



# A flood warning system that rises to the occasion

In a world saturated by extreme weather events, the responsibility for alerting communities to impending natural disasters falls on national governments. Yet to deliver those alerts effectively, they must navigate the complex mix of communication channels to ensure clear and timely delivery to all citizens. Our long term partnership with the Environment Agency delivers exactly that; a critical flood warning system that saves lives.

### Information when you need it most

Through a number of projects throughout the years, we have ensured that flood risks are communicated to the public in the most efficient way possible. As a result of our ongoing relationship, not only are the Environment Agency's internal processes more streamlined, smart and cost-effective; but most importantly, in a time of crisis, the general public is able to receive rapid, relevant and reliable information when it is needed most.



Industry: Public Sector



Location: <mark>UK</mark>



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Web: gov.uk/government/ organisations/ environment-agency

### Challenge

Ensure the UK's Flood Warning System is always resilient, responsive, and cost-effective.

#### Solution

The Flood Warning System has evolved to provide an automated text-to-speech service and also been modernised to the cloud.



### 97.5%

Reduction in component costs

The text-to-speech service has dramatically decreased component costs from  $\pounds40k$  to  $\pounds1k$ .

### 91.7%

Decrease in time-spent

An optimised process has reduced timely manual input from half a day to 20 minutes.

## 11,000

#### Alerts delivered daily

Since re-launch, an average of 11,000 life-saving messages reach citizens every single day.

### FUJITSU

Email: AskFujitsu@uk.fujitsu.com Tel: + 44 (0)1235 797711 "We drive the direction of continuous improvement; we create the roadmap. Fujitsu's role is to help us get there managing risks and delivering our ambition. They're the main reason we can deliver these projects so successfully."

Steve White, Flood Warning System Product Manager, Environment Agency

### Navigating complex terrain and technology

Five million people live in flood risk areas spanning England and Wales, but the technology to reach those in need had become out-dated and disparate. To resolve this, The Environment Agency leaned on Fujitsu's 15 year knowledge of their organisation and technical ecosystem, to deliver a scalable, multi-channel flood warning system – capable of integrating with mobile operators and new innovative communication channels seamlessly.

Simon Nebesnuick, Product Manager at the Environment Agency describes this as a key driver in selecting Fujitsu for the work: "Fujitsu was the clear leader – not only were they responsible for the design and maintenance of the original flood warning system, they could also provide the fully featured platform we needed. We wanted to improve the service, making it more cost-effective by moving it from dedicated hardware to the cloud – a more flexible, portable and resilient approach."

### Unlocking the time to solve new challenges

To unravel one of their challenges, we adopted a rigorous co-creation approach, which was put into practice at a UK Digital Transformation Centre (DTC). This included internal and external contributors from both government and national mobile operators and together we assessed what needed to change to enable the Environment Agency to apply their energy effectively.

Aligned in partnership around the shared mission, we leveraged the data, industry insights, and technology at our disposal into forming the right solution. Together we modernised the service by migrating the Environment Agency to cloud and created an intuitive interface that eliminated under-used and time-consuming elements. Plus, the adoption of group targeting and templates, delivered faster alerts across digital channels, while our programme of continuos improvements enabled new integrations, such as Amazon Polly – an Al text-to-speech service. All of which improved the speed and delivery of the service while reducing time and costs dramatically.

Simon Nebesnuic explains why reclaiming resources is paramount in the public sector: "This is a critical service, we cannot tolerate downtime. If we want to create an entirely new warning, we can now do it in 20 minutes rather than half a day. "While fellow Product Manager, Steve White, goes on to explain the impact of reducing component costs from £40k to just £1k: "We're funded by the taxpayer; we have to be considerate of cost, This is money we can now spend elsewhere."

### Technology you can trust

Our grounded approach to transformation recognises that due to the criticality of the system, it is paramount that not only is the end solution highly resilient, but the journey to get there must embrace agility and speed, while still being risk-averse and free of disruption. As a result, together we have designed a modular service that promotes the addition of new services and features.

Steve White recognises this constant pursuit of improvement as the driving force behind our partnership: "The engagement with Fujitsu is focused on helping us drive continuous development and deployment of new services."

Together we will continue to constantly improve the system to ensure that it not only champions innovation wherever possible, but it creates the environment for lasting change; supporting both the 66% of households and businesses at risk of flooding and the Environment Agency's ambition to have the world's most advanced alerting system.

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