



Department
for Environment
Food & Rural Affairs

Defra Group Management Consultancy Framework: Project Engagement Letter











Completed forms and any queries should be directed to Defra Group Commercial at DgCConsultancy@defra.gov.uk

Engagement details			
Engagement ref #	DPEL_61539_016		
Extension?	No	DPEL Ref.	DPEL_61539_016
Business Area	Defra Floods and Water		
Programme / Project	Water Quality/Water Targets		
Senior Responsible Officer	[REDACTED]		
Supplier	Deloitte		
Title	Evidence assessments to support Defra Water Quality		
Short description	Quantification of the impact of water habits and identification of metrics to estimate uptake and compliance of on-farm measures for water quality.		
Engagement start / end date	Proposed start date 23/02/2022	Proposed end date 29/04/2022	
Funding source (CDEL/RDEL)	Defra		
Expected costs 21/22	£70,200		
Expected costs 22/23	£6,887.50		
Expected costs 23/24			
Dept. PO reference			
Lot #	Lot 1		
Version #	0.1		



Approval of Project Engagement Letter

By signing and returning this cover note, Defra Water Quality accepts the contents of this Project Engagement Letter as being the services required and agrees for Deloitte to provide the services in accordance with the agreed Supplier Proposal under the overarching contract (Lot 1 - Ref 28595), with Defra Group and confirms the availability of funding to support recharge for the services.

Signatures		
Supplier	Business Area	Defra Group Commercial
 By: _____ <i>Signature</i>	B 	
or and on behalf of Deloitte LLP  	For and on behalf of Water Quality, Floods and Water Directorate, Defra  	Defra Group Commercial   
15 February 2022	17 February 2022	18 February 2022
Supplier engages with Business Area to complete. Once agreed, Supplier signs front page and sends to Business Area	Business Area signs front page and sends to DgC	On approval, DgC signs and returns copy to Business Area and Supplier

Supplier contact: 

Business Area contact: 

1. Background

Firstly, managing headroom and capacity our sewerage networks is an ongoing challenge both in 'normal' operating conditions as well as under extreme weather patterns. In addition, future challenges including creep, growth and climate change continue to influence network performance and serviceability. Households can play their part supporting the management of discharges from their properties under normal and extreme weather conditions, benefitting customer bills and personal sustainability as well as the local resilience of the sewerage network by increasing headroom and capacity, but also contributing to more strategic benefits within a catchment by reducing flow and load at treatment works and managing runoff which contributes to sewer overflow activity.

Secondly, we want to better understand the uptake of voluntary on-farm measures and compliance with current nutrient management regulations to accurately predict and mitigate the nutrient pollutant loads from agriculture to the water environment. The primary source of guidance mitigation measures is the latest (2011) Defra Mitigation Manual, which presents 83 mitigation (options) to reduce diffuse water pollution, air pollution and greenhouse gas (GHGs) emissions. The aim is to help users in developing policies and selecting suitable mitigation methods to meet the inter-acting and occasionally conflicting obligations. There is potential for alternative data sources (e.g. earth observation or commercial data) to be used in future to help assess uptake of some of these farm practices. The advantages of satellite earth observations are that they are systematic and frequent and can be made uniformly over larger areas. Satellite observations increasingly contribute to monitoring global climate and environment and to mapping resources and have been used extensively to provide information on agriculture in a variety of applications.

2. Statement of services

Objectives and outcomes to be achieved

First focus area:

- Better understand the impact of consumer water habits on our sewerage networks, including under extreme condition scenarios

Second focus area:

- Better understand the uptake of voluntary on-farm measures and compliance with current nutrient management regulations to accurately predict and mitigate the nutrient pollutant loads from agriculture to the water environment

Scope

In order to answer the first focus area above, the project team will gather evidence on water habits and their impact and conduct modelling to generate a Benefits Report for Household Water Efficiency and Runoff Management including case studies. It is proposed that the following steps will be undertaken:

1. Kick Off and Scoping meeting
2. Evidence Gathering - Household Water Saving Options Analysis – Review of different options and their impacts on demand, consumption and energy efficiency at a domestic level



3. Evidence Gathering - Household Runoff Management Options Analysis – Explore Domestic SuDS retrofit options and benefits for stormwater management under normal and extreme conditions
4. Establish domestic consumption model which can be extrapolated to regional level
5. Establish Domestic Runoff Model which can be extrapolated to regional level
6. Develop scenarios for regional impact and uptake % to establish strategic impacts on Metrics.
7. Real world benefit Case Study Catchment – ‘Normal’ Conditions – At a catchment level, what difference do these measures make to more complex benefits e.g. Asset Performance, Compliance and efficiency – Likely to be related to historical or typical annual rainfall records simulated through a hydraulic model. – Needs a WASC Hydraulic Model
8. Real world benefit Case Study Catchment – ‘Extreme’ Conditions – Understanding benefits of SuDS scenarios on extreme rainfall flood and overflow performance – Likely to be related to design type rainfall
9. Establish potential maintenance requirement as a result of changes to network self-cleansing
10. Produce Benefits Report for Household Water Efficiency and Runoff Management – Tactical and Strategic, including challenges around uptake and behaviour to ensure benefit is leveraged.

In order to answer the second focus area above, the research team will gather evidence on on-farm mitigation measures for water quality and assess with measures could be verified or assessed using novel data sources. This will generate both a database (within a spreadsheet) of measures and their appropriateness for measurement via novel data and a summary paper setting out options, caveats, limitations and next steps. It is proposed that the following steps be undertaken:

1. Kick Off and Scoping meeting
2. Evidence Gathering - An Inventory of Mitigation Methods and Guide to their Effects on Diffuse Water Pollution, Greenhouse Gas Emissions and Ammonia Emissions from Agriculture (2011) – Review of different options and their impacts on demand, consumption and energy efficiency at a domestic level
3. Evidence Gathering – Farmscoper– explore and review additional information from the Farmscoper tool where available
4. The approach will be based on digital sources and without direct farming or agronomic agency advice, but supplemented with technical advice from AECOM counterparts in water and catchment management
5. Assess which on-farm measures could be verified or assessed using these novel data sources and support future activity if opportunities are identified, considering spatial and temporal resolution, gap filling of partial observation data, and possible limitations.
6. Initial assessment indicates that c. 12 of the mitigation methods are directly addressable and a further c. 11 more potentially addressable with earth observation (open source and/or commercial data). These c. 20+ topics will be selected as the primary focus of the study but all measures considered will be captured in the final deliverable along with high-level reasons (against criteria to be confirmed) for their inclusion or exclusion so that they can be revisited in the future.
7. For each measure, an assessment will be made of whether physical changes will be seen on the farm, what spatial scale these will be, and whether these will be temporary, seasonal or permanent (other classification may be required). The category of measurability would include indication of whether the technique: could theoretically be done, if it has been done, if it has been done and whether a public or commercial solution or tool exists to do it.



8. Consideration will also be given to the potential of artificial intelligence, machine learning and cloud computing of large data sets to verify predictions of uptake and assess extent of land use change

Commercial data from laboratories which process soil samples or sales data relating to new technologies and farm equipment may be assessed where considered appropriate

Assumptions and dependencies

- AECOM (a member of the Deloitte consortium) will be the key liaison point for the work;
- All work will be conducted remotely
- The supplier, including wider delivery team, have both the required expertise and the means to resource this project within the short timescales agreed;
- Defra will work collaboratively with Deloitte and its consortium to provide existing relevant data and documents, relevant insights from existing subject matter experts and timely feedback on draft materials to be enable us to perform the Services

Deliverables

Proposed deliverables would comprise:

Focus area 1:

Benefits Report for Household Water Efficiency and Runoff Management – Tactical and Strategic, including challenges around uptake and behaviour to ensure benefit is leveraged

Focus area 2:

A spreadsheet tabulation containing all the on farm measures considered and assessed against measurability criteria (to be decided during inception period) and references where appropriate.

A summary paper associated with the assessment of measurability of on-farm measures setting out the options, caveats, limitations and suggested next steps

Deliverable	Success Criteria	Milestone / Date	Owner (who in the delivery team?)
Project Stage A			
Working draft materials for both focus areas	Delivery of draft working materials and findings for discussion	31/03/2022	
Final deliverables (as per scope above)	Final handover of all deliverables	/04/2022	
Internal Capability Development Outcomes			
Knowledge transfer across directorate on impact of consumer water habits on our sewerage networks.	Better divisional understanding the impact of consumer water habits on our sewerage networks. Feed into government plan and policy thinking.	15/05/2022	
Insights on uptake of nutrient management measures and regulations to	Accurate prediction and mitigation of the nutrient pollutant loads from agriculture to the water environment		



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Deliverable	Success Criteria	Milestone / Date	Owner (who in the delivery team?)
Social Value Outcomes			
N/A (covered at framework level)			

Limitations on scope and change control

Unless instructions to the Supplier are later amended in writing, the work undertaken will be restricted to that set out above. In providing the services detailed above, the Supplier will be acting in reliance on information provided by the Business Area.

The Project Engagement Letter is the agreed contract of work between the Defra Group Business Area and the Supplier and can be varied under the change control process. Any changes to timescales, scope and costs will require approval by DgC.

3. Delivery team

Provide details of the agreed team members including their roles and responsibilities during the project.

Total resource	59.25/50
<u>Total days*</u> Engagement Length**	
*Total days worked across all resources	
**Total working days in engagement	

Business Area's team



4. Fees

Defra Group will reimburse the Supplier for approved work done according to the table below. The total fees for the scope of work detailed in this Engagement Letter will be £76,887.50, inclusive of expenses and excluding VAT.

Provide costs for any particular stages to the engagement.

Stage	Cost	Due (link to milestone dates)
A		DD/MM/YY
Working draft materials for both focus areas	£70,200	31/03/2022
Final deliverables (as per scope above)	£6,887.50	/04/2022
Expenses		
No expenses expected – if any are identified these will be discussed and agreed in advance but in any event will be at cost and within Defra T&S policies.	£0	
Grand total	£76,887.50	

Business Area considerations:

- Are the costs and fees appropriate (costs linked to deliverables, rates and drive value for money)?

Expenses statement

Defra Group overarching contract rates include expenses for any travel to/from any UK location defined by the Business Area as the base office for the work. Only expenses for travel at the Business Area's request from this base can be charged. If appropriate, define permissible expenses to be charged.

Payment

The Supplier should invoice fees in arrears on delivery of key milestones, which will be agreed before project commencement. Defra Group will reimburse fees monthly on confirmation of approval of work delivered by the Business Area. The Supplier will keep an accurate record of time spent by staff in providing the services and provide this information and supporting narrative, if requested.

5. Governance and reporting

Given the relatively small scale and short time-frame for completing this work, we will establish light touch governance to manage delivery. A project working group will be established which includes members of the supplier 'Delivery Team' and client 'Business Area's team'. It is planned for this group to meet once a week with the purpose of reviewing progress and providing project assurance against

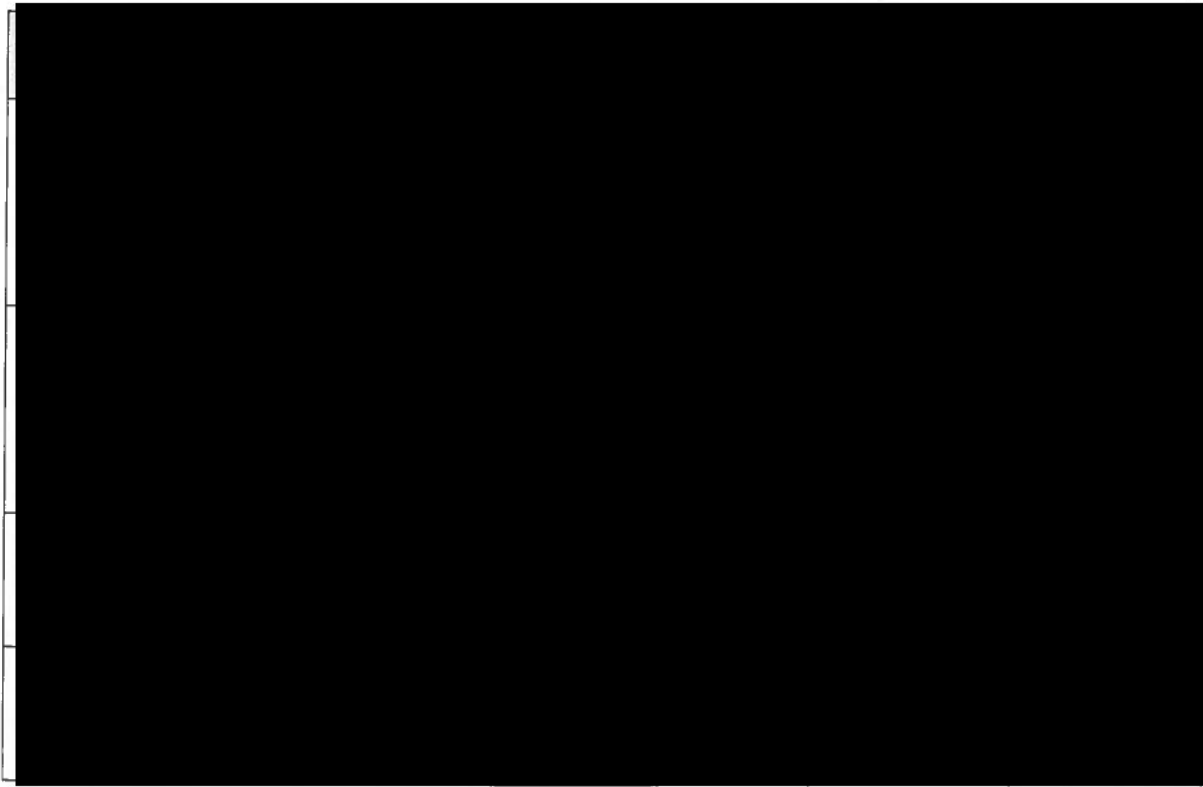
agreed outcomes and outputs. This group will be coordinated and chaired by the supplier, with support from the Defra project manager.

As part of the Call-Off Contract, the Supplier and Business Area agree to provide reporting on the following:

- Completion of the time tracker on a monthly basis, to track days worked by our consultants;
- Weekly progress update against the agreed activities and deliverables

Key Performance Indicators

Business Area and Supplier to agree any specific key performance indicators related to this specific project engagement.



Feedback and satisfaction

A project working group has been established which includes members of the supplier 'Delivery Team' and client 'Business Area's team' and which is planned to meet once a week. This working group will provide the required reporting intervals to support delivery of this project and project assurance. (see section 5). Defra Group reserves the right to hold review meetings during the assignment, discussing what went well, opportunities for improvement on future assignments and similar. This will incorporate any 'Show and Tell' documentation or transferable products that have been produced.

A post-engagement quality review of the engagement will be arranged where the Business Area rates the services provided.

Non-disclosure agreements

It is not expected that there will be a need for any additional NDA's for this project. The overarching MCF2 framework include NDAs.



6. Exit management

The agreed actions and deliverables by the Supplier for when the contract ends are as follows:

It is expected that a short review will be undertaken between the Business Area's Team, Supplier and associated delivery partners nearing completion of this work to review the report/write-up of final outputs.

Following this review and agreement of final outputs a project sign-off will be given. See above for the project's KPIs

Notice period

The nature of these engagements require that Defra Group have the ability to terminate an engagement with notice. Defra Group's termination rights for this engagement are marked below.

The minimum notice period for termination is 5 working days regardless of engagement duration.

1. Business Area identifies a potential need for delivery support, initiates a conversation with DgC, confirms which approvals are required for an engagement to occur, e.g. Consultancy Governance Board if over £100k or DgC Corporate Services Delivery Board if under £100k.
2. Request Form completed by Business Area and submitted to DgC at:
[REDACTED]
3. The form is reviewed by the DgC team around which resource route is most appropriate (e.g. Lots 1/2/3) and may request additional information/edits from the Business Area if required.
4. Lot / Supplier is selected and briefed on the request by DgC, then introduced to the requesting Business Area for further discussion and confirmation of work to be delivered
5. A Project Engagement Letter is completed by the Business Area with input from the Supplier (with supporting proposals as appropriate) and then finally agreed between the two parties, including evidence of all required approvals either being in place or being progressed (e.g. PO) and forwarded to the DgC for review by the Consultancy Governance Board (CGB). Approval states are:

Approval state	Definition	Permissions
Full approval	<ul style="list-style-type: none"> ▪ DPEL agreed ▪ DPEL signed: Supplier, Dept and CO ▪ Purchase Order number 	<ul style="list-style-type: none"> ▪ Work can start ▪ Supplier can invoice for work

