

Flood warnings for infrastructure: tailored flood warning services

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Abstract The floods during the summer of 2007 in England and Wales were the most expensive in terms of flood damage anywhere in the world during that year. The Costs of the Summer 2007 Floods in England Report (Environment Agency, 2010) stated that approximately 50 000 properties were flooded, water supplies to 350 000 homes were disrupted and insurance industry costs totalled £3.2 billion, including £660 million in damage to critical national infrastructure and essential services. During 2009/10, the Environment Agency piloted an internet-based service, providing flood warnings for infrastructure assets operated by Western Power Distribution, an electricity distribution company covering south Wales and southwest England. The Environment Agency subsequently enabled all organisations designated Category 1 or 2 Emergency Responders (The Civil Contingencies Act 2004) to access a targeted flood warning service in October 2011. The development of this pilot demonstrated that a web-based application is one method of delivering a tailored warning service and that “live flood warning data” held by the Environment Agency could be used to develop a range of specialised products and services. Value Added Resellers (VARs) are actively now using Environment Agency data to create specialised warning services for utilities and transport operators, specialist insurance products and smart phone applications. These developments ensure that more people are receiving flood warnings in the way they want to access this information. The adoption of these services will improve flood response, reducing the impact of flooding on communities due to disruption to essential services.

Key words flood warning; infrastructure; value added resellers; live data feeds