Department for Environment Food & Rural Affairs

Sustainable Environmental Regulatory and Digital Solutions (SERDS)

Stage 2 - Industry Brief

Environment Agency

Forestry Commission

NATURAL ENGLAND

Agenda:

- Industry Briefing – how will the session work and how will it help us?
- Business Strategy and Needs
- High Level Architecture
- Delivery
  - RSP
  - EMP
  - WT
- Ways of working
  - Relationship
  - Agility
  - Governance
- Commercial Approach
- Transition
- Next Steps

Industry Briefing – Why are we here?

- Thank you for attending this Session
- The Session will be conducted as a closed brief to the Market, working through the Agenda that has been shared with you
- By Closed Brief, we ask that questions are not asked in the session due to time restrictions – in the next steps at the end of this presentation, we will communicate the process
- Can we ask that microphones and cameras are kept silent to ensure the best connection?
- This session will be recorded – if you are uncomfortable with this, please raise your hand now

Business Strategy and Needs

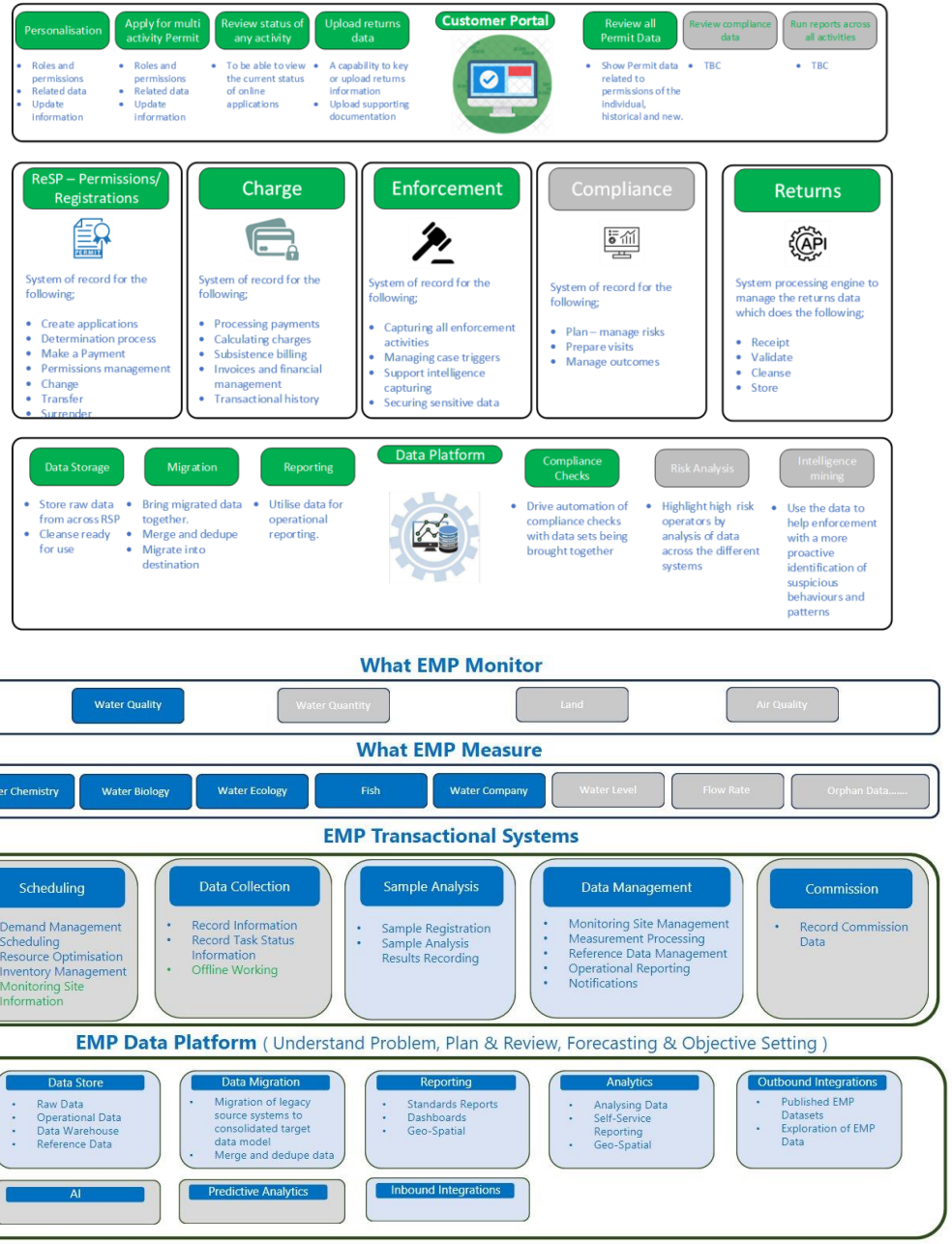
High Level Architecture

Key Technologies

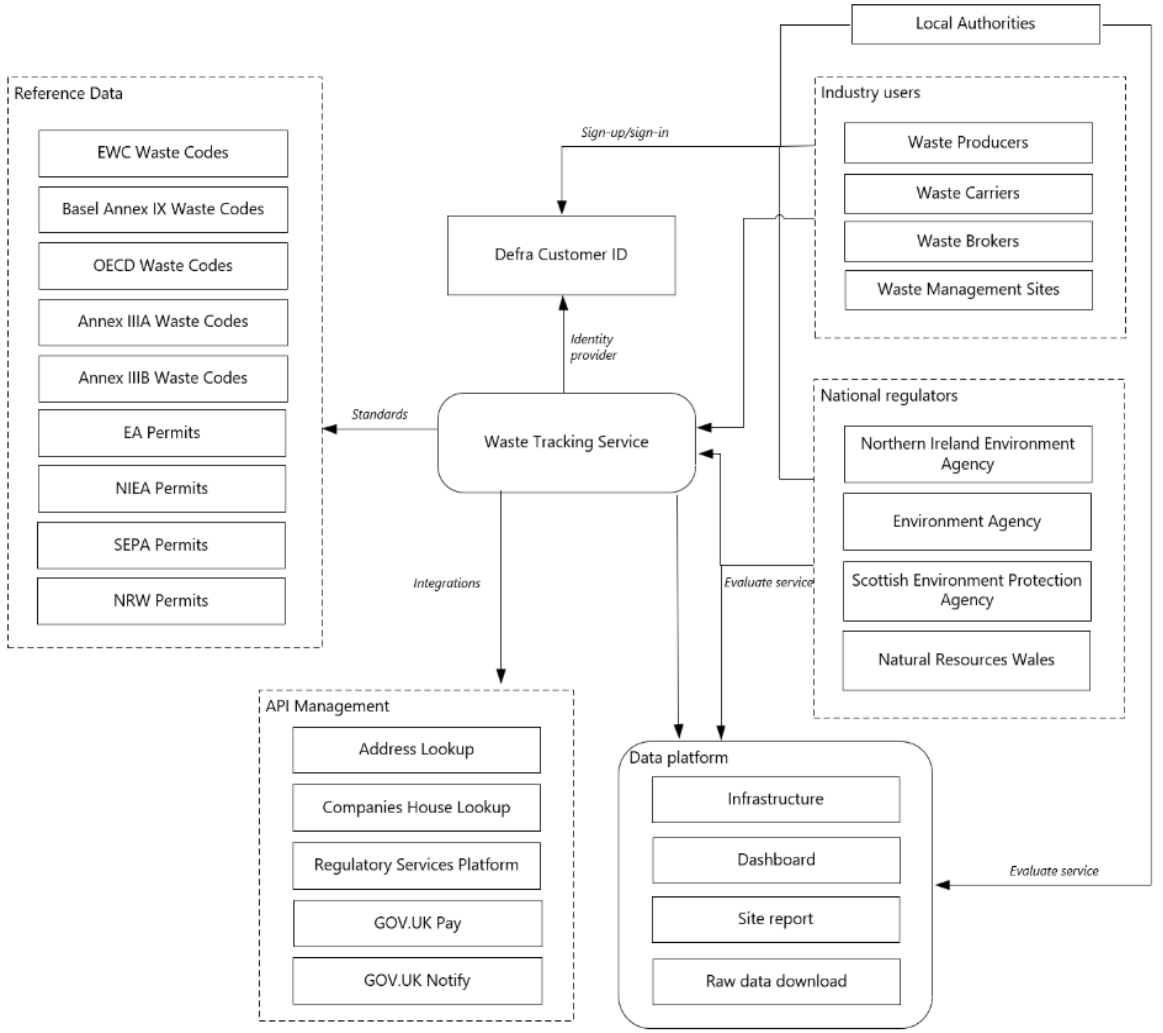
- Core internal Platforms are mainly built using Microsoft Technologies including Power Platform, Office, SharePoint and Azure Services, Dataverse is used for operational data storage.
- Other technologies in use include Boomi, 1Spatial 1Integrate, Safe Software FME, esri ArcGIS.
- Public facing interfaces are currently built using technologies such as React, Teleportal, NextJS, NodeJS, Kubernetes, NGinX on Azure and integrate with DEFRAs common identity management platform.
- The platforms are required to interface with many internal and external data sources built using a variety of technologies and of various ages.
- Development is managed using Azure DevOps and other common testing, pipeline and deployment tools.
- Services must align with Government standards & guidelines around security, accessibility, usability, maintainability etc as published by GDS, NCSC and others.

High Level Architecture

RSP & EMP Platforms Summarised



Waste Tracking – Business Context Diagram



Delivery

The Regulatory Services Programme

RSP is the primary delivery vehicle for digital environmental regulation transformation. This includes delivery of all digital regulatory needs in **the Plan for Water, Waste Regulatory Reform, and other Environmental Permitting Regulatory programmes.**

Deliver the digital and data tools for effective regulation	• Delivering the customer and internal facing digital needs that underpin permitting transformation. • Making sure the EA can undertake its enforcement role, in particular dismantling organised crime groups. • Implementing intelligence tools that provide colleagues with the awareness of potential safety issues. • Putting in place the data analytics capabilities that help automate performance data in real-time.
Reduce likelihood of environmental incidents	• Identifying potential compliance breaches much sooner through new enhanced data and analytics capabilities, reducing the potential cost of cleanup. • Making sure resources are focussed on the biggest risks to the environment through better understanding of risk.
Safeguard income	• Mitigating risk of not being able to bill & collect £350m annual income by implementing new charging, billing & payments services. • Acting upon Information Commissioner's Office recommendations and avoiding data protection related fines. • Avoiding any potential reduction in income from partners (Proceeds of Crime Act) with the EA not having the digital and data capabilities in place.
Deliver a common approach to digital in E&B	• Deliver a common approach to digital in Environment & Business (E&B) by re-using existing capabilities to help deliver development applications effectively eg Development Planning Services (DPS) replacement.

Having one delivery programme ensures that we have a consistent, fit for purpose set of digital capabilities and business processes that underpin environmental regulation.

Environment Agency

Environment Monitoring and Planning Programme

Data driving delivery

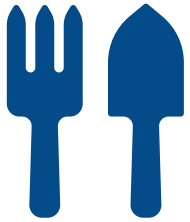
Phase 1 outcomes

Focus is on WIMS, MIDAS, NCS, MSIS, EcoSys, BioSys, NFPD, and Water Company Monitoring Data

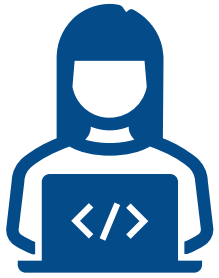
Build a scalable, effective, place-based platform

Secure and consolidate water monitoring data into one platform…

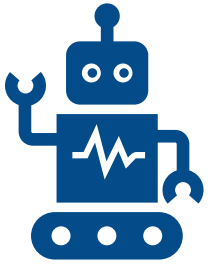
with immediate time savings



Provide easy-to-use, adaptable tools for collection and reporting



Enabling analytics capabilities for advanced users through access to the data



Enable innovative and advanced technology

EMP Environment Agency

Environment Monitoring and Planning Programme

Future phases

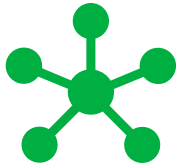
Enable a flexible, efficient monitoring commission

Integrate Environmental objectives from all plans

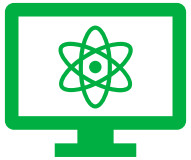
Enable pro-active, multi-criteria decision making to target interventions

Understand the effectiveness of planning measures

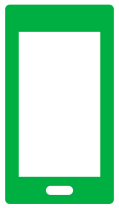
Turn data into insights to lead the environmental narrative



Enable effective two-way data-sharing and partnership delivery



Provide the tools and governance for data science innovation



Deliver paperless field data collection to remove errors at source

Continue to replace legacy systems and import orphan datasets

EMP Environment Agency

Digital Waste Tracking Service

Reducing Waste Crime – flytipping, illegal waste sites, organised crime and illegal waste exports

Estimated **220 million tonnes** of waste generated in the UK each year

Environment Agency survey of informed stakeholders estimate that **almost a fifth of all waste** produced may be illegally managed

Support legislative requirements and key Government Policies and Strategies, including a shift to the circular economy

£1 billion estimated cost of waste crime to the UK each year in clean up costs and lost tax revenues

Data quality – access to timely, robust and relevant data for policy decision making and evaluation and regulatory intelligence and informed business investment decision

Realise resource efficiencies, harmonise processes and reduce duplication

Digital Waste Tracking Service

Current status and delivery focus

- Waste Tracking has completed alpha service assessments
- The part of the service covering green list waste exports is in private beta
- UK Waste is in design and early build

Overall current focus is on

- Data ingestion (single record, csv and API)
- Fixed annual charge and transaction level regulatory charges for hazardous waste
- Basic data outputs and reporting

For later

- Ability to understand waste flows and treatment across the chain
- More extensive data outputs/reporting
- Charging for other categories of waste

Ways of Working

- Relationship
- Agility
- Governance

Ways of Working

Agility: Maximise Flexibility and Flow

- The programme recognises the need to work in a bimodal fashion with some solutions being built using “traditional” waterfall approach while others are built and evolved using more “agile” ways of working.
- In some cases, there may transition between waterfall and agile, for instance, when an MVP is so large that it does not make sense to break it down into “sprints” and have the overheads of an agile methodology such as Scrum/Kanban etc but may then go on to be evolved in a way that delivers value in a more frequent manner.
- Potential suppliers must be able to show a good understanding of agile, waterfall and lean methodologies and be able to guide the programme in which to apply when looking at a solution. When considering which approach to apply it should be demonstrated that the following has been considered: **achieving delivery of the maximum customer value, in the shortest possible time and using the minimum possible resources** whilst complying with the security, technology and governance requirements and constraints set by DEFRA.
- Another key consideration when suggesting a way of working is how to ensure dependencies across teams can be minimised in such a way as to avoid teams being blocked in working on multiple solutions simultaneously.

Commercial Approach

- Will either utilise a Crown Commercial Services Framework or the Restricted Competition
- Duration – likely to be a term such as 2 + 1 +1 + 1 – feedback on this has been given and we will discuss internally
- Budget – is being finalised
- ITT Submission Information will be shared as soon as possible for planning purposes

Transition

- As there is an incumbent supplier, if a new supplier is awarded this contract, there will need to be a transition period
- The duration of this is key – we have received feedback on this but would appreciate thoughts from the market
- What would you need from the Buyer to ensure the success of this?
- This will likely be scored as part of the Price Evaluation

Stage 2 Next Steps

- Once this session is closed, we will look to send you out these slides and make available a recording of this Brief
- We ask that from 1200hrs tomorrow, you ask Clarification Questions to Tom Dubberley – tom.dubberley@defra.gov.uk
- The deadline for asking these from Suppliers will be 1700hrs on the 27th August
- The Buyer will make available the responses to these on Contracts Finder by 1200hrs on the 30th August
- Next Steps will then be shared with the Suppliers