Transcript

20 August 2024, 03:05pm

Dubberley, Tom started transcription



Dubberley, Tom 0:06

Run us through. I will share my screen with you all.

And we will start.

And apologies, I'm gonna have to leave this down here. 'cause. I have to come off camera and mute. So.

As I said, sustainable environmental, regulatory and digital digital solutions is the procurement. This is the stage 2 industry brief of the pre market engagement. So thank you very much for coming and attending so.

Just to let you know what we're going to cover today, it's a brief agenda. We're going to counter through it, so I apologise for anyone in advance, but we will try and slow ourselves down as much as we can.

And I will cover the industry briefing and while we are here section so.

Just to remind everything, everyone that, everything that we discuss in this slide is subject to contract.

There are potential. There's potential for things to change for requirements to change, for solutions to change, so just want to warn everyone up front that that is where we are. And yes, before anyone asks and.

I know it's close brief, but we will be sharing the slides out to everybody at the end of the session. So by a close brief.

I mean that we're asking the questions aren't asked in this session.

We will get to the end of this presentation and I will explain how you can ask questions and what the deadlines are, et cetera, around clarification questions after this industry briefing.

So like I say, can we ask that microphones and?

Video are off and the session's been recorded.

So.

I am going to Passover to Julian. Julian.



Pratt, Gillian 2:14

Good afternoon everybody. I'm Gillian Pratt. I'm the.

Lead SRO for this contract and the senior responsible officer for the regulatory services programme. But I'm going to talk to you about the overarching business strategy and needs First off.

So these are three aligned programmes, all driven by environmental improvements. They're closely linked services, so environment monitoring and planning, you can see the blue logo on the right there.

Has some interface with the regulatory services programme at the top and green. Similarly, the regulatory services programme and the waste tracking programme also relates to each other, where the service is provided.

From waste tracking, the data is provided into the regulatory services programme within the Environment Agency, so three services aligned.

Regulation, the top one regulatory services.

And the monitoring and planning service are both within the Environment Agency part of our environment and Business Directorate. They are key service transformations and waste tracking is led by Defra working with the Four Nations of the UK and their environment agencies. That one is a public facing service across the UK, the other ones are combinations of internal and external for England only. So these are user needs driven transformations.

And they unlock the potential of our regulatory and monitoring data. They'll give us better management, decision making, faster regulatory and citizen decisions and information, and they'll enable us to exploit in the longer run the potential of artificial intelligence.

So I think I pass on. To John.

X

Bishop, John 4:16

You doing day, Jillian? Thank you. So good afternoon everybody. I'm John Bishop. I'm the principal architect with responsibility for technical governance and assurance across the Environment Agency.

I'm not going to be sharing very, very detailed architectural.

Descriptions with you today because that would take far longer than this session allows for.

So I wanted to just draw your attention to some of the key technologies that we're currently using across.

All three of the areas that Julian's just mentioned, so the majority of the solution is

built using Microsoft Standard standard technologies, and that's both within power platform. Absolutely, it's not just both. It's three times that's power platform, office and Azure, so.

As you can see, a significant number of Microsoft technologies have not listed them all here.

But we're pretty open to to other technologies being used should they go for our governance processes.

We have quite a few other technologies that we that we also need to interface and include within the programme. Quite a lot of spatial and GIS technologies, as you would assume, and a number of integration technologies. We're also using integration technology from Microsoft as well.

Where we're building public interfaces at the moment. Again, they're they're pretty standard sets of frameworks and languages. JavaScript, TypeScript because it's there is some still some review around this going on and.

And we are investigating other options such as using Defer's own common platform for presenting stuff to the external customers.

Lots of integration as you would expect both internally and externally.

And that's with a variety of different systems of different ages and different types. So while most of our integration either will be restful or using graph, we may need to use some more historic integration technologies where where necessary.

As it's a Microsoft platform, we're making heavy use of Azure DevOps and other common tools. You know cucumber and the like. And of course, as you will very well be aware, if you've done other government business, we need to align with appropriate GDS standards, security standards and other things as promoted by by UK government. If we want to move on, Tom.

So I'm not going to cover as I say, detailed architecture linked to connections and where the bits are being, but I just wanted to illustrate here for our service use how they've been broken down.

Into logical and domain domain focused platforms.

So you'll see at the top the regulatory services platform and its internal platforms. So we've split that down on top of a core data platform.

Emp very similar in that we've broken it down into the various logical steps and are delivering often in parallel where we can solutions there.

If you want to move on again, Tom.

And again, waste tracking as Dulian indicated, this is a slightly more complicated in

respect to PKS across all Four Nations.

So again, it's been broken down into a number of different breakdowns here. And you can see some of the interfaces that we rebuilding obviously should be moved forward with this procurement. Then we'll we'll be providing more detail around some of the architecture in the future.

And I'm handing on again.



Pratt, Gillian 8:07

I think it comes back to me, so talking about the regulatory services programme and a little bit more detail First off then, so the regulatory services programme or RSP, as we fondly know, know it is an end to end service for regulation. It hits lots of targets that are required by Defra policy.

Through reform actions and ministerial commitments, it's.

It basically goes as I say from end to end, so that's from.

Applying for the for and working out whether you need to be involved in this service, it goes into applying for a permission.

Enables us to process those applications to manage an existing permission, to manage charges, billing and payments. It enables us to understand the performance or and ensure compliance of those we regulate it also.

And supports us in enforcing those regulations and it enables us to provide more information.

So that's the end to end nature of the service we have.

A very strongly user needs led service where the regulatory customer, if it's an external facing part of the service or one of our internal officers.

Their user needs are absolutely.

Inherent in all our thinking from the start through design.

And into test and clearly through change management in the way that we roll out the programme and train people. So it's absolutely critical for us that we unlock the potential of our data. We hold a lot of information.

Both information we generate ourselves, but from third parties as well, whether it's those we regulate or potentially in the longer run things like citizen science and other regulators, information that we might want to combine with our own to make better decisions.

So you can see there on the left hand side, we've talked about the key things that we need to do. We need to deliver the tools and that's largely what I've talked about at

the moment. We need to be able then to reduce the likelihood of environmental incidents. So this is using the information and spotting.

Where there is more chance of breaches and hopefully through better closer management, one would hope that we would be able to spot those.

And potentially prevent some of the risks occurring through more active regulation, we need to be able to safeguard our income. We have lots of different charging schemes and we need to be able to draw that money in in order to be able to function effectively.

And we need to deliver a common approach to digital across our environment and business directorate. So we're leveraging some of the design that we've done through this capability work.

To use for.

Development planning services as well as trading and sharing with colleagues in the environment, planning, monitoring and planning programme, and also within the waste tracking programme. Essentially, we're having here a single delivery programme that makes sure we have consistent fit for purpose digital capabilities, business processes that underpin environmental regulation.

So I think I now hand over to Jenny Connolly.



Connelly, Jenny 12:10

You do.

Thank you, Jillian. So hello, everyone. I'm Jenny Connolly. I'm the environment monitoring and planning programme director.

I'm taking the view that you probably want to know a little bit more about how the business view this programme, that's that's the perspective I'm going to bring to you today.

And provide you with a brief overview of what we've what we're up to at the moment and what we'd like to be able to achieve in the future. So EMP as it's known is fundamentally a data programme, hence the tagline.

Delivery.

We hold in the Environment Agency a sort of large and historic data set of environmental monitoring information that's we've been collecting for decades and we use that for a whole range of different purposes.

And it underpins vast, vast swathes of the Environment Agency's business. So we use it to do things like assess whether objectives water met and supporting the planning

and delivery of interventions, both made by both the EA and by our partners. We use it to understand pressures on the water environment such as drought and climate change. We protect human health by improving bathing water quality. We use it to underpin the processes that support permitting and regulation, and we also use it to drive investment. So things like the price review, the water company investment that's made, that's all based on the monitoring data that we hold. We also use it for flood forecasting and warning.

Assessing vital things like water security and nutrient neutrality, which supports. House building and growth, and it also underpins the flood and coastal risk management capital investment programme. So I think you'll get a flavour from that of just how how widely the data sets that we hold are used within and within and also externally to the Environment Agency.

We're a programme that's a lot younger than RSP. We've only been around a couple of years. We moved into delivery in July 23, so just over a year ago.

And our current focus is on what we call phase one or foundational work. And really, that's focused on transforming the data from a series of disparate legacy archives, some of which are really very old. Our oldest one is 35 years old this year, and that's our water quality archive. And what we've done so far in the last 12 months is we've built a place based platform to hold all the data on and we are now in the process of trying to secure and consolidate our water monitoring data onto that platform, the systems that we're working on, they won't mean anything to you, but the the first four are the ones we're working on at the moment.

And we're hoping to go live with that early in early 2025 and then we'll move on to deliver all the others, but it's water quality first then followed by ecology, biology, fish. And we're also doing some work to ingest water company monitoring data so that we can use that.

We've got a really broad base of users in the Environment Agency. We've got people all the way from just wanting to view single sample results to to full blown data scientists. So we've had to provide a a real range of analytical tools for our people. So we're using power BI to provide some self-service reports and some self build reports and then we're going all the way through to much more advanced use cases where people are accessing.

Unmodelled versions of the data using things like like our.

And Python to to analyse the data. So we've just really having to service a full range of users and I think Gillian said this as well. But once we've done all this foundational

work, that should enable us to move forward and start using much more advanced technologies like AI in the future.

So that's phase one, I think, Tom, if you could move on to the second slide. We're just in the process at the moment of working up what our future phases will look like and we've we've run a series of workshops with the business trying to understand what it is they need.

Out of future phases of EMP, our initial focus moving into next year is to continue to replace our legacy systems and to import more.

Data sets so that we can really start to harness the the value of our data. So we've also got some quick wins in there around, believe it or not, we're still collecting quite a lot of our monitoring data on paper. So we're looking to move towards more paperless in field collection processes and we're also very focused on data insights to need the environmental narrative. So the three things over on the over on the right hand side there.

Next year, like I say, it's all about carrying on with the legacy work, but really we want to turn the focus to data ingestion, analytics and intelligence. So we want to build the ability to ingest much a much broader range of data in addition to our archive data and to use that to generate really rapid insights and data visualisation to support a whole range of different decisions that we get asked by by defer and governments. A couple of examples I've got here is that if I had X amount of money, where would I invest it to get the best bang for my buck?

How can we evaluate the effectiveness of the interventions that we're making and targeting the work that we do around specific problems? You know, where would where would, where would we want to target our interventions to get to get the greatest benefit? That's what we want to achieve in the next 12 months or so is sort of starting the journey towards that. And then beyond that, there are some programmes in flight at the moment to transform how we do monitoring as a business and also how we shape integrated catchment.

Planning in the future?

In year two of this bid, that's when we'll hopefully be able to start looking at how we address those problems and that's things like over on the left hand side, developing a flexible, efficient monitoring Commission and being able to provide integrated catchment planning, multi criteria, decision making tools. So we can target or work we do.

So that's really where EMP is at its in its thinking from a business perspective. And I

think hopefully that's given you a bit of a flavour of what we're all about. And I, Tom, I have no idea who I'm handing over to. I'm guessing it might be Lindsay. It is Lindsay you.

Pratt, Gillian 18:53

Lindsay, you're on mute.

Holmes, Lindsay 18:57

Sorry about that. Somebody had to do that, didn't they? So yes. Good afternoon, everybody. I'm. I'm Lindsay Holmes. I work with Defra's resource and resource and waste team. My background is as a data analyst and probably following a bit of theme actually. As Jenny has discussed, waste tracking also has quite a strong data angle to it. So just through this slide here I just want to describe an outline made the. Primary drivers for waste tracking. So we we produced roughly an estimated 220 million tonnes of waste in the UK each year. That's a really, really high figure there. The the things that are driving waste tracking really date back from our resource and waste strategy that we launched towards the end of 2018. And from that there are a number of strategies and policies deriving from that that you may well. Heard of particularly the collection and packaging reforms and the extended producer responsibility reforms and deposit return schemes and simpler recycling are some of the primary ones. One of the other large drivers is around waste crime, so there's we estimate something like a billion pounds.

It cost waste crime cost the UK each year in clean up costs and lost tax revenues. The waste crime can arise from a number of different activities related to fly tipping, illegal waste sites, illegal waste sorts, and there's it's actually connected with serious and organised crime there. So and a recent report from the Environment Agency. Has estimated that almost a fifth of all waste of all waste produced in England. Maybe illegally managed?

The other main driver that is supporting waste track waste was waste tracking is the move towards the circular economy this it. From this we mean where there are opportunities to use waste products in place of raw materials. At the heart of waste tracking as well as I described to start with is about improving the time, the timeliness quality and.

Accuracy of of the waste data. So from from from this.

The timely information transparency and oversight providers there with opportunities

to help tackle wave waste crime it can.

Support improved policy making and and and evaluation, including some business decisions as well on infrastructure.

We also hope as well that it will provide opportunities for us to be able to bring in internal efficiencies and also reduce duplicated efforts on on the waste businesses reporting into either Defra itself or the various agencies or other other government departments on their on their data we have.

We we have quite a number of areas where there are.

Gaps or inconsistencies in data, so particularly working together across all of the UK, we hope to be able to harmonise and simplify some of the processes, as well as improve oversight of our of our data.

So.

That is me and I will hand over now.

Pratt, Gillian 22:57

Hi, it's back to me again.

So our ways of working it, it's critically important to us, obviously to deliver great platforms and products, but it is also important to us to have a good relationship with the contractor we choose.

So we're looking for the importance of how we go about delivery as well. And we have taken a strong learning approach here. We're looking for transfer of skills, so. We want to deliver products, but we also want to learn about how they are configurable and how to do that for ourselves. We want an open and honest approach including, you know, sort of a good focus on positive behaviour and interactions. And we see this as a collective endeavour or a series of collective endeavours where we will want to work in partnership with the supply that we appoint. So.

Please bear that in mind. It's important to us how we go about this as well as what we produce. And I'm going to hand to John on agility and then it's back to me for governance.



Bishop, John 24:15

OK, Tom. Yeah. So just a quick counter through this. I'll talk less than hopefully the slides are there. We do recognise that we need to work in sort of bimodal fashion. So we will still have some waterfall, but as Julian has already said, this is very use and

needs led. So agile techniques may and are more appropriate in many cases. So we really want to sort of see suppliers that can support both.

And know when to use the appropriate methods that can advise us and help us in understanding how those methods should be applied to get the most delivered in the shortest possible time and using minimum possible resources. However, we do also recognise that there are constraints technology wise around standards around security that also need to be addressed, but we really are looking for suppliers who can help us.

Within the commercial constraints of whatever framework we go with.

Can really come up with ways that will help us drive forward stuff, as I say, to deliver to our our customers needs as quickly as possible and and that will not always necessarily be the same way every time. And I'll hand back to Julian.

Pratt, Gillian 25:39

Thank you, John. So finally the last ways of working that we wanted to raise with you was around governance.

And as you can see, we have three separate programmes, albeit that they have good inter inter.

Good relationships between them and transferability. So two of the programmes, environment monitoring and planning and regulatory services programme are within the EEA, the Environment Agency and Waste tracking is within Defra, but each has its own programme board so.

We do come together as part of this contract arrangement. We have a design and architecture group that looks at the benefits of consistent consistency, the consistent approach and the sorts of things that John's been talking about. We have a delivery group that has oversight of the statements of work.

The plans.

The pace of delivery we review behavioural aspects.

And we also monitor and manage the money. And then finally, we have an oversight group which has the three Sr OS from the three programmes, which is an escalation route really. We have full oversight of the contract and it is to this group that any resolution would be sought if there are any issues within the design architecture. Delivery groups.

For them to escalate for resolution.

So that's it from me and I think I now hand back to Tom, is it?



Dubberley, Tom 27:24

Thank you, Julian.

So.

Everyone. I'm gonna do a quick counter through of the commercial approach. So thank you every every so much for all of your feedback, suggestions, points on some of the approaches that we put to you in the pre market engagement questionnaire, it was very much appreciated. So just to recap on a few things, we will either utilise a crowd Commercial Services framework or the restricted procedure. I am fully aware that the new regulations are coming, so that might be changed slightly in terminology, but not in what we intend to do. So with the duration. It's likely to be a term such as two years plus 1 + 1 + 1, but your feedback on this has been given and we're discussing internally to come up with the correct approach that meets both customers needs.

And works within commercial tunnelships we've got.

The budget has been finalised. We will publish this as soon as we can because I know that some something, a lot of people have been asking for details on and the ITT submission, the invitation to tender submission information will be shared as soon as possible for planning purposes via contract Finder etcetera. So that people are fully aware of the approach.

So.

Transition.

Just to touch on, as there's an incumbent supplier, if a new supplier is awarded this contract, there will need to be a transition period. I am speaking to a lot of experts on the call who I'm sure are fully versed on transition and I want to just make sure that we recap the duration of this is obviously key. We've asked and received feedback about what transition duration you might be thinking of.

But would appreciate any more thoughts from the market.

The question that we're looking for from the market is what would you need from the buyer to ensure the success of transition?

There I'm sure a lot of experts on the call have worked in in on contracts in procurement where transitions haven't gone as well and obviously we are always looking to build on lessons learned. So that's always fantastic.

There, it's also important to point out that this will likely be scored as part of the price evaluation.

So it is really important it.

So bringing us to a close so stage two next steps. So stage two in the industry brief. So once this session is closed, we will look to send out the slides and make available a recording of this brief.

If we're allowed to, and if security allow us to. If not, I will fully publish the transcript so you can review, but the slides will be made available to everybody and I am planning to do that via contract Finder, so everything will be shared in the same way as it has been shared previously.

Now clarification questions that I mentioned at the start of this call, I will ask that for 1200 hours tomorrow that you start asking clarification questions.

These will be captured and reviewed and answers given the deadline for asking these will be 5:00 o'clock on the 27th of August, so next Tuesday and we will make available the responses to this by twelve 1200 hours on the 30th of August. So next Friday and then next steps will then be shared with the market. There is a potential that we might do another request for information that's slightly more specific, but that hasn't been.

Guaranteed at this moment.

So at this point that is the end of my slides. So thank you ever so much everybody for attending.

I will. We've cancelled through that a lot quickly. A lot quicker than I thought we would. And so I will end the call there. Thank you ever so much for attending. OK, brilliant. Thank you. Thanks very much.

Tushar Kamble 32:06 Thank you.

Ajidahun, Okunola 32:08 Thank.

Dubberley, Tom stopped transcription