

Ref	Question	Answer
001	Who has helped in developing the prototypes and what technology has been used in those prototypes?	We have been working with our interaction designers in the team. We've been using the Heroku app and the GDS prototype kits as well.
		Here are the three prototype links:
		https://get-flood-warnings1.herokuapp.com/ no username and password
		https://xws-internal1.herokuapp.com/ Username: xws Password: xws
		https://tfws-prototype1.herokuapp.com Username: tfws-prototype Password: tfwspass1
002	Are you open to SaaS solutions? I assume you use the tools to build the capability, but if a SaaS solution is ready which may or may not be 100% what you want, would you be open to that kind of solution?	We're not entirely prescriptive on how the solution has to be put together, but we all recognise there will be some existing technical solutions that do a fair chunk of our functionality. So, we wouldn't discount that as long as it meets the outcomes, KPIs etc. To note, for the tender we will probably be working on some architecture principles, because any solution will need to slot in
003	Is there any crossover with regard the geospatial aspects for this project and the data services platform (DSP)? Is your spatial data stored in this solution, or is it being accessed from DSP?	with the wider flood services architecture that we've got. Currently, the Flood Warning System we have is where this data is coming from, that goes to the DSP for public consumption.
004	At one point there was a consideration for the telephone operators to potentially message out directly on behalf of the agency. Has that now been fully ruled out as a potential option, or is that still something that is in consideration?	I think we're likely to rule that option out at this stage.
005	Are there going to be big attempts by the agency over the next 6-12 months to increase sign up, so that you're not having to rely so much on EDW?	That's the ambition. We're looking at our 'Get Flood Warnings' website for instance and making that as attractive as possible. But I think we'll always be up against a general lack of inertia from the public.
006	Are you planning on informing all suppliers or potential suppliers of software contracts that you already have in place that may be beneficial to their bids?	Yes, we'd likely do that as part of our procurement (e.g. when we talked about opportunities for reuse of licensing agreements in the prospectus).



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007	Can you define the minimum requirements for system reliability?	We're looking at the next flood warning system to be 99.99%. What that means is slightly different because the Environment Agency is often judged on those extreme flood events where we need the system most. Hopefully we would be looking at having a solution in place which allows us to make the most of the resources we've got and increase them when needed.
008	Can you expand on other service SLA's, in terms of numbers of users?	We're looking at an hour for resolution on unplanned downtime 24/7/365. I think we would be looking at single points of contact for service management. It's worth adding that we're looking to have different kinds of non-functional requirements for some of the workstreams or sets of functionality.
009	How many internal users do you anticipate for the service?	 For the internal message sending application, concurrent usage is normally around 12 but it can be lower, 100 or more potentially in a bigger event. Usually, the level of concurrent users is much lower. I think for targeted flood warnings we're looking at about 1000 total (non-concurrent) users as a maximum. There are about 110 organisations who have access to the system, and currently about 100,000 locations. We're keen to make use of the targeted/organisation service as we go forward and maybe between now and the new service, we will start to extend that. So, if we put our reach out to all the local authorities as an example, that's 400-500 organisations. We
		haven't got accurate figures of what we're projecting yet, but that gives you an idea. I would suspect around 10-15% of that being concurrent users. People use the functionality in different ways, so it's not easy to get actual usage of a particular organisation as there is often a blend of use.
010	Are you looking to build and not buy or are you looking for an off the shelf product to replace what's there? What is it about the current system that you believe limits your future strategy?	I don't think we have any hard and fast decisions about that. If there was a product that would do most of what we need off the shelf but is flexible enough to do the rest, then that is obviously something that we would consider. Having looked around at some of the other similar agencies in the UK and abroad, they tend to be more tailored, and that's something we can discuss. The system we are currently running has performed very well for us, but it was designed originally back in 2004 / 2005. The
		underlying principles remain the same, but we're looking for an opportunity to apply some more modern thinking and modern design that we can build into the future.
011	Non-subscribed user contact details from telephone companies: is this a legal requirement on the telephone providers, a contracted agreement or some other arrangement?	We obtain data from telephone operators under the Civil Contingencies Act in an emergency. We have an agreement about how we use the data and they charge us for extracting that data. The telephone operators operate under a sub-contract to the incumbent.



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012	With regards to the market engagement questions that need answering by 16 th May at 10am, will only the suppliers who submit their answers be invited to participate in the formal tender?	No, the invitation to tender is not confined only to suppliers who have responded to the questionnaire.
013	Who is the incumbent for this service?	Fujitsu UK
014	Could the Authority please provide an indication of their budget for WIP over the 6+2+2 years period?	We've advertised in the region of £20m in our prior information notice, which is based on spend over the last 10 years. This will be refined prior to commencing the procurement.
015	Given the fact that the current service works well with little service failures, what is the business rationale for the requirement to introduce a new service/solution that naturally comes with a substantially high transition risk?	We want to build a platform for the future and as a public body, we are obliged to go to market periodically to comply with PCR2015.
016	You mentioned that you'll be awarding a single supplier contract in the market engagement questionnaire. Suppliers are asked to specify which services they will likely tender for. Does that mean suppliers who cannot tender for all won't be considered?	The rationale behind asking that question is because there will likely be subcontracting opportunities. We may have a SaaS solution whereby 60-80% of functionality is delivered by the prime contractor and then you may need to buy other elements to make up the 100%.
017	In reference to single contract preference, is this the case for both software and implementation services. Would you consider the benefit of making a (single) technology selection and then selecting implementation partner with those skills?	We'd probably not do that. I think we would rather have an outcome based managed service rather than "please build it using this technology stack" or divide the solution development from the ongoing maintenance.
018	Do you think the contracting process will follow the same mechanism as DSP3?	Yes, as it stands, but due to larger scope, value, and public safety criticality it'll need to be tweaked.



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019	Please can you provide more detail around the integration? Are there phases of development?	The public APIs, which are available via the DSP, are already being used by the outside world, so we would need to be able to feed and provide data. There are a couple of items looking at telemetry and forecasting, which are automation tasks, but it might be that that kind of integration comes later in the programme. So yes, there's a mixture. For the ones that are urgent, we have a well-defined API to work to. What we need to be aware of is if we change anything from the source data, we might be needing to do some work on the consuming systems and there's a risk there that we lose a bit of time. We don't need to do the work ourselves, but we lose time because we need to give them lead time to do it, as opposed to if we provide exactly as it is now, which may not be getting the full benefit of newer technology. There's a balance to be had, which
020	You mentioned rough architecture principles that might be shared, I just wanted to ask how prescriptive you're likely to be on the type of technology and particularly following any prototyping that you've done so far.	 we'll discuss in implementation and follow-on discussion. I don't think we're going to be particularly prescriptive, but we do need any solution to fit with the wider services that we offer in the Environment Agency. It will be principles that make sure any solution does fit in with that wider architecture.
021	How often would you expect new releases for the service(s)?	We expect to be able to continuously improve the new system and we would be looking at regular deployments of improvements to the service. I don't know how often that's going to be, but to give you an indication, bimonthly as an estimate. It would also depend on which bit it is that we're changing. If we're changing a relatively small element, then we might do small releases and fairly frequently. If there's something major (e.g., central hub) that might be a much more substantial deployment and therefore would be doing maybe one or two of those a year. What we want to do is be more responsive to our user needs.
022	You mentioned rationalisation, automation, use of mobile and digital assistants. Do you have a FWS digital transformation strategy/roadmap for the future?	What we want to do is be more responsive to our user needs. We want to gather information from you as suppliers in this market to see what you think would be possible. We do have a roadmap, but we haven't gone into that detail, so we want to explore that with you.
023	Can you expand on the prototypes created within Heroku please? How much progress has been made, has there been a certain focus on some of the areas within Heroku or has it been broadly reflective of everything?	Primarily we focussed on two workstreams. With 'get flood warnings', we've got a prototype that allows individual users to sign up to receive flood warnings. The other is 'manage flood warnings' which allows how duty officers select which areas they want to send a flood warning to, adding information to make it relevant for the person getting a warning message.



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		An area that we haven't focused on so much is organisations and how they sign up for flood warnings, which is what we are going to be continuing over the next year because we know we need to do more prototyping and testing with organisations to see how they would like to sign up for warnings relating to assets within different boundaries or for multiple addresses. We've really been focusing more on the citizen side of things, but we're now going to shift our focus onto organisations.
024	I was unclear on the status of the "technical hub" that was mentioned. Is that part of this project, or something that is being developed in parallel? If parallel, what are the development timelines and how will the two projects integrate?	It's part of this project. There are versions of it across the Environment Agency, but we don't have one which is doing exactly what we need to do as part of this.
025	Is there a clear path in terms of when you want the project to commence?	Part of this exercise helps inform our business case to justify investment decision. We don't have an exact date, but we are using this to develop our business case, get approvals and move to market as soon as we can. As a restricted procedure, we would expect the procurement process to take ~5 months. As a competitive dialogue, we would expect the procurement process to take ~9 months.
026	Will the technical hub include upgrades to the flood forecast models / and or replacement to current forecast models with latest techniques?	It won't because effectively the technical hub is taking the information from our forecasting and telemetry services. Those flood forecast models will be hosted and maintained and developed in the forecasting system ("IMFS") as the forecasting service. So, we would be a user of it, but we wouldn't necessarily be updating the forecasts.