From Science to Service: Value added human interpretation

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Civil Contingency Services

- Met Office Advisors
  - Team of 15 based across UK
- Support to Central Government - Lead departments, Cabinet Office, GO-Science, devolved Administrations
  - Major weather and weather related impacts
  - COBR, SAGE
  - National Risk Register
- Support to Local Resilience Fora for all weather related hazards
  - eg Floods, wind, snow, ice, fog
  - Pollution events (eg ash)
  - Work closely with responders
  - Planning, response, recovery

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Scotland 8 December 2011

“The conditions are exactly as predicted when the Met Office issued its red warning” Nicola Sturgeon, Deputy First Minister

- Mon 5 Dec – Yellow warning issued – meetings with Scottish Govt, Transport Scotland and Resilience community begin
- Wed 7 Dec – Red warning issued
- Thu 8 Dec – Gusts in excess of 100kts recorded

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Advisor Services

• Transport
  • Building and managing resilience and efficiency in critical infrastructure

• Defence
  • Supporting defence to build defensive advantage

• Development
  • Working in partnership to build authoritative voice
Providing value added human intervention internationally

- **Met Office Global Guidance Unit**
  - 7/24 capability of global meteorologists to provide value-added advice on global meteorological hazards
  - Supports SWFDP, Science for Humanitarian Emergencies and Disasters, Risk and Horizon Scanning Group
  - Builds single authoritative voice on international meteorological hazards

- **Humanitarian Advisor to DFID**
  - Embedded capability to Conflict, Humanitarian and Security Team
  - Provide expert, targeted, value-added user specific advice to support earlier action and greater preparedness to natural hazards
Preparing for and responding to natural hazards

Risk and Horizon Scanning Expert Group
- Foreign & Commonwealth Office
- Department for International Development
- Government Office for Science
- Ministry of Defence
- Department of Environment, Food & Rural Affairs
- Department of Energy & Climate Change

Emerging natural hazards
- Philippines
  - Heavy rain has continued to cause flooding in the Philippines following Typhoon Bopha in December 2012. The UK Vol Office seasonal forecast indicates that there is a continuing risk of heavy rain in the Philippines. There is therefore an increased risk of further flooding and landslides.
- Indonesia
  - Latest information indicates that the summer monsoon will happen earlier than usual. As with the Philippines, the UK Met Office seasonal forecast indicates that there is a continuing risk of heavy rain in Indonesia. There is therefore an increased risk of further flooding.
  - The area has already been subject to heavy rain during January and over 25,000 people were forced to abandon their homes after a short period of heavy rain in mid-January 2013.
- North East Brazil - Nordeste
  - The UK Met Office global rainfall forecast for February to May indicates enhanced rainfall over this area resulting at risk of further flooding and possible landslides.
- Bangladesh
  - The UK Met Office forecast for March to May indicates an earlier than normal transition to the summer monsoon. This pre-monsoon season is a time of elevated risk for Bay of Bengal cyclones and storm surges that cause coastal inundation in Bangladesh.
Good global forecasts of expected track over 4 days ahead

03 Z 8th November T+51hour winds

Central pressure of 927mb (obs. ~900mb)
Winds exceeding 100 mph (obs. over 120mph)
Rainfall well in excess of 32mm/hour

International cooperation is vital

4km regional forecasts gave warnings over 2 days ahead of:

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Responding to Fukushima

- Provided simulations to the International Atomic Energy Authority & Comprehensive Nuclear Test Ban Treaty Organization throughout the incident
- Supported SAGE
  - Daily model runs for releases of 5 radionuclides with colleagues from PHE, ONR and RIMNET
  - Provided for the first time ever joint dose assessments
- Undertook long range forecasts to understand wider regional and international implications
useful trusted relevant
user focused joined up accessible
collaborative authoritative
acted upon in partnership
understandable added value
impact based