



## **International Natural Hazard Forward Look: Weekly threat analysis for the UK government**

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Since 2015, a multi-hazard partnership consisting of 4 UK Government science agencies and public sector organisations (Animal and Plant Health Agency, Public Health England, Met Office, British Geological Survey) has produced a weekly international overview of natural hazards for UK government departments. Aligning with the Sendai Framework, this novel, collaborative approach joins horizon-scanning scientists in order to anticipate and assess potential emerging international threats and their implications. The overall aim is to improve situational awareness of decision makers across government, allowing the UK government to be more anticipatory in its response to natural hazards and thus to reduce the impact(s) of future disasters on government resources and interests overseas. The International Forward Look (IFL) provides a weekly multi-hazard assessment of hydrometeorological, volcanic, animal, and human health events globally, with an emphasis on new, emerging or deteriorating situations. It predominately reports on current events and their potential evolution, as well as providing meteorological forecasts over the next 7 days. Each contributor scans and evaluates information from a wide range of UK and international sources, including authoritative information from mandated national, regional and global centres, and uses expert scientific knowledge to identify and assess events of interest/concern.

The process has been designed to identify events, flag when they are worsening, identify inconsistencies in the evidence, determine where the impact of the hazard could be greatest, and identify potential cascading and interacting events (for instance where the meteorological forecast could interact with a health or volcanic event). Using a novel matrix, individual events are assigned a colour coded rating ranging from grey, through yellow, orange and red to communicate actual or potential increasing likelihood and/or impact. The final output is organised by region and includes two world maps, one highlighting noteworthy human, animal and meteorological events and the other details currently reported volcanoes. The individual entries include a brief summary of the hazard as well as an implications box for the science agencies to provide a more detailed analysis of the situation. The maps contain no political boundaries as the events of concern are observed from a regional perspective, but underlying information is given at a country level.

Since its conception, the IFL has provided the UK government with situational awareness and informed response and resource allocation. Though challenges remain, such as the range of recipients and their knowledge and needs, the product is undergoing continual development through stakeholder consultation, with the aim of developing an open-access web-based platform. The value of the IFL is not just the end product and the regional non-political nature of the output, but also the building of organisational and individual relationships that provide a catalyst for innovation and more successful ways to assess risk from multiple natural hazards.