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Lessons learnt in mobile telecoms on 7th July 2005

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Telecoms Industry Emergency Planning Forum

- Chaired by the Cabinet Office Central Sponsor for Information Assurance

- All fixed & mobile network operators, LINX, DTI, CCS, NISCC & Ofcom

- Memorandum of Understanding and Confidentiality Agreement

- Information sharing and co-operation

- National Emergency Alert for Telecoms (NEAT)

  – invoked on 29th March 2004 (Manchester fire), 7th July 2005 (London bombings) and 11th December 2005 (Buncefield oil depot)

- National exercises in January 2005 and January 2006

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Industry response to the crisis

- Protecting the integrity of the critical national infrastructure

- Supporting the Emergency Services

- Maintaining voice, data and text transmission for customers

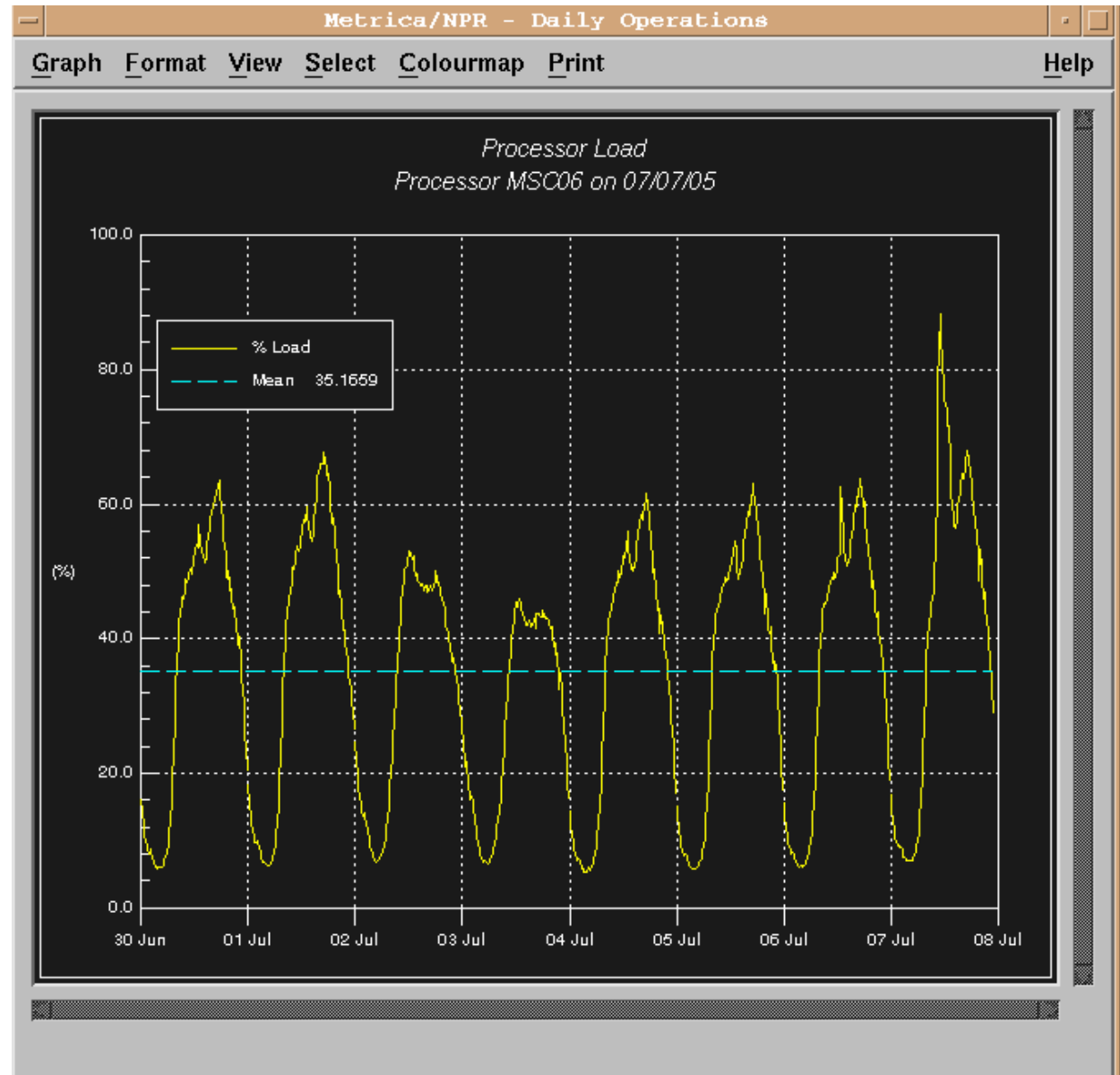- Maintaining close contact with the Regulator and Government

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Network congestion - management controls

- Half rate encoding – doubles the radio interface capacity at the cost of call quality

- Call gapping on the fixed networks to all 07 number ranges

- Access Class Barring – largely automatic when congestion in MSCs

- Removal of Paging – relieves load on MSCs

- ACCess OverLoad Control – variation on Access Class Barring which restricts use within a defined area to emergency responders only

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London – 7th July

- Networks heavily congested from mid-morning to late evening

- Half rate applied across central London to provide additional capacity

- Call gapping agreed with BT on 07 number range

- National SMS traffic 41 million messages – went up to 49 million (+20%)

- London voice traffic normally 7 million calls – went up to 11 million (+57%)

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Switch traffic

Metrica/NPR – Daily Operations

Graph   Format   View   Select   Colourmap   Print   Help

Processor Load
Processor MSC06 on 07/07/05

% Load
Mean   35.1659

Problems arising

- Half rate encoding works well for smaller-scale incidents, but not in this case as it rapidly became a large-scale incident

- Call gapping could have been applied sooner

- ACCess OverLoad Control caused problems as not all emergency responders were equipped with the correct SIM cards

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Lessons learnt

- Up-to-date list of key contacts

- Checklist of key activities

- Specific rôles and responsibilities

- Detailed record of what happens and major decisions with times

- Don't do something because it worked last time – wait and see

- Availability of live performance data

- Bring in second Network Controller to liaise with TI-EPF

- Maintaining staff levels, provision of food, etc.

- Increased performance of individuals

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Questions ?

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