information in the message, 80% said they would want more information in the event of an emergency. This is where the message content, particularly the sign post for further information becomes important. In this trial the message directed people to the Cheshire Resilience website, and to a call centre for further information. The main

aim of this capability is to provide the initial alert following the onset of an emergency, not necessarily to provide regular updated information in the hours or days that follow. This can be achieved via other forms of communication from local responders in slower time.

82. When asked where they would go for further information in an emergency, 53% said 'radio' and 28% 'TV'. Only 5% said internet which could indicate that it would be better to give people the local radio station frequency rather than the local resilience website address in the message. This is further supported by the different preferences in sources of further information between age groups. Those over 55 for example, are less likely to have access to, or use the internet, which may influence choices to publish further information.

Pre-trial communications

83. The fact that 88% of people had heard about the trial shows how effective the pre trial communications campaign was in engaging the community. 97% of people who received the letter rated it as 'good' in terms of giving all the information they needed with 77% saying it was 'very good.' One caveat here is that this was a self-selected sample and so the people interviewed may have had a greater emotive response to the trial.

84. One issue with the success for the pre-trial campaign is that the people interviewed were expecting an alert message whereas in real life they would receive it without prior warning. Of course, test alerts could not have been ethically sent out without prior warning as they may have caused panic. Had the sample been larger, the answers of the 10% of participants who had not heard about the trial prior to hearing the alert could have been analysed. This may have shed light on whether views on the message would have differed if they had not expected to receive it. Unfortunately this 10% comprised 24 people and is too small a sample to draw any meaningful conclusions.

Levels of Personal Emergency Preparedness

85. In a linked piece of work Ipsos MORI were commissioned to conduct a UK survey of 1,000 people regarding their perceptions of risks facing the country and on their own feelings of emergency preparedness. The aim of this work was to compare how an informed population living in close vicinity of a COMAH site would rate their emergency preparedness compared to the general population.

86. The survey results suggest that the wider UK population (47% of respondents very or fairly well prepared for an emergency) are more prepared for an emergency than the trial participants (36%). This is

surprising as it was expected that those living in close proximity to a COMAH site would feel more prepared for an emergency than the general population due to the information regularly sent to them by the site.

87. One explanation for this could be that Ellesmere Port participants have a greater sense of the risk in their local area and so feel more vulnerable and thus less prepared. This is despite the fact that Ellesmere Port participants were more likely than UK participants to have undertaken a number of possible preparations for an emergency. For example 85% of Ellesmere Port participants could tune into their local radio station compared to 36% of UK survey participants. Ellesmere Port participants were also more likely to have a torch, tinned food, spare batteries, first aid kit and bottled water in the house.

Alert channels and sources

88. The surveys also looked at how feelings of emergency preparedness affected an individual's preferred medium of being alerted in an emergency. Almost nine in ten (87%) of Ellesmere Port participants said 'voice message to landline'. This compared to 10% of the general UK population. Whilst this endorsement of the use of the EDW system in this way is encouraging this answer could be skewed by the fact that Ellesmere Port participants will have participated in the

trial and therefore understand what the capability can offer, whereas the UK participants are unlikely to have received one.

89. The most popular method to receive information was 'announcements on TV' for both the UK survey and the EFWD survey with 62% and 88% respectively, citing it as their first preference. One drawback to this method is that it would not wake people up during the night; it would only be a useful way to receive information once people were aware of the emergency and had turned the TV on. One interesting finding was that 81% of EFWD participants said sirens would be a good method, compared to just 13% of the UK survey. Again, this might be a result of the use of sirens in Ellesmere Port.

90. Both sets of participants were also asked why they wanted to receive information in this way. Regardless of the method chosen, speed was the principle factor. Of the trial sample:

- 75% of respondents said receiving the message 'quickly/directly' was very important to them,
- 34% who preferred a particular alerting method because they 'can get it anywhere'; and
- 10% who said they would 'trust the message'.

91. In terms of receiving information in *advance* of an emergency both trial participants (78%) and UK survey participants (51%) preferred 'letters or leaflets' in the post. 16% of EFWD participants said 'voice message on a landline' compared to 5% from the UK survey. This finding is backed up by research from the EA which has shown that people like to have information in hard format so they can keep it and refer back to it if needed.

92. The message received by trial participants in Ellesmere Port stated it was being sent by the emergency services. As the findings above identify, trust in the source of the message is important to the public. Participants in both surveys said they would most trust a message from the Police, followed by the Fire and Rescue Service brigade and then the local council. The need for this to come through formal channels is suggested by the fact that 'friends/family' scored low with only 5% of trial participants and 11% of UK survey participants picking this option.

Risk Perception

93. Both surveys considered participants' perception of risks in their local area. Unsurprisingly, half the Ellesmere Port participants cited 'Major Industrial accidents' compared to just 4% of those asked in the UK survey. This could be due to the fact that they live in close proximity to such a site and receive information

about the risks, and that they were primed by questions asked about the trial and so recognised it as more of a risk.

94. In contrast, UK survey participants ranked 'severe weather' as the most likely to happen with 39% selecting this option. This was the second most popular answer among Ellesmere Port participants with 26% giving this response. One possible explanation for this is that during the time of the survey there was heavy snow fall throughout the UK which may have impacted on views.

95. For the key findings section of the EFWD trial public evaluation report from Ipsos MORI see **Annex B**.

Anecdotal Feedback

96. As well as the formal evaluation, public perception of the trial was also obtained anecdotally. A total of 27 calls were made about the trial to the Cheshire West and Chester Council call centre. These were split into three main groups; praise for the trial and the alert message, queries about why the alert had or had not been sent to a particular number, and concerns raised about the alert format. All queries were referred to members of the project team.

97. One emerging issue raised by at least three different callers was that EFWD would not be appropriate for the deaf as they would not be able to hear the alert message. This feedback was valuable as

it shows that if this kind of civil alerting capability were to be rolled out nationally changes would need to be made to the system, if it were to reach all members of the community. Alternatively if users were signed up to the system they could opt to receive alert messages via SMS or email instead. This currently forms part of the FWD service.

98. The number of calls received from the public who wanted to lend their support to the trial was very encouraging. Several comments were received from the public endorsing the trial. One lady who rang the centre said she thought the message was 'excellent' and a 'great way to reach people.'

Local responders

Message delivery

99. A total of 61 local responders and members of the project team were sent the test alert message at 10:00 on the trial day. The table below breaks down how this was achieved. All of the messages were successfully sent or acknowledged aside from two landline calls. Of these two, one had no connection, and one was not answered. One point of interest is that without being asked to in the message, one of the responders acknowledged it by pressing one. This form of positive acknowledgment could be very useful when sending out messages in order to confirm exactly who has heard the alert.

	Landlines	SMS	Email
Alerts sent	58	41	52
Successfully sent	NA	41	52
Unsuccessful	2	n/a	n/a
Unacknowledged alerts	55	n/a	n/a
Acknowledged	1	n/a	n/a

100. Due to a peculiarity of the way in which message recipients' details were input to the system the trial messages to local responders were not sent until 10:15. This was due to the system working through each recipient in turn. As local responder details were loaded in second, the system processed all the public calls first followed by the responder numbers. This would need to be reviewed in the future.

Operational Feedback

101. In order to capture the views of those who had been sent the message, all recipients were asked to complete a hot debrief sheet. These asked questions about the format and content of the alert message, as well as views on how helpful it was. These questions were broken down by medium of alert to enable comparison between the different alert message types received i.e. SMS versus landline.

102. 27 of the hot debrief sheets issued were returned to CCS. The overwhelming response was that the trial had been positively received. For SMS, Email and the landline message, all respondents either agreed or strongly agreed that it was a useful way to receive an alert for this type of emergency. Please see **Annex C** for graphs providing a breakdown of responses.

103. Of the comments collated in the free text box, the majority were positive remarks about the message being clear or useful. Several themes emerged:

- **Playback** - the most common comment was that there should have been a play back option at the end of the telephone message. Whilst this capability was present this was not highlighted in communications.
- **SMS** – the 160 character limit of an SMS message hampered its effectiveness with recipients stating that the message should contain further information.
- **Missing text** – Some bits of the audio message were missed due to the speed at which the message started once the call was connected. There was also a desire for the 'directive action' the recipient needed to take.

Strategic Feedback

104. In order to discuss these comments in further detail and to get some more feedback on the trial a debrief workshop was held one week after the live trial date. Over 25 local responders and members of the project attended, including representatives from the blue lights services, Cheshire and Cheshire west Council, Cheshire LRF and the site operator.

105. The debrief day provided a useful opportunity for CCS to update the group on the trial and to gauge further views. The first of two discussion sessions focussed on understanding how the trial went, highlighting any issues or concerns. Attendees commented that they thought this system provided a really effective first hit for alerting a high proportion of the public quickly. It was also felt that this system would be a useful addition to the warning & informing toolkit but should not replace existing arrangements.

106. Whilst it was believed that the system would be useful for those living in Ellesmere Port, attendees commented that visitors to the area or those passing through would not be contacted. As such other alert tools would still need to be employed.

107. The need to pre-configure messages was also raised as it was felt responders would not have time during an emergency to populate a message, as the site operator did for this trial. It was identified

that template messages would need to be agreed during the set up of any future system.

108. The second session focussed on perceived benefits from the trial, the challenges going forward and what next steps the group would like to see. Attendees reiterated that the main benefit would be alerting the public and key agencies quickly following an emergency.

109. It was felt that while this system would be appropriate for a site with a PIZ of this size; its value would diminish if population sizes were significantly lower. There are 25 COMAH sites across Cheshire, all very different in terms of infrastructure, staff, profiles, size, production of chemicals and size of surrounding populations. A site with a PIZ of two households would not want to take on such a system while smaller COMAH sites may not be able to afford to take on the system.

110. In terms of any potential future roll out of the scheme, attendees felt that Central Government should stipulate strict thresholds for activation of the system to ensure consistency, but allow local areas to tailor it to suit their needs.

111. There was also recognition that there would be a resource implication for LRFs to enable set up and maintenance of the system. This would include operational factors such as agreement of message sets, the maintenance of alert zones,

updating responder contact details and promote its usage. There will also be other procedural and familiarity factors such as regular training and exercising of procedures and arrangements to maintain operational readiness.

112. One benefit of the trial, relayed back to the project team, was that it prompted local responders to consider their current command and control arrangements and to look at ways in which existing communications between agencies during an emergency could be improved further. Additionally the site operator commented that the workshops had been useful in instigating conversations about alerting arrangements between different agencies.

The Site Operator

113. The project worked in close cooperation not just with the LRF but also the operator of the hazardous site. Innospec Speciality chemicals had a unique perspective on the trial given their role as activator of the trial and recipient of the message. Staff from the site supplied hot debrief sheets and also attended the debrief workshop to offer their feedback on the trial.

114. Staff commented that this system would have several benefits to them, notably the ability to warn the public quickly and with less effort and 'ringing round' than current arrangements necessitate. Staff also commented that if this system were employed by

neighbouring COMAH sites it would be a useful way to find out about incidents at other sites.

115. One important piece of feedback from the site operator was that it would not have been practical, in a real emergency situation for them to activate the alert. This was because they felt they would not have the time to input the required information and send the message out. Innospec always have a full shift on site, however depending on the time of the emergency this may only be one officer. Given this extremely limited resource there would be other specialised demands on his or her time and the actions of the officer would have to be prioritised. As such it was felt that activation of the system should fall to the Emergency Services. The site operator did recognise the benefit of the system and felt it would be a good way to cascade information in the event of an emergency.

HOW EFFECTIVE COULD EDW BE FOR OTHER RISKS?

116. The Defence Science Technology Laboratory (DSTL) was commissioned by CCS to produce a literature review into the effectiveness of civil alert systems. This identified a series of characteristics that an effective civil alert system would exhibit.¹³

117. This section of the report evaluates the EDW component of FWD against these characteristics to understand its effectiveness, as it performed in this trial. It is important to note that this trial did not use the full FWD system for alerting the public, just the landline method for sending alerts.

118. A full explanation for each criterion, along with the extent to which EDW can be evaluated against it is provided below:

- **Speed** - the rate at which the warning is delivered to the intended audience. In this trial 90% of messages were sent to the 5,738 public landlines

within 15 minutes. This is in line with current estimated system requirements.

- The trial findings have shown that the EDW capability allows professional bodies to be contacted quicker than the current notification process.
- **Locality** - the extent to which the alert message is geographically targeted to those who are affected by the emergency. EDW meets this criterion as it provides a way of targeting specific numbers or email addresses within a designated area. EDW could be used to target particular sectors of the PIZ or the whole area if necessary.
- **Targeting** – once the locality is identified this is the extent to which the right people are notified of an alert and that those who did not need to know about it were not communicated with. EDW has the potential to meet this criterion through the definition of multiple warning zones. The objective here is to minimise the likelihood that alerts are issued to those it is not relevant to thus reducing their interest in the scheme.
- **Spontaneity** - the extent to which an individual has to complete an action to receive an alert for example, opting-in or subscribing to a service. The service tested the automated subscription process and as such no

¹³ *The Effectiveness of Civil Alert Systems: A Review of the Literature*, Defence Science Technology Laboratory, 2012

action is required on the part of the public to receive messages. Instead a series of actions are incumbent on the system and emergency responders in defining target areas. If individuals wanted to receive messages in other formats there would be a need for them to subscribe.

- **Non-intrusiveness** – whilst in ‘normal’ mode the alert medium should not interfere with the recipients’ usual activity. In this example, the use of EDW in this way does not impede the potential alert recipient from using their telephone in the usual manner. It is expected that when activated, the alert system is likely to intrude on normal activities which is seen as appropriate.
- **Automated Operation** – the potential for the alert system to switch from normal mode to alert mode without the need for manual intervention, for example through the use of sensors. This element was not tested as part of this trial but the existing FWD system does include some river level sensors which can trigger alerts to be sent if they exceed defined thresholds.
- **Ubiquity** – is the extent to which the alert method excludes people from receiving a message. The aim here being that 100% of the population in an impacted area receive an alert. This capability, as tested does not

achieve 100% in this regard as it is only capable of targeting those with a landline connection (estimated 85% of the population). Of the 6,210 daytime residents it can be said that only 693 definitely received the message with a further 3463 hearing the message either at the time or when they picked up their voice messages. Individuals and groups representing those hard of hearing expressed specific concerns about them not being able to hear the audio message. Alternative methods such as SMS, email and others would help to increase the ubiquity of the system. This is countered by individuals who may opt out of receiving messages. People visiting or passing through the area would not be alerted if FWD were used in isolation.

- **Support for second languages** – the potential for the alert message to be sent in additional languages. This trial did not explore use of second languages in messaging although the EA use English and Welsh messages for FWD messages. No complaints were received regarding this decision.
- **Content** – the variety of formats employed to present the information of an alert message. This trial only utilised the audio message option for the public. The full system as referred previously does offer other alternative messaging formats. These may be

constrained by the system or other external factors.

- One important piece of feedback from the trial was that you would not want to send a landline message longer than 70 seconds in length in order to keep the public engaged. A balance must be struck in message content between not alarming the public and issuing clear directive advice. Having a further point of contact is also key as the purpose of the message is to send an initial alert, not to provide regular updates. Another issue is capacity; the longer a message is, the longer time needed for delivery.
- **Presentation** – the ease at which the message is interpreted by the recipient. The message once received must be understood in the right manner. Results from the survey suggest that a high proportion of people understood what the message meant for them. This is likely to be linked to the frequency of pre-event communications. The language, sound and diction of the alert message for the trial were revised several times to ensure it was appropriate for the trial. The digitised voice was surprisingly well received with 95% of survey respondents stating they found the voice trustworthy. This does contradict research by the EA which suggests that a recorded human voice is

preferred and was anecdotally reported by the contact centre.

- **Receipting** – ascertaining whether the message reached the intended recipients. Whether or not EWD meets this criterion, as tested in this trial, is mixed. The system does and – indeed did - show which calls were categorised as successful or unsuccessful. Unless a person acknowledges the call by pressing one, for example, it is not certain whether or not they have actually heard the message. This is complicated by the fact that it is difficult for the system to detect when the call is picked up by an answer machine. There is an algorithm within the system which assesses if the message was received by a human or answer phone although the accuracy of this is variable. An educational campaign would be needed in order for it to become engrained in recipient's minds that they need to acknowledge the alert message when they receive it.
- **Security & Performance** – the extent to which the system could be inappropriately accessed and is available for use. As FWD is currently successfully used by the EA during emergencies; we can be confident that data is protected and cannot be easily spoofed, and that the system is resilient. These would of course be

important considerations should the system be expanded and used for other risks.

119. The service performs well against almost all criteria. The areas where it does not perform so well are ubiquity and receipting. In terms of receipting, this is due more to human factors rather than the system itself; other forms of alert sent via SMS, or email would still require some form of response to be sure that the person had actually read the message.

CONCLUSION

120. In terms of the project objectives, we can conclude that the trial successfully engaged a sample of users and delivered test alert messages to them.

121. This trial has determined that use of EDW as a warning capability for a risk other than flooding, in this instance an incident at a COMAH site, could be an effective form of alerting. The system's ability to issue alerts to a large, targeted population in the fifteen minutes following an emergency is crucial to this. This is important as it offers a solution to the perceived gap nationally in current alerting capabilities to do this. In addition, the fact that the majority of UK homes (85%) have a landline connection (although it is unclear exactly how many

have phones connected) suggests there would be wide coverage for such an alerting system.

122. The system information obtained on the trial day is helpful in showing how many people received the message and for how long on average they listened to it. It was felt however, that if the trial were to be conducted again, that the message should be sent to all PIZ landlines at 10:00 and at 18:00 rather than sending them out once at 10:00 with the follow ups at 18:00. It was felt that this would have allowed for a better comparison of how the alert was received at different times of the day. Also the more recent "tech refresh" version of FWD would allow more clarity around whether it was a person who had received the call, or an answer phone.

123. This trial has identified a number of issues that still need to be resolved, before EDW could be considered for national roll out. Whilst not experienced as part of the trial, call congestion at the local exchange is a distinct possibility which would have the impact of significantly extending the time needed to transmit the alert messages. The likelihood of this could be reduced by sending messages out in pulses rather than all at once. This is currently being investigated by the EA.

124. The scope of the system would need to be carefully defined in terms of the

possible risks that it could cover and how this would affect existing alerting arrangements. There are a number of scenarios set out in the National Risk Register that could potentially benefit from such a system. While we can conclude that this system worked well in the trial area for warning the public about a potential emergency at a COMAH site, more needs to be done to see if it would work well in other areas and for other risks.

125. The optimal frequency of test messages to transmit would need to be defined. Research has indicated that repeated false alarms or overuse can result in increased complacency and diminished responses¹⁴. Conversely, if messages are sent infrequently the public will be unaccustomed to them and less likely to treat them seriously. It is important therefore to have suitable clear guidelines on the trigger points for sending out alerts. This was raised by local responders at the first project workshop.

126. The impact on Local Resilience Forums will also need further consideration. Particularly, who would hold responsibility for set up, maintenance and running of the system. Maintaining security of the system will also require consideration to minimise risk of an attack.

127. Increasing public awareness about emergency preparedness is crucial if improvements to civil alerting are to be made. In this trial just under 800 of the 4,244 successful calls were acknowledged as directed. Further to this, of the 230 people who participated in the follow up survey, 30% could not remember anything that the alert had said. Knowledge of the core 'go in, stay in, tune in' message which has been pushed since a nationwide communications campaign by the Government in 1999 is low. If this capability were to be rolled out a communications campaign would be needed to inform the public about the system, particularly around the importance of acknowledging messages as directed, and about message content. This could potentially improve receipting of messages and understanding of directive action

128. Case studies have shown that opt in rates to alerting systems are low. Despite the potential benefits people are reluctant to subscribe to these systems. Evidence therefore suggests that any system should automatically enrol the public to maximise likelihood of messages being received. Findings from the surveys conducted during the trial show the high levels of support for this concept with 90% of trial respondents and 76% of UK respondents agreeing with this position.

¹⁴ *The Effectiveness of Civil Alert Systems: A Review of the Literature*, Defence Science Technology Laboratory, 2012

129. While CCS recognises the value of the EDW system for warning the public about risks other than flooding, it is proposed that the system forms part of a wider approach to alerting, and is not seen as a 'silver bullet'. While there is a wide range of alerting capabilities in place, each has their own advantages and disadvantages - none are 'catch all.' This trial has again reinforced the importance of having a diversity of alerting methods; while EDW is good at sending audio messages to targeted members of the population – as evidenced by this trial - it is not an appropriate way of contacting everyone. In this trial those away from their home when the alert was sent, or deaf members of the community would not have received it.

130. Research has indicated that messages sent via multiple methods are likely to be more effective than single source. The trial has highlighted that following receipt of an alert message the recipient will look for further information to either confirm or deny what they have been told. This further suggests that an audio alert message would be best used as part of a wider approach to warning and informing. A combination of alerting capabilities also provides more resilience; if one system falls down, there are others to back it up.

Next Steps

131. In light of the findings from this project a series of next steps are proposed below

to enhance the UK's capability to alert the public during an emergency:

- A **consultation process** with other LRFs and their devolved equivalents in the UK will be conducted to gather more information on their approaches to alerting and to understand the rationale for this position. This will also present the key findings from this report to validate them across a greater proportion of the resilience community.
- Work will also be conducted with the EA and system suppliers to **explore how access to the FWD capability** might be increased and what the resource and cost implications would be for this.
- CCS will work in partnership with LRFs to **draft template alert messages** that could be sent out to the public in the event of an emergency. The generic content of these will be informed by research and will include information on: the incident, its location, directive action, time of occurrence and who is sending the message. Consultation with relevant government departments, press offices and local responders will play an important part in the acceptance of this work.
- CCS will **engage other Government departments** for their views on how

alerting the public to the (imminent) onset of an emergency might best be achieved. A policy paper will then be produced which will outline in detail,

the Government's approach to improving civil alerting. This will include the findings in this report and results of the consultation with LRF's.

Annex A - Message content of professional partner and public message

Public- alert message content

Telephone

This test message is from the emergency services.

There is no need to be concerned or take any action.

This test message will help us understand how useful this type of alert might be. There is no real emergency at the current time.

If there was, you would be advised to, go in, stay in, tune in.

You would be told to go indoors and stay inside, until told otherwise by the emergency services.

Further updates would be given via your local B B C Radio station. There is no real emergency at the current time. If you have any enquiries about this test message you can call 08459 881188 or go online at www.CheshireResilience.org.uk.

We want to know what you think about this message. To take part in a future survey about this message please press one, or to opt out press two.

To repeat this message please press star. Thank you for your time.

Local Responders- alert message content

Telephone, Email and SMS

The telephone and email messages were based on the 'Major Accident Message' template and included information on the incident, location and rendezvous point.

The SMS message, bound by the number of characters was a more succinct message stating the incident and location only.

All message formats reiterated that the message was a test.

Annex B- Ipsos MORI public evaluation- Key findings

Evaluating the test message

132. When examining the results of the Ellesmere Port survey it is always important to bear in mind that it is based on a sample of people that, following the test message, agreed to be contacted for this survey. This is not a representative sample of all those residents who would have received the message.

133. The findings of the Ellesmere Port survey are on the whole positive on the effectiveness of the recorded message. An important facet of such messages is how they get spread to the wider population and even though this message was just a test, six in ten respondents told someone about it.

134. The most recalled part of the message was “stay in”. While only 3% could spontaneously remember the key theme “Go in. Stay in. Tune in.” it is positive that a third (33%) recalled being told to “stay in” and a further 16% remembered the message saying to “listen to the radio”. However, three in ten people could not remember anything about the message.

135. Respondents in Ellesmere Port reacted positively to being replayed the message. Over nine in ten said it was helpful, trustworthy and genuine, while 87% said it was reassuring. Just 14% said it was fake and 9% said it was unfriendly.

136. Levels of understanding of the message were also high. Around nine in ten respondents said they understood what it meant for them and their household as well as their local community. A similarly high proportion of respondents (87%) said they would know what to do in a real emergency if they received such a message. There was a contradiction in terms of the level of information provided, while 82% agreed that the message contained all the information they needed, 89% said they would want more information if they received the message in a real emergency. This potentially reflects the difference between a test situation and a real life emergency, and the requirement for follow-up information in the case of the latter.

137. There is also positive news for the effectiveness of the publicity around the message before it took place. Two-thirds of respondents recalled receiving a letter about it in the post, while a quarter heard it about it elsewhere. Just one in ten respondents did not hear about it before hand.

Emergency preparedness

138. It is encouraging for the effectiveness of the test message, that among Ellesmere Port respondents, a voice message to landlines was amongst the

most preferred methods of receiving information about emergencies. Around nine in ten stated voice messages to landlines, around the same as said they would want announcements on TV. 'Messages on TV' was the most preferred method among the general public. Sirens also rated highly among Ellesmere Port respondents (81%) while just 13% of the general public stated a preference for sirens – this is likely to be because Ellesmere Port respondents are more familiar with sirens being used in their local area.

139. The respondents in Ellesmere Port felt more informed about what to do in case of an emergency than the wider general public. Just three in ten British adults felt informed about what to do in case of a large-scale emergency compared to half of Ellesmere Port respondents.

140. However, Ellesmere Port respondents were less likely to say they felt prepared for an emergency than the British public. Just over one in three in Ellesmere Port (36%) said they were well prepared compared to just under half of the British public (47%). One explanation for this trend might be that there is a greater sense of risk in Ellesmere Port, which leaves people feeling more vulnerable (or less prepared) despite their generally having a greater awareness of what they are meant to do if an emergency happens.

141. Receiving information seems to make British adults feel more prepared, with three quarters of those who have received information about being prepared for emergencies saying they do feel prepared compared to less than half (45%) of those who did not receive information.

142. Many British adults have done little to specifically prepare for an emergency, for instance, 16% have prepared a list of useful contacts, 11% have discussed emergency procedures, and just 7% have prepared an emergency grab bag. However, most people routinely keep a number of items that would be useful in an emergency including:

- Torch: 78%
- Candles: 73%
- Tinned food: 70%
- Spare batteries: 63%
- First aid kit: 66%
- Spare medication: 52%

143. Despite this, only one in three say they routinely keep bottled water (34%) and one in four a battery powered or wind up radio (24%).

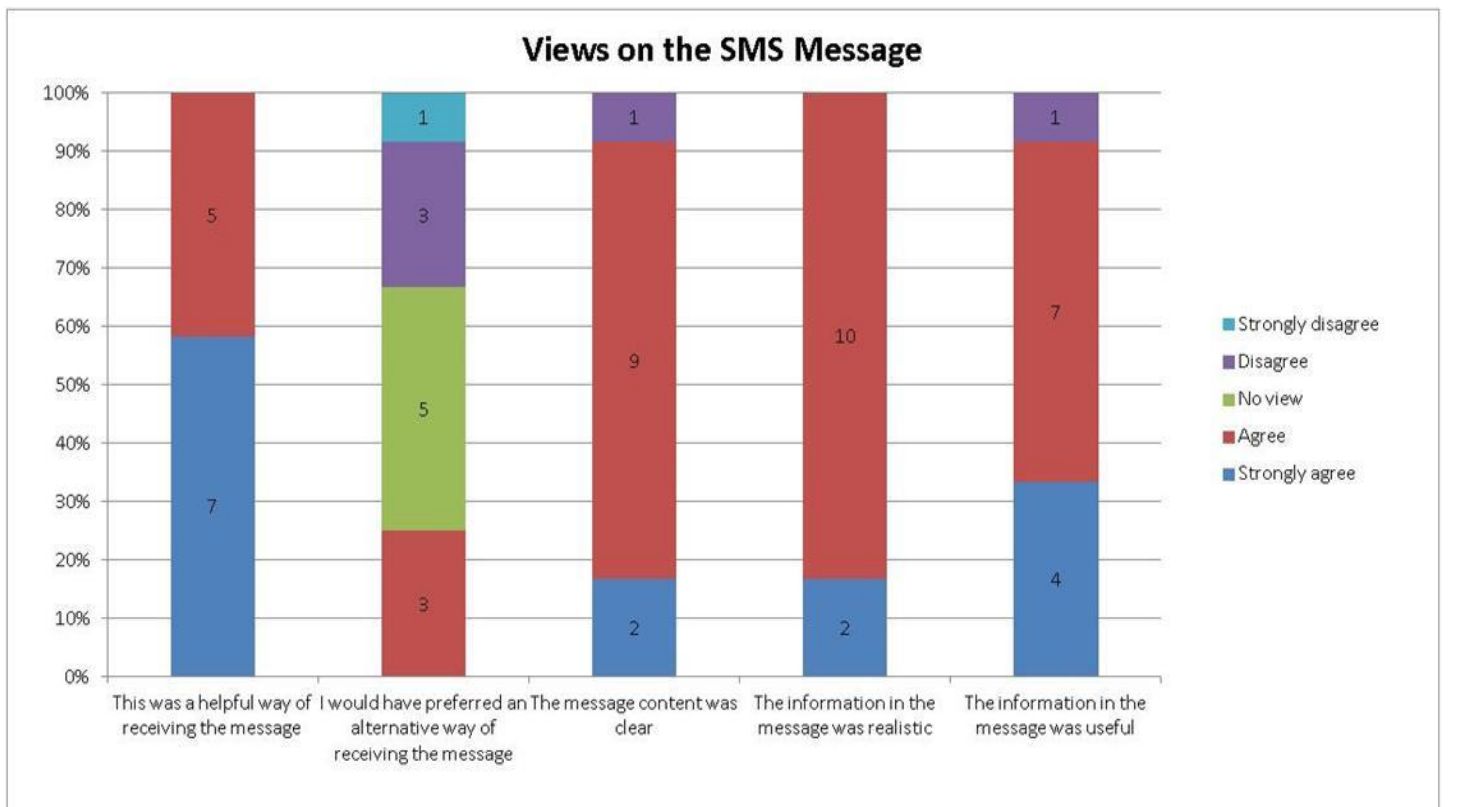
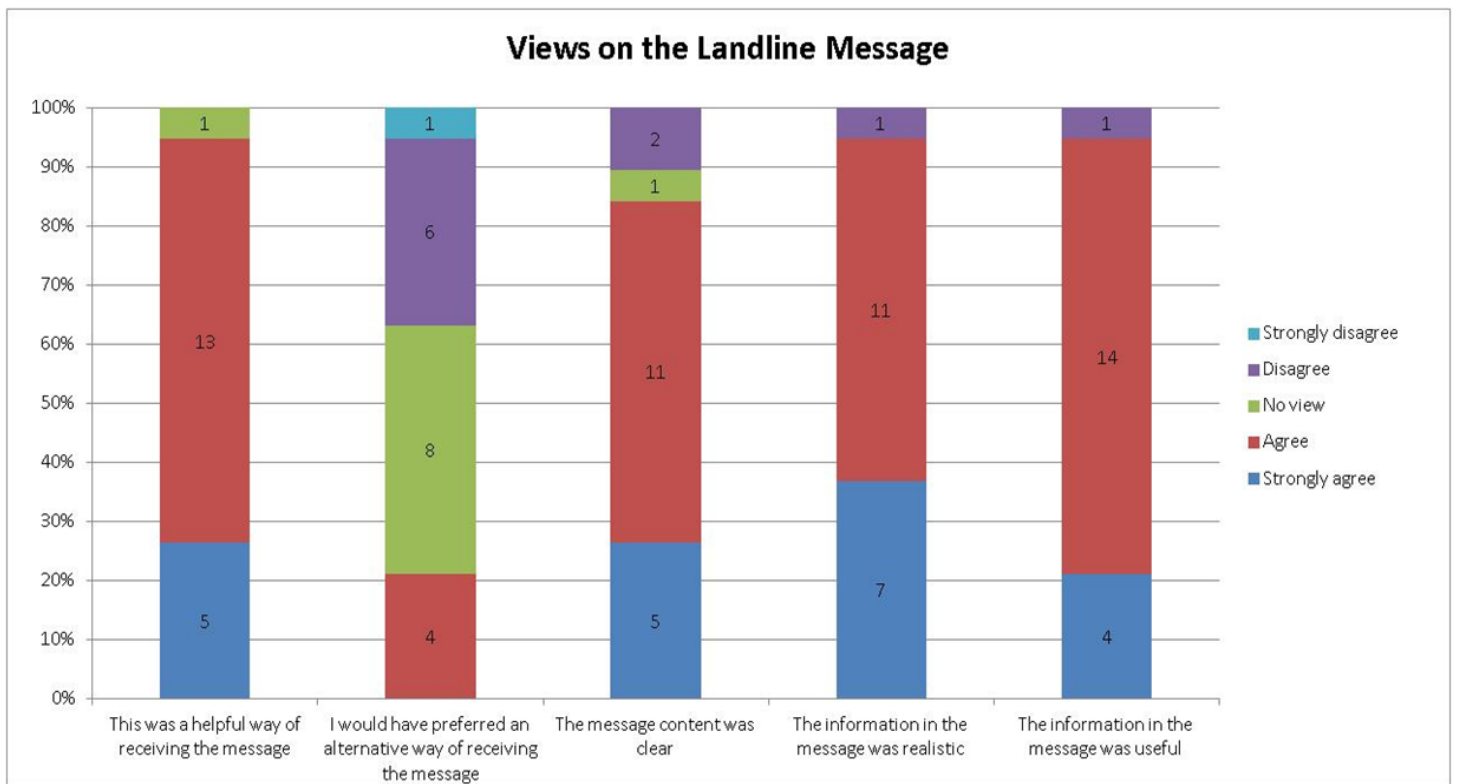
144. While respondents in Ellesmere Port felt better informed than the British public, there was also a greater thirst for more knowledge about potential emergencies, particularly amongst those who felt less informed. Two thirds of Ellesmere Port respondents said they wanted more information (67%) compared to under a half (45%) of British adults. One in ten (10%) British adults said they do not need to know about preparing for an

emergency while 15% say they know enough already.

145. Leaflets and letters from the local council and emergency services were by far the most common way in which

respondents had received information on preparing for emergencies. The Police, Fire and Rescue Service and local council were the most trusted organisations to be giving out information about how to prepare for emergencies.

Annex C – Results of Local Responders’ Hot Debrief Sheets



Views on the Email Message

