

## **EXERCISE WHITE NOISE – POST EXERCISE PUBLIC REPORT**

### **Government Exercises**

The Government has in place a coordinated cross-Governmental exercise programme that effectively tests the collective central Government response to the wide range of threats and hazards facing the UK. The nationwide rolling programme of exercises is designed to ensure we have the best possible contingency plans in place to respond to a whole range of emergency scenarios. Exercise White Noise formed part of the National Preparedness Programme annual exercise series and brought together the relevant parts of Government, including the Devolved Administrations, with industry partners to test the response to a failure of the telecommunication network.

### **Exercise Overview**

Exercise White Noise was the first full-scale exercise on communications failure that had been undertaken by the Department for Business, Innovation and Skills (BIS) as lead Government Department for the telecommunications Industry.

The exercise objectives sought to:

- Rehearse and test the BIS response to a telecoms emergency;
- Rehearse and test central Government co-ordination arrangements including the information flows and interfaces between industry, Central and Local Government and the Devolved Administrations;
- Test the communication with the telecoms industry through the NEAT (National Emergency Alert for Telecommunications) channel;
- Rehearse recovery management aspects of a disruption to telecommunication networks.

In all, ten Government Departments, two Devolved Administrations, three Government Offices, the telecoms regulator Ofcom, and ten telecoms companies took part in Exercise White Noise

This exercise was extremely important for the UK, and BIS would like to acknowledge with thanks the participating telecoms companies for their time in designing, preparing for and participating in the exercise.

### **Planning and Scenario Preparation**

The planning of the exercise started in January 2009 and was overseen by a project team involving BIS, the Department's contractor (Steelhenge) and the Cabinet Office. The

scenario was developed in conjunction with the Electronic Communications Resilience and Response Group (EC-RRG) the industry and Government forum that owns and develops industry wide emergency response planning.

The scenario involved a “bug” being accidentally introduced to the UK public switched telephone network (PSTN) - that is the network that carries traditional voice services. The bug disrupted the ability of PSTN switches to transmit information within networks and between operators, leading to a cascade failure of the whole UK PSTN. The exercise was developed so that operators would be required to isolate their networks from one another – both to allow for testing of internal business continuity plans of operators (where desired) and to understand further the impact of such action on the UK as a whole.

For the purposes of the exercise the internet was assumed to continue to operate normally. The preparation of the scenario had added benefits in that it enabled Government Departments to review their own business continuity plans in the event of a large-scale problem and focused attention on the importance of communications for several sectors including energy, transport and the financial sector as well as the impact on 999 services.

## **The Exercise**

The exercise took place over two days (11/12 November 2009) and was based on the usual concept of players in the exercise having no prior visibility of the scenario. There was no actual operational play and all data was delivered via simulation. In every other respect the exercise was played as realistically as possible between the teams taking part with players responding in real time as they received and gathered information.

### **Government Play**

A number of participants (including a number of Central Government Departments) also conducted subsidiary internal exercises either within the main scenario or on a business continuity basis. This play was supported by the main scenario but did not impact upon it in any way other than to deliver any supporting detail.

### **Industry Play**

The telecoms sector fed into in Exercise White Noise through the separate, but parallel exercise Empex 6 which was designed to test both individual company business continuity plans and collective industry response to severe communications disruptions.

The media co-ordination was tested as part of the exercise with BIS and OFCOM media specialists working in collaboration with colleagues across departments and industry.

## Feedback

Overall, the Department believes that the exercise met all the objectives that were set at the outset. It demonstrated the basic robustness of the plans which were then in place to deal with telecoms disruptions, and also highlighted some areas which can be improved upon to make any emergency response more effective

It was notable that 96% of the 105 respondents to the player survey believed they had learnt from the exercise. Moreover, 60% of the organisations said that they would be carrying out more development work in the area of the communications aspect of business continuity as a direct result of participating in the preparation for and conduct of the exercise.

## Key Learning Points

In summary the key findings include:

- Further consideration should be given by Government and response partners to the sector impacts and linked interdependencies of a severe telecommunication failure;
- Government Departments should ensure that they have effective business continuity plans in place to manage loss of telecoms internally;
- The National Emergency Alert for Telecoms (NEAT) should be reviewed to enhance its effectiveness. Strategic communications between Government and the telecoms sector during an emergency will be reviewed to improve effectiveness in delivering relevant information. The need for a management bridge alongside the technical bridge should be built into future plans;
- Further prioritisation should be accorded to developing the resilient NEAT bridge;
- Although response and coordination was effective, internal protocols, procedures and equipment can be developed to further enhance BIS's capacity and efficiency if such an emergency arises. Response teams will benefit from further training and exercises;
- There should be further integration of Ofcom staff into BIS emergency response arrangements for telecoms;
- A challenge for other business sectors is to have in place effective business continuity management practices to ensure continuity of a telecoms service at those locations that cannot lawfully function without access to 999.

## **Future Strategy**

The lessons learnt from the exercise are being implemented.

Going forward, a need has been identified to carry out further exercises in this broad area (though not necessarily on the scale of White Noise), especially involving the Office of Cyber Security and the Cyber Security Operations Centre, – neither of which were fully operational at the time of White Noise and were therefore unable to participate.

As part of the European Commission's Communication on Critical Information Infrastructure Protection<sup>1</sup>, there is also a commitment to carry out a pan-European cyber exercise by the end of 2010. The planning for this exercise is being facilitated by ENISA (the European Network and Information Security Agency); the UK plans to contribute to and participate in the exercise. It is likely that the value of exercises at the European level will increase and the UK's experience in this field will be a valuable resource for the wider European community.

Further information on Government work with the telecoms sector on resilience can be found on the Cabinet Office website<sup>2</sup>.

Department for Business, Innovation and Skills (BIS)  
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<sup>1</sup> [http://ec.europa.eu/information\\_society/policy/nis/strategy/activities/ciip/index\\_en.htm](http://ec.europa.eu/information_society/policy/nis/strategy/activities/ciip/index_en.htm)

<sup>2</sup> [http://www.cabinetoffice.gov.uk/ukresilience/preparedness/ccact/cat2\\_info/telecoms.aspx#neat](http://www.cabinetoffice.gov.uk/ukresilience/preparedness/ccact/cat2_info/telecoms.aspx#neat)

## **Annex 1 – LIST OF PLAYERS**

Department for Business Innovation and Skills  
Department of Energy and Climate Change  
Department for Transport  
Department of Communities and Local Government  
Ministry of Defence  
Department of Health  
Foreign & Commonwealth Office  
Home Office  
Ministry of Justice  
Department for Environment, Food and Rural Affairs  
Cabinet Office  
Centre for the Protection of National Infrastructure  
Scottish Executive  
Welsh Assembly  
Ofcom

BT  
Cable & Wireless  
Kingston Communications  
Airwave  
Vodafone  
Orange  
Virgin Media  
Global Crossing  
O2  
Verizon