



Department
for Environment
Food & Rural Affairs

Request for Quotation

**Further Update of the UK's Persistent Organic
Pollutants Multi-Media Emission Inventory**

C5063

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SECTION 1: Request for Quotation

Title: Further Update of the UK's Persistent Organic Pollutants Multi-Media Emission Inventory

You are invited by Defra group Commercial on behalf of Defra, to submit a quotation for the requirement described in the specification below.

Please submit your quotation via the Atamis system on or before the deadline given below.

The Timetable below is subject to change by the Authority and Tenderers will be informed accordingly.

Procurement Activity	Anticipated Date	
Publish advertisement for the procurement	24/10/2022	
Deadline for clarification questions	Date	Time
	21/11/2022	14:00 GMT
Deadline for Tenders	Date	Time
	28/11/2022	12:00 GMT
Evaluation of Tenders	28/11/2022 – 08/12/2022	
Contract award notification	08/01/2023	
Contract award	16/01/2023	
Contract start date	16/01/2023	
Contract End date	31/03/2026	
Duration of Contract	38 Months	
Extension Period	Subject to the Authority's discretion	

Section	Contents	Action
1	Tender Particulars	For Information
2	Evaluation	For Information
3	Specification of Requirements	For Information

Appendices	Contents	Action
A	Form of Tender	Print, Sign, Scan and Upload to Atamis
B	Authority's Conditions of Contract	For Information
C	Commercial Pricing Proposal	Complete and Upload to Atamis
D	Staff Time in Days Template	Complete and Upload to Atamis
E	Evaluation Questions	For Information

Glossary

Unless the context otherwise requires the following words and expressions used within this Request for Quotation shall have the following meanings (to be interpreted in the singular or plural as the context requires).

Words/Expression	Meaning
"Authority"	Means the Department for Environment, Food and Rural Affairs acting as part of the Crown.
"Atamis"	Means the e-tendering system used by the Authority for conducting this procurement which can be found at http://defra.atamissolution.co.uk .
"Contract"	Means the contract to be entered into by the Authority and the successful supplier

“RFQ”	Means this Request for Quotation and all related documents published by the Authority and made available to suppliers
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Conditions applying to the RFQ

You should examine your quotation response to the RFQ and related documents ensuring it is complete prior to submitting your completed quotation.

Your quotation must contain sufficient information to enable the Authority to evaluate it fairly and effectively. You should ensure that you have prepared your quotation fully and accurately and that prices quoted are arithmetically correct for the units stated.

Acceptance of Quotations

By issuing this RFQ the Authority does not bind itself to accept any quotation and reserves the right not to award a contract to any supplier who submits a quotation.

Costs

The Authority will not reimburse you for any costs and expenses which you incur preparing and submitting your quotation, even if the Authority amends or terminates the procurement process.

Mandatory Requirements

The RFQ includes mandatory requirements and, if you do not comply with them, your quotation will not be evaluated. All mandatory requirements are set out in Atamis.

Clarifications

The Authority reserves the right to discuss, confidentially, any aspect of your quotation with you prior to any award of Contract to clarify matters.

Amendments

The Authority may amend the RFQ at any time prior to the deadline for receipt. If it amends the RFQ the Authority will notify you in writing and may extend the deadline for receipt in order to give you a reasonable time in which to take the amendment into account.

Conditions of Contract

The terms and conditions attached in Atamis (Appendix B) for Short Form (Services) will be included in any contract awarded as a result of this RFQ process. The Authority will not accept any material changes to these terms and conditions proposed by a supplier.

Prices

Prices must be submitted in £ sterling, exclusive of VAT.

Quotation Submission

Details of the Qualification, Technical and Commercial requirements can be located through the Atamis e-tendering portal (<http://defra.atamissolution.co.uk>).

Disclosure

All Central Government Departments, their Executive Agencies and Non-Departmental Public Bodies are subject to control and reporting within Government. In particular, they report to the Cabinet Office and HM Treasury for all expenditure. Further the Cabinet Office has a cross-Government role delivering overall Government policy on public procurement, including ensuring value for money and related aspects of good procurement practice.

For these purposes, the Authority may disclose within Government any details contained in your quotation. The information will not be disclosed outside Government during the procurement.

In addition, the Authority is subject to the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, which provide a public right of access to information held by public bodies. In accordance with these two statutes, the Authority may be required to disclose information contained in your quotation to any person who submits a request for information pursuant to those statutes.

You should also note that the Authority will publish the RFQ and the Contract on the Contracts Finder Website.

By submitting a quotation, you consent to these terms as part of the procurement.

Disclaimers

Whilst the information in this RFQ and any supporting information referred to herein or provided to you by the Authority have been prepared in good faith the Authority does not warrant that this information is comprehensive or that it has been independently verified.

The Authority does not:

- make any representation or warranty (express or implied) as to the accuracy, reasonableness, or completeness of the RFQ.
- accept any liability for the information contained in the RFQ or for the fairness, accuracy, or completeness of that information; or
- accept any liability for any loss or damage (other than in respect of fraudulent misrepresentation or any other liability which cannot lawfully be excluded) arising as a result of reliance on such information or any subsequent communication.

Any supplier considering entering into contractual relationships with the Authority following receipt of the RFQ should make its own investigations and independent assessment of the Authority and its requirements for the goods and/or services and should seek its own professional financial and legal advice.

SECTION 2: Specification

This section sets out the Authority's requirements.

Background

The UK is a party to the UN Stockholm Convention for Persistent Organic Pollutants (POPs). "The Stockholm Convention is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of human and wildlife, and have harmful impacts on human health or on the environment."¹

The Convention requires all Parties to eliminate and/or restrict the production, use and emissions of substances it has listed as POPs, to ensure stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner. Wastes identified as being POPs or containing POPs must be destroyed or irreversibly transformed. As part of the Stockholm Convention there are number obligations that enable the ultimate elimination of POPs and ensure parties are doing all that they can eliminate and restrict the production, use and emissions of POPs

There are currently 30 substances listed as POPs², with one³ other just listed and not yet enforced and six⁴ others going through the POPs Review Committee (POPRC) process. All Parties are free to propose new substances for listing, therefore the list of POPs and associated policy actions following these listings are continuing to grow and develop. When a substance is agreed to meet the Annex D criteria, both the Risk Profile (RP) and Risk Management Evaluation (RME) are finalised and the listing is agreed internationally, it will be listed on Annex A, B and/or C⁵ of the Convention.

The purpose of this contract is to assist the UK in meeting some these obligations to the Stockholm Convention, and in addition meeting the commitments made in the UK's National Implementation Plan (NIP) for POPs, producing evidence for the England 25 Year Environment Plan indicators and supporting the RME for a substance the UK has proposed for review as a POP.

¹ UNEP Stockholm Convention: <http://www.pops.int/TheConvention/Overview/tabid/3351/Default.aspx>

² UNEP Stockholm Convention, All POPs listed in the Stockholm Convention:
<http://www.pops.int/TheConvention/ThePOPs/AllPOPs/tabid/2509/Default.aspx>

³ UNEP Stockholm Convention, The new POPs under the Stockholm Convention:
<http://www.pops.int/TheConvention/ThePOPs/TheNewPOPs/tabid/2511/Default.aspx>

⁴ UNEP Stockholm convention, Chemicals proposed for listing under the Convention:
<http://www.pops.int/TheConvention/ThePOPs/ChemicalsProposedforListing/tabid/2510/Default.aspx>

⁵ Annex A – Elimination; Annex B – Restriction and Annex C – Unintentional production

Objectives

There are five main objectives of this contract:

1. Update and maintain a pre-existing Multi-Media Emission Inventory (MMEI) for persistent organic pollutants (POPs).
2. Estimate UK and global emissions of MCCPs (to feed into a Risk Management Evaluation (RME) for the POP Review Committee).
3. Review, verify, improve and expand a pre-existing Waste Tool for POPs.
4. Review and action the potential need to add hexachlorobutadiene (HCBd) to the MMEI.
5. Review and add emissions and sources of (some) newly listed POPs and/or substances under review by the POPs Review Committee (POPRC).

Further details of the project objectives and requirements are provided below.

Detailed requirements

There are a number of obligations of the Stockholm Convention that are directly relevant to this project, the first of specific relevance is detailed under Article 5 of the Convention⁶ which outlines the need for parties to develop and maintain source inventories and release estimates, taking into consideration the source categories identified in Annex C.

In 2007, the UK developed an inventory to assist the requirements of Article 5 of the Convention, the UK's POPs Multi-media Emissions Inventory (MMEI), a multi-vector inventory of POPs emissions. Since its development, this inventory has been expanded through the inclusion of additional POPs and it is updated and improved annually. Due to the availability of the relevant datasets, there is a 2-year delay, but it currently consists of data from 1990 to 2019 on POPs which are released unintentionally from anthropogenic sources (listed in Annex C of the Convention). This has built on the existing UK National Atmospheric Emissions Inventory (NAEI) and now reflects better knowledge of emissions from non-air vector emission sources that is used to measure progress, priorities action and fulfil several reporting requirements.

The UK's MMEI shows that estimated emissions to air, land and water for all Stockholm Convention Annex C substances have declined significantly in the UK between the period of 1990 to 2019. This is largely due to policy actions targeting major UK point sources. The magnitude of diffuse sources such as accidental house fires, used of solid fuels in domestic properties and back yard burning have also declined since 1990, but represent a more challenging set of sources to control and further minimise.

The previous contract that updated the inventory also included the addition of a first set of emission estimates for open-sources of PCBs from paints and sealants. This programme

⁶ Article 5 Measures to reduce or eliminate releases from unintentional production

also included a new tailored approach for the dioxin-like PCB emission inventory to take the existing approach from European Monitoring and Evaluation Programme (EMEP) tier I (basic) to EMEP tier II (intermediate). Targeted improvement of the existing inventories and expansion of the time-series to include data for 2017 has also been completed, along with further review and update of emission factors for fly-ash associated with municipal solid waste (MSW) incineration from energy-from-waste plant.

The second objective of the last contract was to develop and establish a multi-media release inventory for POPs added to the Stockholm Convention at the Conference of the Parties (COP) 8 and COP 9, held in 2017 and 2019 and other POPs being reviewed by the POPs Review Committee. This led to the development of a multi-media emission inventory for pentadecafluorooctanoic acid (PFOA) its salts and PFOA-related and persulfluorohexane sulfuric acid (PFHxS), its salts and PFHxS-related compounds. The PFOA inventory includes the management of PFOA-related compounds which degrade to form PFOA under natural processes. A novel approach was used to create this inventory, whereby PFOA and its salts has been considered as one item and POFA-related as the second item. Data from the UK Chemicals Investigation Programmes (CIP) have been used to assist in validation of the estimate produced for water.

The MMEI allows the UK to fulfil two reporting tasks, the first being under Article 15 of the Convention⁷. This requirement occurs every 4 years. Parties report on the measures they have taken to implement the provision of the Stockholm Convention and on the effectiveness of such measures in meeting the objectives of the Convention. The data submitted includes statistical data on its total quantities of production, import and export of each of the chemicals listed in Annex A and Annex B or a reasonable estimate of such data. Additionally, data are requested on the emissions of Annex C POPs, these data are taken directly from the MMEI. The second reporting task is an obligation outline in Article 13 of the UK POPs Regulations⁸. This reporting is both annual and triannual, with the MMEI data being required for the triannual reporting. Reporting of this will completed later this year with the next report being due in 2025.

Table 1 The Reporting requirements for the next 5 years

Year	Stockholm Convention Article 15 (every 4 years)	UK POPs Regulation – Annual Reporting	UK Regulations – POPs Triannual Reporting
2022	5 th Cycle due 31 st August	2021 data due	2018, 2019, 2020 emissions data due
2023	N/A	2022 data due	N/A
2024	N/A	2023 data due	N/A
2025	N/A	2024 data due	2021, 2022, 2023 emissions data due
2026	6 th Cycle likely due 31 August	2025 data due	N/A
2027	N/A	2026 data due	N/A

⁷ UNEP Stockholm Convention, National Reports:

<http://www.pops.int/Countries/Reporting/NationalReports/tabid/3668/Default.aspx>

⁸ The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020:

<https://www.legislation.gov.uk/ukxi/2020/1358/regulation/19/made>

A further use for the data from the MMEI is within England's Outcome Indicator Framework for the 25 Year Environment Plan (25 YEP). Specifically, for the H3 indicator: Emissions of mercury and persistent organic pollutants to the environment⁹.

In addition to Article 5 of the Convention, Article 7 regarding Implementation Plans is relevant to this contract. The UK's National Implementation Plan (NIP), which was initially published in April 2007, updated in 2013, 2017 and most recently in 2021¹⁰. The NIP outlines what the UK has done to meet the obligations of the Convention and what the next steps to be taken in the management of POPs, including future research and initiatives to address further unintentional emissions of these substances. An update is required when there is a change to the convention, for example listing of new substances. The source and emissions data from the MMEI is relevant for updating the UK's NIP.

The UK NIP 2021 (published in 2022) recommends a number of measures for future work, these are summarised in the plan in Annex III pages 62-63, the commitments that have specific relevance to this contract are as follows:

- Review the need for the addition of HCBd to the UK emissions inventory
- Development and maintenance of multimedia emissions inventory for new and existing POPs (years 2020, 2021, 2022 and 2023)
- Review, verify and improve the POPs Waste Tool

In 2021, the UK nominated medium chain chlorinated paraffins (MCCPs) to be listed as a Persistent Organic Pollutant (POP) on the Stockholm Convention.

Therefore, Defra needs to understand the uses, alternatives, and potential implications of a ban for the UK. This information is submitted to the Convention via an Annex F form. As the nominating party for MCCPs, the UK (Defra) is also responsible for preparing the Risk Management Evaluation (RME) for consideration by The POPs Review Committee (POPRC). This is compiled from the Annex F forms received by the Convention following the invitation sent to all parties to the Convention and stakeholders.

Currently, MCCPs are undergoing the review process and have already passed the screening dossier phase (which determined they meet the POP criteria). An intersessional working group has been formed to develop the risk profile. This is drafted using the Annex D proposal and the information provided in Annex E forms, which parties and stakeholders were invited to submit through a call for information that was circulated after POPRC-17 (January 2022).

The risk profile for MCCPs was recently agreed at POPRC-18 (September 2022), meaning the UK is in the process of gathering evidence to enable the drafting of the RME. The main drafting of this RME is being completed under a separate contract, however we require information on the emissions of MCCPs to be completed by this contract.

⁹ Defra. 25 Year Plan: H3: Emissions of mercury and persistent organic pollutants to the environment:
<https://oifdata.defra.gov.uk/8-3-1/>

¹⁰ UNEP Stockholm Convention. National Implementation Plans:
<http://www.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx>

The third objective of the previous MMEI contract was to develop a waste tool to enhance predictions of the future waste flows of POPs against assumed bank supplies of in-use goods. The POPs included so far in the waste tool are PCBs, decaBDE and HBCDD. The methodology used to create the waste tool for these three POPs has used data from inventories and additional data and intelligence gathering from both trade associations and published literature. The PCB tool was developed initially to corroborate the elimination of PCB from in-use sources (di-electric). To complete this, the contractors undertook stakeholder engagement with both the energy networks and UK hazardous waste sector. Data was gathered to improve the methodology for assessing the emission from the equipment still in use. The primary driver for the development of this tool was the commitments made in England's 25 Year Environment Plan (25YEP) to substantially increase the amount of POP material being destroyed or irreversibly transformed by 2030. There was a need to understand the current rate of destruction of POPs and where action could be targeted to best meet the commitment of destroying more of them. It is the aim the data derived from the tool will be used in the Outcome Indicator Framework (OIF) for 25YEP, specifically the J5 Indicator: Prevent harmful chemicals from being recycled¹¹. The data for PCBs has been validated through consultation with industry, however the estimates made for HBCDD and decaBDE are based solely on the inventory reporting. Further work is required to further refine the tool for these existing POPs, engaging further with stakeholders and to add at least a further two more POPs, one of the PFASs and a chlorinated paraffin.

¹¹ Defra, 25 Year Plan. J5: Prevent harmful chemicals from being recycled: <https://oifdata.defra.gov.uk/9-5-1/>

Scope

- **Work package 1:** Update and maintenance of the multimedia emissions inventory

The objective of this work package is to maintain and further improve the IT infrastructure for a multimedia release inventory for the Annex C POPs (unintentionally produced POPs) together with appropriate memoranda of understanding with the key data providers through the National Atmospheric Emissions Inventory (NAEI) infrastructure.

The work programme should include the following tasks:

- a) To update the multi-media release inventory to extend the European Pollutant Release and Transfer Register (E-PRTR) to the requirements of the Stockholm Convention for dioxins, PCBs and HCB and other listed POPs, using the relevant guidance¹² and updated guidance¹³ discussed at COP 10 prepared by the Convention.
- b) Where needed, to enter into memoranda of understanding with data providers to provide, subject to any confidentiality agreements, data on sources and release routes of POPs.
- c) Use the guidance prepared by the Convention¹⁴ on the national reporting to maintain the Stockholm Convention multimedia release inventory infrastructure and to allow the Authority to extract the data to prepare the report to be submitted under Article 15 of the Convention.

Outputs

- a) Multimedia inventory covering air, water and land for all Annex C POPs and consistent in form and content with previous inventories.
- b) Review and update any existing emission factors and evaluate the uncertainties.
- c) Project annual reports setting out a multimedia release inventory structure for the POPs listed above.
- d) Annual report detailing how key areas of uncertainty in the existing inventories have been addressed and text interpretation of the trends. It must provide a complete record of all the methodologies used during the update. Following agreement with Defra the contractor must provide Defra with an electronic version of the report.

¹² UNEP Stockholm Convention. BAT and BEP Guidance:

<http://www.pops.int/Implementation/BATandBEP/Guidance/Overview/tabid/5121/Default.aspx>

¹³ UNEP Stockholm Convention. Tenth Meeting of the Conference of the Parties to the Stockholm Convention.

Working Documents:

<http://www.pops.int/TheConvention/ConferenceoftheParties/Meetings/COP10/tabid/8397/Default.aspx>

¹⁴ UNEP Stockholm Convention. Reporting – Guidance:

<http://www.pops.int/Countries/Reporting/Guidance/tabid/3670/Default.aspx>

f) Provision of ad hoc advice and scheduled advice prior to the Conference of the Parties (COP) meetings and during the drafting of the update of the NIP, opinion and information to the Defra-nominated officer and the devolved administrations in relation to the subject area as may reasonably be required.

g) Submission of relevant data from the emissions inventory in the required format for periodic reporting as required under the terms of the Stockholm Convention and UK POPs regulation.

h) As well as the above vectors, the inventory should also cover products and residues in the case of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF), polychlorinated biphenyls (PCB), pentachlorobenzene, hexachlorobenzene, hexachlorobutadiene and polychlorinated naphthalenes.

- **Work package 2:** Emissions on MCCPs for the RME

The aim of the second work package is to provide estimates for releases of MCCPs. These are required at a UK level, to fulfil the requirements of the Annex F form.¹⁵ Estimates are also required at a global level. Along with information gathered in the Draft Risk Profile¹⁶, these will allow the completion of the MCCPs RME dossier, which as the nominating Party, the UK (Defra) are drafting to be assessed under the POPs review process.

The work programme should include the following tasks:

a) Provide estimates for releases (discharges, losses and emissions) of MCCPs to the environment per year in the UK. State the level of uncertainty and provide a range if more appropriate.

b) These estimates should be disaggregated to show all uses, lifecycle stages, and release routes, stating identified source locations and any gaps in the estimates.

c) Provide estimates for releases (discharges, losses and emissions) of MCCPs to the environment per year globally. State the level of uncertainty and provide a range if more appropriate.

d) These estimates should be disaggregated to show all uses, lifecycle stages, and release routes, stating any gaps.

- **Work package 3:** Review, verify, improve and expand the POPs Waste Tool

The current Waste Tool is described above (Section 1a), the information on the current POPs (HBCDD, PCBs and DecaBDE) need to be verified and improvements made where

¹⁵ UNEP Stockholm Convention, Annex F Form:

<http://chm.pops.int/TheConvention/POPsReviewCommittee/Meetings/POPRC17/POPRC17Followup/tabid/9096/Default.aspx>

¹⁶ UNEP Stockholm Convention, Draft Risk Profile for chlorinated paraffins (CPs) with carbon chain lengths in the range C14-17 and chlorination levels at or exceeding 45 per cent chlorine by weight:

<http://chm.pops.int/TheConvention/POPsReviewCommittee/Meetings/POPRC17/POPRC17Followup/tabid/9096/Default.aspx>

needed. This will require direct engagement with relevant stakeholders for example hazardous waste operators. Using recent sampling studies on POPs in Waste Electrical and Electronic Equipment (WEEE)¹⁷ and Domestic Seating¹⁸, to further update the Tool.

Following on from the improvement of the current tool, two new POPs should be added, these will include a PFAS POP and chlorinated paraffin POP, the specific substances to be added to the tool will be discussed and agreed upon at the inception meeting at the start of the project, as it might be seen as most appropriate to select MCCPs as the chlorinated paraffin candidate as this is the UK's proposal currently sitting with the POPs Review Committee, information from work package 2 could directly inform this work and possibly also work package 5.

As the outputs of the Waste Tool are being fed into the 25 YEP indicator work, the contractors will be expected to provide appropriate support and summary text to allow the data to be published accurately.

The outputs to this work package include, the updated and improved spreadsheets for PCBs, DecaBDE and HBCDD as well as a report detailing the methods used, clearly referenced data sources and the details of the stakeholders engaged, taking into account any agreement regarding anonymity. The new spreadsheets for the chlorinated paraffin and PFAS POP substance should also be provided with reports detailing fully referenced data sources, methodology and a text summary of the trends, including recommendations for future improvements.

Work Package Outputs

a) Updated and improved spreadsheets for PCBs, DecaBDE and HBCDD along with an associated report detailing the methods used, clearly referenced data sources and the details of the stakeholders engaged.

b) New spreadsheets for the two new POPs with two associated reports detailing the methods used, clearly referenced data sources and the details of the stakeholders engaged. The spreadsheets should contain estimates of the quantity of POPs being destroyed or irreversible transformed within a set period, e.g. annual prediction from the year production/use started, including a future prediction of when the POPs contents is no longer predicted to be a cause for concern.

- **Work package 4:** Review and action the potential need to add hexachlorobutadiene (HCBD) to the MMEI

In 2015, at COP 7, HCBD was added to Annex A of the Stockholm Convention without any specific exemptions. In 2017, at COP 8 it was agreed that HCBD should also be listed on Annex C of the Convention. HCBD has been added to the UK POPs legislation, which lists

¹⁷ An Assessment of the levels of POPs in waste electronic and electrical equipment in England and Wales: <https://icer.org.uk/wp-content/uploads/2020/03/UC14161.3-An-assessment-of-the-levels-of-persistent-organic-pollutants-POPs-in-waste-electronic-and-electrical-equipment-in-England-and-Wales-FINAL-REPORT.pdf>

¹⁸ An Assessment of POPs in domestic seating: https://www.circularonline.co.uk/wp-content/uploads/2021/10/WRC-Final-Report_UC15080.5_An-assessment-of-persistent-organic-pollutants-in-waste-domestic-seating_270521.pdf

substances subject to release reduction provisions requiring regular assessment of the need for the mandatory monitoring of this substance.

The production of chlorinated solvents has been identified as a possible source, as HCBd is formed as an unintentional by-product. Industry estimates from EuroChlor suggest this has decreased to negligible levels¹⁹. A table of estimated unintentional global releases of HCBd was included in the UK's 2017 update to its NIP.

Waste streams containing HCBd from the on-going production of certain chlorinated hydrocarbon may still have to be considered.

HCBd is currently not included in the MMEI, the purpose of this work package would be to review need for the addition of HCBd to the inventory.

Work Package Outputs

- a) A report detailing estimates of UK emissions of HCBd and recommendations of whether there is need for it to be included in the inventory.
- **Work package 5:** Emissions and sources of newly added POPs (the substances currently being reviewed for listing as POPs are: UV-328 Methoxychlor, Dechlorane Plus, LC-PFCAs, Chlorpyrifos and MCCPs, any new proposals from other parties to the Convention will be announced ahead of the POPRC meetings, therefore August 2023 and 2024)

The purpose of this work package is to continue the work from the previous contract to establish release inventories for some of the newly proposed and newly listed POPs to the Convention. This is to build a UK evidence base of key sources and releases to environment of these substances. This evidence base will help inform Defra of the potential environmental releases and burden of these substances, helping to inform future monitoring campaigns and policy action. Data from this evidence base will be fed into the POPs Review Committee (POPRC) process and updates to the UK's NIP and will be used to identify where the substance/s might be present in specific waste streams, highlighting gaps in the evidence needed to determine waste limits. Ideally, this work would be initiated at the point of a new nomination being made public via the Stockholm Convention website, typically, each July/August prior to the POPRC meeting in September/October of the same year. However, it is impossible to predict if any new proposals will be made and what substances will be proposed for listing by any of the Parties to the Convention. However, having this information available at this initial stage will enable Defra and the Environment Agency to focus any sampling projects needed, for example the sampling recently done to determine POPs in waste domestic seating.

Initially, the consultants will discuss with Defra regarding the priority of these substances considering the outcomes of the POPRC meeting in September 2022, with a minimum of

¹⁹ EuroChlor (2004). Hexachlorobutadiene – Sources, environmental fate and risk characterisation. Science dossier. Available online: <https://www.eurochlor.org/wp-content/uploads/2019/04/sd5-hexachlorobutadiene-final.pdf>

two new inventories being compiled throughout the duration of this contract. Previous work has been completed on perfluorooctanoic acid (PFOA) its salts and PFOA-related compounds and perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds. It is considered likely that any information gathered for this work package could also be relevant for the waste tool, therefore cost efficiencies could be considered here if the same substances were covered for this work package and the waste tool.

The work programme should include the following tasks:

- a) Review all POPs (including any newly listed or substances proposed for POPs listing and prioritising those without existing emission inventory data) to determine evidence gaps and potential risk of emissions to the environment.
- b) Review the uses, waste streams and releases of the newly listed POPs or substances proposed for POPs listing selected for assessment to air, land and water to produce a comprehensive list of release routes for the UK environment.
- c) Establish emission factors for sources releasing to air, land, water, products and residues for the newly listed POPs or substances proposed for POPs listing selected for assessment.
- d) Provide an outline of a methodology for collecting additional information on air, land, water, product and residue releases with view to updating the established inventories.
- e) Scope an outline of work required to monitor releases from both industrial and diffuse emission sources which could be used to test estimates.
- f) Provide recommendations on how to improve the inventory

Work Package Outputs

- a) Table summarising the main sources of activity data, waste streams and emissions factors that will be used to compile the POPs emissions inventories. The table should summarise from where this information is to be sourced, how it is to be managed (i.e. metadata management processes), how it will be processed into an emissions inventory format and how it will be reported.

Project Deliverables and Milestones

Break clauses are required to ensure Defra is not committed to a contract with a duration period that exceeds individual financial years. These will be in place throughout the duration of the project, with one present in each of the following financial years from 2023/24 onwards. The tenderer is expected to bid for the work planned to be completed within in each financial year (costed separately). The deadlines for each milestone can be agreed with Defra. The table below provides an indicative timetable based on current expectations.

Milestones	Deliverables	Deadline
Inception meeting	Kick off meeting with project steering group and suppliers	January 2023
Work Package 1	The updated emissions inventory for 2020 – Report and updated spreadsheets/inventory	March 2023
Work Package 2	Emissions estimates for MCCPs as part of the UK led RME	February 2023
Provision of advice	Advice relating to the contract during the process of updating the NIP	January-March 2023
Work Package 1 & 3	Provide text and review data for the 25 YEP indicator	March 2023
Meeting (Pre-COP)	Meeting to discuss relevant COP agenda items with Defra POPs team and Defra International Teams and the suppliers	April 2023
Work Package 3	Update to current Waste Tool	May 2023
Six monthly progress meeting	Contract progress meeting with the steering group and suppliers	June 2023
Work Package 1	The updated emissions inventory for 2021 – Report and updated spreadsheets/inventory	July 2023
Work Package 3	Addition of chlorinated paraffins to the Waste Tool	December 2023
Six monthly progress meeting	Contract progress meeting with the steering group and suppliers	January 2024
Work Package 1	The updated emissions inventory for 2022 – Report and updated spreadsheets/inventory	March 2024
Work Package 1 & 3	Provide text and review data for the 25 YEP indicator	March 2024

Work Package 4	Review and action the potential need to add hexachlorobutadiene (HCBd) to the MMEI	May 2024
Six monthly progress meeting	Contract progress meeting with the steering group and suppliers	June 2024
Work Package 3	Addition of PFOA/PFOS to the Waste Tool	September 2024
Six monthly progress meeting	Contract progress meeting with the steering group and suppliers	January 2024
Work Package 1	The updated emissions inventory for 2023 – Report and updated spreadsheets/inventory	March 2025
Six monthly progress meeting	Contract progress meeting with the steering group and suppliers	June 2025
Provision of advice	Advice relating to the contract during the process of updating the NIP	March – May 2025
Work Package 1&3	Provide text and review data for the 25 YEP indicator	March 2025
Meeting (Pre-COP)	Meeting to discuss relevant COP agenda items with Defra POPs team and Defra International Teams and the suppliers	April 2025
Work Package 5	Sources for the newly added POPs/existing POPs	December 2025
Six monthly progress meeting/Final meeting	Contract progress meeting with the steering group and suppliers	January 2026
Contract end		March 2026

Governance

The project will be managed within Defra's POPs and Chemical in Waste Team (Key contact: Liz Lawton). There will be monthly progress update calls between the consultants and Liz Lawton. There will be planned 6-monthly progress meetings between the consultants and the project steering group. The project steering group will consist of Defra POPs scientific expert, Defra economist, Defra POPs Policy Lead, Environment Agency Chemicals Strategic and Regulation Planning Lead, representatives from other competent authorities and potentially a Defra Air Quality representative (link to the NAEI). The consultants will prepare reports for each of the individual work packages, the emissions inventory update being supplied each year of the contract, noting that two updates are needed within the first year of the contract. Additional meetings are planned to be held prior

to the Conference of the Parties to discuss any relevant COP meeting agenda items, for example any items relating to the inventory, use of the emissions data (Reporting under Article 15), there is addition of provision to review and revise text and interpretation for the H3 and J5 indicators and advice during drafting of future updates of the NIP.

There will also be support on the risk management areas from the Chemicals Strategic and Regulation Planning team at the Environment Agency who has the relevant expertise and has been involved in the previous contracts.

Duration

- Work Package 1: January 2023 – December 2025
- Work Package 2: January 2023 – March 2023
- Work Package 3: April 2023 – December 2025
- Work Package 4: January 2024 – May 2025
- Work Package 5: January 2024 – December 2025

Technical Requirements

Technical evaluation

The information received in the Tender submission will be evaluated against the following contract award criteria and weightings:

- Technical (Quality) – 70% weighting of overall score. This is broken down as specified in the table below.
- Commercial (Cost) – 30% of overall score (further details provided below).

The Tender submission comprises information submitted for the technical criteria (described below) and commercial (cost) criteria (described below). **Please note that information on prices should not be included with the information provided for the technical criteria.**

Scoring Criteria – Technical Evaluation

The Technical Evaluation will be scored as follows:

Scoring Criteria (for information)

- **For a score of 100:** Excellent - Response is completely relevant and excellent overall. The response is comprehensive, unambiguous and demonstrates a thorough understanding of the requirement and provides details of how the requirement will be met in full providing additional added value.
- **For a score of 70:** Good - Response is relevant and good. The response demonstrates a good understanding and provides details on how the requirements will be fulfilled.
- **For a score of 50:** Acceptable - Response is relevant and acceptable. The response provides sufficient evidence to fulfil basic requirements.
- **For a score of 20:** Poor - Response is partially relevant and/or poor. The response addresses some elements of the requirements but contains insufficient / limited detail or explanation to demonstrate how the requirement will be fulfilled.
- **For a score of 0:** Unacceptable - Nil or inadequate response. Fails to demonstrate an ability to meet the requirement.

If a Tenderer receives a 'Fail' in question E01 and E02 they will be eliminated from the procurement.

To meet minimum standards for this Request for Quotation, if a score of 20 or less is awarded for one or more of the technical criteria (E03 to E06), the Tender will be rejected.

Commercial Evaluation

The calculation used is the following:

$$\text{Score} = \frac{\text{Lowest RFQ Price}}{\text{RFQ Price}} \times 30\% \text{ (Maximum available marks)}$$

For example, if three RFQ Responses are received and supplier A has quoted £3,000 as their total price, supplier B has quoted £5,000 and supplier C has quoted £6,000 then the calculation will be as follows:

$$\text{Supplier A Score} = £3000/£3000 \times 30\% \text{ (Maximum available marks)} = 30\%$$

$$\text{Supplier B Score} = £3000/£5000 \times 30\% \text{ (Maximum available marks)} = 18\%$$

$$\text{Supplier C Score} = £3000/£6000 \times 30\% \text{ (Maximum available marks)} = 15\%$$

Suppliers are required to submit a total fixed cost for completion of the project. In each case, the breakdown of costs must list separately staff costs, travel and subsistence, materials, subcontracts and reports. This information must be provided in respect of any sub-contractors who will be employed for the purposes of the proposed Contract. The suppliers must also state whether VAT is applicable.

Costs will need to be reasonable and competitive, and offer value for money. Travel and subsistence costs must be at Civil Service standards rates or less as detailed in attached Appendix F.

Please complete the pricing schedule (provided in Appendix C) providing prices in £Sterling and excluding VAT. Please upload a copy to the commercial envelope of the Atamis e-tendering platform only.

Prices submitted should not include any pricing assumptions and should detail exactly what has been included in the price submitted. Any assumptions should be clarified during the clarification period.

2.1. Details of the technical criteria and information requirements/Questions

E01 - Sustainability - Pass/Fail

The Authority has set itself challenging commitments and targets to improve the environmental and social impacts of its estate management, operation, and procurement. These support the Government's green commitments. The policies are included in the Authority's sustainable procurement policy statement published at:

<https://www.gov.uk/government/publications/defra-s-sustainable-procurement-policy-statement>

Within this context, please explain your approach to delivering the services and how you intend to reduce negative sustainability impacts. Please discuss the methods that you will employ to demonstrate and monitor the effectiveness of your organisation's approach.

Your response should:

- Demonstrate that the Tenderer has a sustainability policy in place; and
- Provide evidence as to how the Tenderer will reduce the environmental impacts of delivering this contract.

A “fail” will be allocated to a response that does not demonstrate any evidence of addressing sustainability.

E02 – Equality and Diversity

Tenderers should provide details of suitably robust procedures for equality and diversity, including how they will **conduct measurements** in a safe manner.

A “Fail” will be allocated to a response that does not demonstrate any evidence of addressing equality and diversity.

If a Tenderer receives a ‘Fail’ in any of the questions E01 - E02 they will be eliminated from the procurement.

If a Tenderer scores 20 or less using the ‘Scoring Criteria’ in Section 2: Tender Evaluation (Paragraph 1.8); for any of the questions E03-E06 the Authority may choose to reject the Tender.

Technical evaluation questions and scoring

The technical evaluation will account for 70% of the total marks.

E03 - Understanding of the Policy, Delivery and Evidence Requirements

(Weighting: 25%)

- Based on the specification provided, please set out your understanding of the policy, delivery and evidence requirements for this project and the issues and technical challenges it presents.

Evaluation criteria

Your response should demonstrate:

- An expert working knowledge and previous experience on constructing and maintaining emissions inventories, detailing quality assurance approaches and methods used.
- Knowledge of the UK’s obligations under the Stockholm Convention, commitments made via the UK’s NIP for POPs and Defra’s on-going commitments from the 25 Year Environment Plan and associated indicators.
- Demonstration of a clear understanding of POPs reporting requirements under both the Stockholm Convention and the UK POPs Regulations.

- A detailed understanding of the issues surrounding POPs in waste.
- Knowledge of POPs in articles, and sources into the environment.

Your response must be a maximum of 2 sides of A4, Arial font size 12, excluding the list of the most recent publication, references and CVs. Links to other documents will not be considered as part of your response e.g. links to published documents online. Please upload a document with the filename: "E03 – Your Company Name"

E04 - Approach and Methodology (40%)

Based on the Specification of Requirements provided, please provide details of the approach and methodology proposed to deliver the project.

Your response must be a maximum of 5 sides of A4, font size 12. Any responses exceeding 5 sides of A4 will not be evaluated beyond the last page. Please upload a document with the filename: 'E04_Your Company Name'.

Evaluation criteria

Your response should:

- Clearly set out your approach and provide a detailed methodology for each work package, demonstrating a clear understanding of the technical requirement needed to deliver a successful outcome. Please explain how your approach and methodology will meet our requirements.
- Detail ways in which cost savings could be made, considering the frequency of inventory updates and keeping the updates aligned with the reporting schedule (Table 1 of the Project Specification). Demonstrate how data gathered and tools generated for the contract can be used to inform more than just work package.
- State what will be delivered and when (broken down by objective and task) and indicate the interdependence of milestones. The approaches and work plan will be included in the contract issued to the successful Supplier, therefore please restrict your entry to the salient points and set these out clearly and concisely, using Gantt charts/flow charts as appropriate.
- Outline how you would work with key stakeholders throughout the project including policy leads and ALBs including plans for any engagement activities with industrial stakeholders.

E05 - Experience and Expertise (Weighting 25%)

The project will require knowledge and experience of work related to the Stockholm Convention, POPs (chemical properties, environmental impacts, use and sources to the environment, and issues relating to POPs in waste), emissions inventories, technical report writing as well as presentation and communication of technical material.

Please outline your proposed project team with details of expertise and previous experience relevant to this project. You may provide a short CV for each member of the proposed team, outlining their expertise in relation to the project (Maximum 1 page per person). Please upload a document with the filename: 'E05_Your Company Name'.

Please indicate the number of days allocated per staff member under each work package. Tenderers should ensure that the detail corresponds with the commercial submission for staff costs. Please name all members of the proposed team, outlining their respective roles, responsibilities and grade and identifying Key Personnel.

If using a consortia or sub-contracting approach, please include information on all partners/sub-contractors, justification for their inclusion, and the skills and experience members will bring to the project team.

Evaluation Criteria

Your response should:

- Identify all key staff (including sub-contractors), detailing the number of years they have been involved in similar activities and identify their roles within this project, and demonstrate that the project team is well suited to achieving the projects objectives.
- Demonstrate that the project team provides value for money whilst retaining a good balance of expertise on the more challenging tasks.
- Demonstrate that the project team have specific expertise and technical skills in key areas.
- Demonstrate that the project team have suitable experience for the tasks required, by listing some relevant completed work.
- Provide details of staff development to maintain or improve the expertise of the project team throughout the duration of the contract. This should include a demonstration of completion of (or commitment to undertake) roster of experts training and up skilling of existing workforce.

E06 - Project management & Risk Management (Weighting 10%)

Please provide information on how you will plan, manage and deliver this project. Please upload a document with the filename: 'E06_Your Company Name'.

Evaluation Criteria

Your response should:

- Include a project plan and a Gantt chart to show key timelines and milestones.
- Please provide a description of the staff cover for the different work packages.
- Include details on the quality assurance processes in place to ensure that the final outputs are robust.
- Include an organogram showing the project management structure and lines of communication and reporting, including the periodic update meetings specified in the Project specification.
- Include an assessment of risks to the project, including specific reference to Covid-19 risks and how these will be managed and mitigated.

Appendices

APPENDIX A

FORM OF TENDER

To be returned by **12:00** GMT on **28 November 2022**

TENDER FOR THE: **Further Update of the UK's Persistent Organic Pollutants Multi-Media Emission Inventory**

Tender Ref: **C5063**

1. We have examined the invitation to tender and its schedules set out below (the **ITT**) and do hereby offer to provide the goods and/or services specified in the ITT and in accordance with the attached documents to the Authority commencing (**Date to be confirmed**) for the period specified in the ITT.
 - Tender Particulars (Section 1)
 - Specification of Requirements (Section 2)
 - Evaluation (Section 3)
 - Form of Tender (Appendix A)
 - Authority's Conditions of Contract (*Appendix B*)
2. If this tender is accepted, we will execute the Contract and any other documents required by the Authority within 10 days of being asked to do so.
3. We agree that:
 - a. before executing the Contract substantially in the form set out in the ITT, the formal acceptance of this tender in writing by this Authority or such parts as may be specified, together with the documents attached shall comprise a binding contract between the Authority and us;
 - b. pursuant to EU Directive 1999/93/EC (Community Framework for Electronic Signatures) and the Electronic Communications Act 2000, the Contract may be executed electronically using the Authority's electronic tendering and contract management system, Atamis;
 - c. we are legally bound to comply with the confidentiality provisions set out in the ITT;
 - d. any other terms or conditions or any general reservation which may be provided in any correspondence sent by the Authority in connection with this

procurement shall not form part of this tender without the prior written consent of the Authority;

- e. this tender shall remain valid for 120 days from the closing date for tenders specified in the ITT; and
- f. the Authority may disclose our information and documents (submitted to the Authority during the procurement) more widely within Government for the purpose of ensuring effective cross-Government procurement processes, including value for money and related purposes.

4. We confirm that:

- a. there are no circumstances affecting our organisation which could give rise to an actual or potential conflict of interest that would affect the integrity of the Authority's decision making in relation to the award of the Contract; or
- b. if there are or may be such circumstances giving rise to an actual or potential conflict of interest, we have disclosed this in full to the Authority.

5. We undertake and it shall be a condition of the Contract that:

- a. the amount of our tender has not been calculated by agreement or arrangement with any person other than the Authority and that the amount of our tender has not been communicated to any person until after the closing date for the submission of tenders and in any event not without the consent of the Authority;
- b. we have not canvassed and will not, before the evaluation process, canvass or solicit any member or officer, employee or agent of the Authority or other contracting authority in connection with the award of the Contract and that no person employed by us has done or will do any such act; and
- c. made arrangements with any other party about whether or not they may submit a tender except for the purposes of forming a joint venture.

6. I warrant that I am authorised to sign this tender and confirm that we have complied with all the requirements of the ITT.

Signed

Date

In

the

capacity

of

**Authorised to sign
Tender for and on**

behalf of _____

Postal Address _____

Post Code _____

Telephone No. _____

Email _____

Address:

APPENDIX B

AUTHORITY'S CONDITIONS OF CONTRACT

This Document is available on ATAMIS Portal

APPENDIX C

Commercial Pricing Proposal

This Document is available on ATAMIS Portal

APPENDIX D

Staff Time in Days Template

This Document is available on ATAMIS Portal

APPENDIX E

Technical Evaluation Questions

This Document is available on ATAMIS Portal

APPENDIX F

Travel and subsistence (included for reference purposes only)