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Planning

CO2 Condenser - Preliminary Market Engagement

UK Industrial Fusion Solutions Ltd

UK2: Preliminary market engagement notice - Procurement Act 2023 - <u>view information</u> <u>about notice types</u>

Notice identifier: 2025/S 000-063751

Procurement identifier (OCID): ocds-h6vhtk-05abab

Published 9 October 2025, 2:05pm

Scope

Reference

PP-UKIFS-460

Description

The following summary is not intended as a complete or definitive specification of the requirement. A purpose of this engagement notice is to seek information from the market to help refine our understanding and aid the development of a future specification.

UKIFS is seeking experts to support the design and development of a CO2 condenser that is part of the STEP power cycle. This is because a high-performance CO2 condenser is critical to the efficiency of the STEP powerplant (supercritical and/or transcritical CO2 power generation cycles are currently the preferred concept for the STEP prototypic plant). The proposed technical and operating conditions of the proposed CO2 condenser are:

•Operating pressure is between ca. 60-100 bar for the CO2 stream

- •Operating inlet temperature will be between ca. 50 110 °C. The outlet temperature will be between ca. 20-25 °C for the CO2 stream.
- •Thermal duty is in the range of 1-2 GWth.
- •The equipment must comply with UK pressure equipment regulations.

Note: both wet and dry cooling options are of interest, as are both existing and novel technologies or design approaches.

For more information about this opportunity, please visit the Delta eSourcing portal at:

https://ukifs.delta-esourcing.com/tenders/UK-UK-Abingdon:-Engineering-design-services./2HE569TDE9

To respond to this opportunity, please click here:

https://ukifs.delta-esourcing.com/respond/2HE569TDE9

Total value (estimated)

• £0 including VAT

Above the relevant threshold

Contract dates (estimated)

- 1 April 2026 to 31 March 2027
- 1 year

Main procurement category

Services

CPV classifications

- 71320000 Engineering design services
- 71323100 Electrical power systems design services
- 71323200 Plant engineering design services

Contract locations

• UK - United Kingdom

Engagement

Engagement deadline

6 November 2025

Engagement process description

Scope of Preliminary Market Engagement Activities:

This Preliminary Market Engagement (PME) exercise is intended to gather information from potential suppliers regarding the design and development of CO2 condensers. The engagement is currently expected to take place in two stages: The first stage involves a written submission via the questionnaire, which should be returned by 13:00 hrs on 6 November 2025. The second stage will be an online presentation (delivered by UKIFS) and Q&A session that multiple suppliers may attend. This is expected to take place during the week commencing 24 November 2025 (indicative only).

For the avoidance of doubt: Suppliers who wish to attend the presentation and Q&A session will need to confirm that they wish to participate by indicating this within the questionnaire and submitting this via Delta as directed.

Supplier's who do not to respond to this notice are NOT thereby excluded from any

subsequent tender process for this workstream.

As part of this PME, UKIFS may carry out a range of activities. These may include, but are not limited to: issuing follow-up questions to suppliers and reviewing their responses; engaging in discussions with suppliers either collectively or individually, such as through webinars or workshops; seeking feedback on proposed requirements; exploring procurement approaches; identifying potentially suitable suppliers; assessing market capacity; and discussing possible contractual terms. PME may also be used to support the development of award criteria and the refinement of tender documentation.

Any information provided in this notice, such as CPV codes, estimated contract values, anticipated contract dates and durations, and proposed engagement timelines - are indicative only and based on UKIFS's current understanding. These details may be subject to change. The purpose of PME is to improve our understanding of the market, refine our requirements, and shape our procurement strategy. The list of activities included here is illustrative rather than exhaustive, and the nature, extent and timetable of engagement may evolve in line with UKIFS's needs.

Contracting authority

UK Industrial Fusion Solutions Ltd

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Contact name: Operational Procurement

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Region: UKJ14 - Oxfordshire

Organisation type: Public undertaking (commercial organisation subject to public authority oversight)