TETRA TECH

Request for Proposals

RFP-UESP-2020-027

Activity Title: "Clearing system for a clearing institution"

Issuance Date: December 9, 2020
Deadline for Receipt of Questions: January 8, 2021 at 14:00
Proposal Conference: January 22, 2021 at 14:00
Closing Date and Time: February 5, 2021 at 14:00

Issuance of this RFP does not constitute an award commitment on the Tetra Tech ES, Inc., nor does it commit to pay for any costs incurred in preparation or submission of comments/suggestions of a proposal. Proposals are submitted at the risk of the offerors. All preparation and submission costs are at the offeror's expense.

TETRA TECH

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1. INTRODUCTION

The purpose of this RFP is to solicit proposals for **clearing system software for a clearing institution** within the Scope of Work (SOW) specified in the **Attachment A – Technical Specification** within the Energy Security Project implementation funded by the U.S. Agency for International Development (USAID) and implemented by Tetra Tech ES, Inc. (Tetra Tech).

In March 2020, the Tetra Tech issued Request for Information (hereby "RFI") to seek information on available clearing system software solutions, be it off-the-shelf software, custom developed software or customizable software.

The objectives of the RFI were obtaining information about:

1. Current products available.
2. Off-the-shelf and minimally customized software and systems that will assist with clearing of energy contracts.
3. Potential solution providers.
4. Operation, maintenance, and support features and costs.

As a result of the RFI, Tetra Tech has reviewed the responses to the RFI, discussed it with stakeholders and developed this RFP.

2. OFFEROR'S QUALIFICATIONS

Offeror must provide the following information and references in order to be qualified for the procurement process:

1. Company's information, including official registered title, type of business, address, and contact person information.
2. Organization's DUNS number or evidence of process of registering for DUNS number. Please request instructions for DUNS number registration from UESPprocurement@tetratech.com if needed. Active DUNS number or evidence of process of registering for DUNS number is required at stage of submitting proposal. DUNS Number shall be active and SAM.gov registration completed before finalization of subcontract agreement.
3. A short description of the company and of past similar experience in providing the services described in the **Attached A -Technical Specification**.
4. Overall technical approach to fulfill the specifications defined in **Attachment A – Technical Specifications**.
5. Certification that company is not owned or controlled in total or in part by any entity of any government.
6. The Offeror shall complete and sign the Representation and Certifications found in **Attachments C** to this document and include them with the Offeror's proposal. Proposals that do not include these certifications will not be considered.
7. Offerors listed in the Excluded Parties List System will not be considered. The Excluded Parties List can be found at https://www.sam.gov/SAM/pages/public/searchRecords/searchResults.jsf

3. SOURCE, ORIGIN AND NATIONALITY RESTRICTIONS

The USAID authorized geographic code for the Energy Security Project is 935. Code 935: Consists of any area or country including the cooperating country, but excluding the "prohibited sources"

Reference: USAID ADS Chapter 310, and all its sub-sections. These documents are available on the Internet.

4. SUBMISSION OF PROPOSALS

All proposals are due on **February 5, 2021** by no later than **14:00** local time in Ukraine. Proposals must be submitted via e-mail at the address **UESPprocurement@tetratech.com** in the following formats: Adobe Acrobat and Microsoft Word and/or Excel.

All proposals must fully respond to the Technical Specifications enclosed as **Attachment A** and must include quotes in the format provided in the **Attachment B** - **Table 1 Detailed Cost Proposal**. Proposals received after the above-stated due date and time will not be considered for this procurement.

5. QUESTIONS AND CLARIFICATIONS

All questions or clarifications regarding this RFP must be in writing and submitted, in English, to **UESPprocurement@tetratech.com** on **January 8, 2021** no later than **14:00** local time in Ukraine. Questions and requests for clarification, and the responses thereto, will be circulated to all RFP recipients.

Only written answers from ESP Procurement Office of Tetra Tech will be considered official and carry weight in the RFP process and subsequent evaluation. Any answers received outside the official channel, whether received verbally or in writing, from employees or representatives of Tetra Tech, or any other party, will not be considered official responses regarding this RFP.

5.1 Proposal Conference.

A proposal conference will be held virtually (Webex or Skype) on **January 22, 2021** at 14:00 to provide interested offerors an opportunity to learn more about the Energy Security Project and to ask any questions about this RFP and the solicitation process. Tetra Tech welcomes any organization to attend this proposal conference. Pre-registration to attend the proposal conference is required. Please email your registration request and any advance questions by **January 8, 2021** 14:00 to UESPprocurement@tetratech.com.

Written notes from the proposal conference will be provided electronically to all registered offerors, including those offerors who submitted written questions prior to the proposal conference, but were unable to attend the proposal conference in person.

Written questions received will be shared exactly as written to **UESPprocurement@tetratech.com.**

6. PROPOSALS PREPARATION INSTRUCTIONS

All Offerors must follow the instructions set forth herein in order to be qualified for the procurement process. If an Offeror does not follow the instructions set forth herein, the Offeror's proposal may be eliminated from further consideration or the proposal may be downgraded and not receive full credit under the applicable evaluation criteria.

Separate Technical and Cost Proposals must be submitted. All proposals should be submitted in English and be signed by Offerors.

I. TECHNICAL PROPOSAL

The proposals will be scored on a 100-point scale. Available points for each evaluation factor are given below. Offerors must address each evaluation factor.

The suggested outline for the technical proposal is stated below:

A. Organization's Information

- Organization's information, including official registered title, type of business, list of offices if applicable, address, telephone, fax and website.
- Organization's DUNS number.
- Authorized point of Contact with phone number(s) and email address.
- Experience of the firm of at least 5 years in the public and private sector

B. Technical Capability

Description of proposed solution or solutions to be delivered, the system architecture and the detailed technical environment required for the implementation and putting into operation the solution. The solution to be fully in line with the Scope of Work and Technical Specifications enclosed as **Attachment A.**
Offerors must be ready for an interview and demonstration of their solution to Tetra Tech over MS Teams or another platform upon respective request from Tetra Tech.

C. Technical Approach

Present a narrative that describes how the Offeror would implement the tasks identified in the scope of work. This narrative must also include:

- A management approach and methodology which describes how the Offeror will manage the delivery of the services and how the Offeror will interact with the ESP and involved parties.
- A realistic high-level draft work plan that outlines the proposed activities over the course of the period of performance: project life cycle, project milestones, breakdown of main tasks in the scope of work, training plan, migration and go live plan. At the start of the project, the Offeror shall produce a detailed schedule.
- Software development methodology, tools and configuration management.
- User interface design.
- Proposed performance indicators to measure the impact of the Offeror's planned activities and the progress of the contract performance.
- Software development testing (including acceptance testing, the NSSMC and clearing institution acceptance). The Offeror should also prepare an acceptance testing plan that will be discussed and approved with the NSSMC and clearing institution.
- Installation support, migration and go live support.
- Description of documentation (not limited to installation instruction document, design document for the solution, test plans, baseline release document, manuals and used guides, technical documentation, correspondence, training materials etc.). All project documentation will be provided by the Offeror in English and Ukrainian. The documentation must be delivered no later than the end of the acceptance test.

- Software operational environment requirements.
- Software deliver media (the Offeror shall identify the media by which the solution, source code and all supporting documentation will be delivered).
- The Offeror shall specify trainings that it intends to supply. The trainings to include both business and IT training. The training should give the users and IT personnel the required knowledge to operate and handle the system in a correct and efficient manner. All training materials will be provided by the Offeror in English and Ukrainian.
- Warranties.

Information which the Offeror considers proprietary, if any, should be clearly marked "proprietary" next to the relevant part of the text and it will then be treated as such.

D. Proposed Staff

Offerors must appoint a project team, led by a Project Manager on their behalf. This project manager should present and defend the providers proposal (same person during the tender and the project itself).

The Offeror's Project Manager will manage the project from start to finish and will be the point of contact between all parties involved in the project on behalf of the Offeror. The Project Manager will have more than 5 years of experience in managing complex IT implementation projects in the financial and related sectors.

Offerors also to present a narrative that includes the following:

- Team composition (names, specialties/area of expertise, position/role, etc.), with detailed bios, and task assignments to perform the activities described in the SOW.
- Curriculum Vitae (CV) for all labor categories named in the Attachment A. (CVs shall be limited to 3 pages each) that describes their experience and lists the following:
    - Affiliation/Organization
    - Education
    - Years of Professional Experience
    - Relevant Experience to the SOW in this RFP
    - Fluency in English

In addition to presenting the CVs, offerors should complete and include the table below:

Proposed Personnel's Name, Last Name	Proposed Position Under This Assignment	Qualification	Years of Professional Experience

E. Company Past Performance

Offerors should provide a summary of similar assignments for clearing institutions or stock or commodity exchanges (other trading platforms) and financial sector including the Title, Client, Date, and a brief description.

The qualifications section is limited to 5 of the most relevant studies or other assignments for clearing institutions or stock or commodity exchanges (other trading platforms) performed in the last 5 years, presented in the following table format. If the client is confidential, simply list "confidential".

Project (task) name (title)	Description of the project (task) and services provided	Client name, phone number and email address	Start and end dates of the project	Value of the contract

II. FINANCIAL PROPOSAL

a. Detailed Cost Proposal

Offeror shall complete the **Table 1 of the Attachment B - Detailed Cost Proposal** in order to allow Tetra Tech ES, Inc. to compare all quotes and make a competitive selection. The proposal should be provided in Excel format with unlocked cells and formula.

A price must be provided for each project component to be considered compliant with this request. The price proposal shall also include a proposal narrative that explains the basis for the estimate of every cost element or line item. Supporting information must be provided in sufficient detail to allow for a complete analysis of each cost element or line item. Tetra Tech reserves the right to request additional cost information if the evaluation committee has concerns of the reasonableness, realism, or completeness of an Offeror's proposed price.

Offeror shall provide unit pricing in **US dollars (USD).** Prices quoted in this document shall be valid for a 120-day time period, include all taxes and other costs but excluding the VAT tax originated in Ukraine.

b. 1420 Forms for the proposed personnel

For each staff member proposed, the Offeror shall submit a completed and signed USAID 1420 forms.

USAID form 1420 can be downloaded here: https://www.usaid.gov/forms/aid-1420-17

c. Proposed Billing Rates Certification

Document on company letterhead certifying the labor rates being proposed are standard rates and have been previously billed to clients for similar work.

d. Representations and Certifications

These documents can be found in **Attachments C** of this RFP and must be submitted as part of the Cost Proposal.

e. Non-government owned certification

Certification that company is not owned or controlled in total or in part by any entity of any government.

f. Certificate of current cost or pricing data

These documents can be found in **Attachments D** of this RFP and must be submitted as part of the Cost Proposal.

Under no circumstances may cost information be included in the technical proposal. No cost information or any prices, whether for deliverables or line items, may be included in the technical proposal. Cost information must only be shown in the cost proposal.

7. EVALUATION CRITERIA

Award will be made to the offeror representing the best value in consideration of past performance, qualifications, and price factors. Technical criteria are more important than cost, although prices must be reasonable and will be considered in the evaluation. Offeror are encouraged to provide a discount to their standard commercial rates.

Tetra Tech reserves the right to conduct discussions with selected offeror (s) in order to identify the best value offer. Award of any resulting Subcontract Agreement shall be made by Tetra Tech on a best value basis. Tetra Tech reserves the right to request a test assessment from offerors to assess their qualifications.

The submitted technical information will be scored by an evaluation committee using the following technical evaluation criteria (70 points) and cost proposal (30 points).

Given the specific expertise required to perform the services in question only offers with a technical score of 60 points or more will be considered for evaluation of their cost proposals.

Proposals will be scored on a 100-point scale. Available points for each evaluation factor are given below.

TECHNICAL PROPOSAL (70 POINTS)

	Evaluation Criteria for Technical Proposal	Points
I.	Technical Capability	35
II.	Technical Approach	15
III.	Proposed Staff	10
IV.	Company Past Performance	10
	TOTAL	**70**

FINANCIAL PROPOSAL (30 POINTS)

The lowest qualified financial proposal will receive the maximum score of 30 points.

The other proposals will be scored inversely proportional to their price and computed as follows:

Sf = 30 * Fm/F

where

Sf = financial Score of the proposal evaluated

Fm = price of the lowest priced Financial Proposal among those qualified

F = price of the Financial Proposal under consideration

Offeror should submit a Detailed Cost Proposal reflecting the cost of completing the scope. Offerors shall complete the **Attachment B – Detailed Cost Proposal**. Labor rates quoted in this document shall be fully-burdened with all indirect costs, taxes and fee, if any. The period of performance is maximum **12 months**.

Tetra Tech reserves the right to conduct discussions with selected offeror(s) in order to identify the best value offer. Award of any resulting Subcontract Agreement shall be made by Tetra Tech on a best value basis, with evaluation of proposed price as well as proposed services and implementation schedule.

8. TERMS OF PAYMENT

Payment terms for the awarded Subcontract Agreement shall be forty-five (45) days after satisfactory completion and acceptance and of services and deliverables according to the schedule in the Table 1. Payment shall be made by Tetra Tech ES, Inc. via bank wire transfer in **Ukrainian Hryvnias** per National Bank of Ukraine exchange rate on the effective date of the subcontract **or US dollars**.

9. DUNS NUMBER AND SAM.GOV REGISTRATION

Active DUNS number or evidence of process of registering for DUNS number is required at stage of submitting proposal. DUNS Number shall be active and SAM.gov registration completed before finalization of subcontract agreement. All second-tier subcontractors must comply with the requirements outlined in the RFP, including obtaining DUNS and SAM numbers if the proposed second-tier subcontract price is above $30,000. Only legal entities need DUNS numbers. **Information regarding obtaining a DUNS number may be found here:** https://fedgov.dnb.com/webform

10. NEGOTIATIONS

Best offer proposals are requested. It is anticipated that a subcontract will be awarded solely on the basis of the original offers received. However, Tetra Tech reserves the right to conduct discussions, negotiations and/or request clarifications prior to awarding a subcontract. Furthermore, Tetra Tech reserves the right to conduct a competitive range and to limit the number of offerors in the competitive range to permit an efficient evaluation environment among the most highly-rated proposals. Highest-rated offerors, as determined by the technical evaluation committee, may be asked to submit their best prices or technical responses during a competitive range.

11. MULTIPLE AWARDS/NO AWARD

Tetra Tech ES, Inc. reserves the right to issue multiple awards. Tetra Tech ES, Inc. also reserves the right to issue no awards.

ATTACHMENT A – TECHNICAL SPECIFICATION

SCOPE OF WORK: Clearing system for a clearing institution

PERIOD OF PERFORMANCE: maximum 12 months

PLACE OF PERFORMANCE: Kyiv, Ukraine

1. Background

Tetra Tech is the implementer of the Energy Security Project which is a 5-year project funded by the United States Agency for International Development.

The purpose of the ESP is to enhance Ukraine's energy security. Improving the energy legal and regulatory environment and increasing the resilience of energy supply will help USAID to achieve broad-based, resilient economic development as a means to sustain Ukrainian democracy.

Providing assistance for the creation and development of free market mechanisms is the main goal of ESP. The assistance to key energy institutions supports the' implementation of an essential component of USAID's Ukraine Country Development Cooperation Strategy.

The ESP will improve the ability of the Government of Ukraine to provide more affordable, reliable, resilient and secure energy to its citizens; assist the Government of Ukraine to integrate into European energy markets by helping key government agencies and the energy regulator to meet EU energy acquis requirements, including the Third Energy Package; improve energy security establishing competitive energy markets in electricity, natural gas and district heating sectors; and increase energy supply in Ukraine by facilitating private sector-led energy investments in, and increasing production of renewable energy sources.

For a long period, Ukraine was lacking clearing or guaranteed settlement at various commodity markets (including electricity and natural gas market) and this caused huge accumulation of debts, namely at electricity markets. As of August 2019, the SE Energorynok (Ukrainian single buyer entity for electricity market has accumulated 30,9 bln uah of debts due to absence of guaranteed settlement and non-payments). In July 2019, the new wholesale electricity market was launched, it includes several segments, including day ahead and intra-day markets, balancing and bilateral markets, however only day ahead, intra-day and balancing market have guaranteed pre-paid settlement. The natural gas market still misses proper settlement, as well as other commodity markets. The ESP considers proper and guaranteed settlement as an important part of energy security of the Ukraine, that is why the establishment of the clearing system is a key goal.

By "clearing", we mean the act whereby a central counterparty steps in and becomes a legal counterparty to the buyer and seller, respectively, of an original transaction. Thus, the original counterparties will have no direct exposure towards each other, but only exposure to the central counterparty (CCP or Clearing House). Typically, the CCP will require collateral (cash and/or securities) from the original counterparties in order to mitigate the risk of either counterparty failing to settle its contractual obligations.

Typically, the original counterparties will post collateral (cash and/or securities) to the CCP in order for the CCP to mitigate its risk in case either of its counterparties' defaults.

2. Objectives

The objective of this project is procurement, supply and installation of the clearing system software.

3. Scope of Work

A.1 Context

On March 26, 2019 the ESP and the National Securities and Stock Market Commission (hereby "NSSMC") signed a Memorandum of Understanding (hereby "MoU"). The main purpose of the MoU is assistance with

clearing institution establishment and procurement of the clearing system software. The NSSMC is the regulator of the market of securities and financial instruments and, just recently, become a regulator of organized commodity trading in Ukraine.

The NSSMC has explored various ways of establishing an organized commodity market and alternative market clearing solutions with support of various stakeholders, development partners and IFIs. Among important milestones we can mention was an assessment of existing legal framework for commodity and derivatives trading, concept model and an action plan prepared by the consultant's consortium headed by Frankfurt School of Economics in 2018 (https://www.nssmc.gov.ua/activity/insha-diialnist/mizhnarodne-spivrobitnytstvo/#tab-4).

In March 2018 the Settlement Center (hereby "SC"), a state-owned bank with clearing license for the securities market, has issued Request for Proposal for Post Trade Infrastructure IT system, however due to various reasons the selection was postponed.

Legal framework

Currently, the Ukrainian legal framework regulating relations in this area is underdeveloped and does not provide the clearing function (with exception to securities trade). The primary legislation essential for clearing functions has just passed the Verkhovna Rada (known as Derivatives law or the bill #2284, https://zakon.rada.gov.ua/laws/show/738-20#Text) and will become effective on July 1, 2021.
The Derivatives Law provides amendments to clearing framework and expands it to various commodity markets. It introduces:

- Clearing for derivatives, other financial instruments and commodity markets.
- Different types of clearing 1) clearing to identify obligations for clearing institutions, organized market operators, central depository and the National Bank of Ukraine and 2) central counterparty activity.
- Requirements for clearing at organized markets.
- Clearing principles during transition period till January 1, 2023 and clearing principles after later January 1, 2023.
- The function of the National Energy and Utilities Regulatory Commission (hereby "NEURC") to identify clearing rules and requirements for energy markets (electricity and natural gas markets).

The secondary legislation to be drafted by the NSSMC simultaneously and will include clearing licensing requirements, clearing regulation etc.

Organizational issues

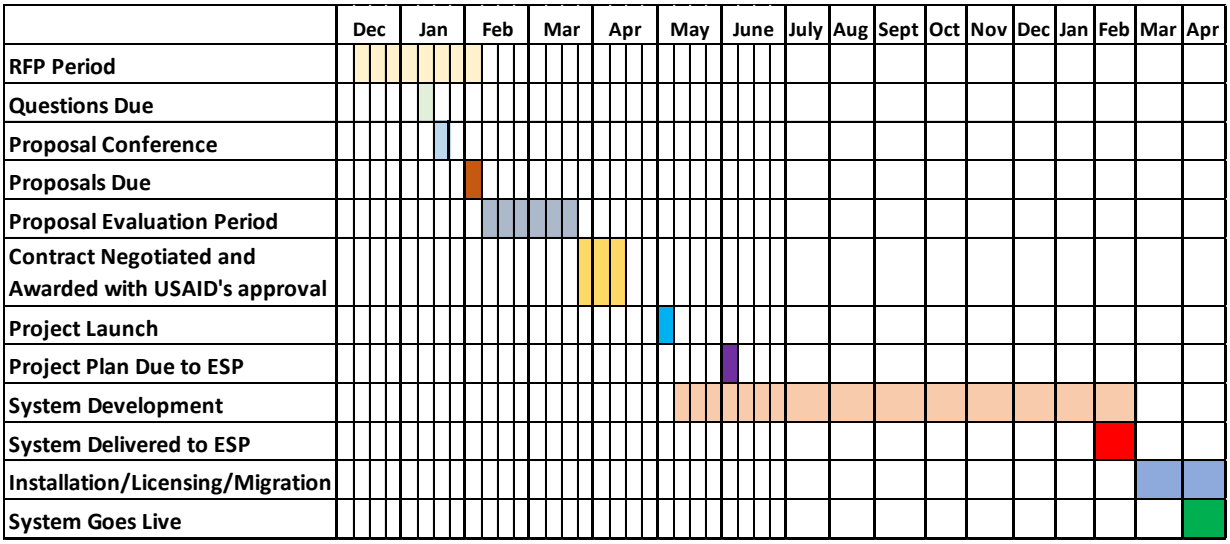
The objective of this RFP is to procure and establish a Clearing System Software that will be able to support the clearing functions. As per the MoU, the NSSMC will become a recipient of the clearing system, whereas the Tetra Tech will cover initial costs for the development of the clearing system and licensing / maintenance for first 3 years of its operation.

The NSSMC's intention to split maintenance and operational use of the system between the state-owned National Depository of Ukraine (hereby "NDU") and a clearing institution. The NSSMC and the NDU will keep and guarantee public good of the clearing system and the NDU, having modern IT infrastructure, will host the system and act as an IT silo. At the same time the clearing institution will have access to the clearing system and will operationally use it.

At current stage, the NSSMC explores the ways to select the clearing institution and possibly it may be the SC, organized market operators or new clearing institution established with participation of foreign clearing institutions, IFSs and various exchanges.

As per initial agreements the clearing to start with energy markets such as bilateral electricity market, balancing electricity market, “day ahead” and ‘intra-day” electricity markets in the year 2023 and natural gas market in the year 2022. The agro and securities market will follow later, so the system to be scalable to adjust the developments of the markets.

A.2 Anticipated Clearing System for a Clearing Institution RFP Timeline



It should be noted that there are some preconditions to award of this procurement that are expected to be in place by award. If there is delay in the preconditions being met, it is possible that award could be delayed.

A.3 Overall system description

The features of the new Clearing System Software are the following:

- Has the opportunity to serve unlimited amount of exchanges and other trading platforms (MTF, OTF);
- Enables on-line and real-time interaction with exchanges and other trading platforms;
- Enables on-line and real-time interaction with the Transmission System Operator (TSO), payment systems and trade-repository;
- Ensures technology of on-line interaction with clearing participants via standardized messaging technologies;
- Fully fledged clearing services as a Central Counter Party (CCP) that maintains risk management module;
- Allows clearing institutions to comply with international regulations and standards EMIR, MiFID 2, REMIT, etc. (optional);
- Is intuitive and easily learned by the parties involved.

A.4 System Requirements

#	Requirement	Detailed description

1.	Technology	• Proven, highly reliable, solution, based on efficient technologies and successfully implemented; • System runs on all major platforms;
2.	Architecture	• System comprises three architecture layers: database, application server, interfaces; • System is based on open system architecture (allowing for customization and plug and play extension with additional modules); • System provides full audit trail for actions that are generated by users of the System or the System itself; • System user interface can be translated into Ukrainian.
3.	External interfaces	• System facilitates links to external systems incl. Exchanges, TSO, payment systems, trade data providers; • Provided customer interfaces are user-friendly "thin" client based on standardized web browser; • Communication with external systems/entities is based on XML, SWIFT and FIX standard messaging; – Assurances of confidentiality, integrity, availability and auditability of data – anything that happens in the system. – System can generate reports and download for importing into internal systems in multiple formats (XML, CSV, HTML, etc.)
4.	Scalability	• System is scalable to handle transaction volumes or number of accounts on CCP level

The Offeror must describe the key features of the solution or solutions, the system architecture and the detailed technical environment required for the implementation and to put into operation the solution.

The description of the proposed solution except abovementioned system requirements should include:

1. A description of the proposed product's systems hardware requirements.
2. A description of the proposed product's systems software support environment requirements, including operating system(s) and data base management system (DBMS).
3. A description of the proposed product's systems software features
4. A description of the proposed solution's interface technologies (for example: SOAP, REST, PKI, etc.).

A.5 Functional requirements

The Offeror must include in its technical proposal a detailed answer to each of the requirements indicated in this section and Form A.3, following the template included in the following pages.
The column "Criticality" indicates as follows:

"1" that the feature is critical for go-live.
"2" that the feature is of particularly high importance for go-live
"3" that the feature is critical at a later stage, but not for go-live.

The Offeror should complete this template filling in the two rightmost columns, where applicable:

- The column labelled "Response Category", indicates the response code of the Offeror to the requirement. The Offeror should include one of the following response codes:

Code	Description
A+	The proposed solution fulfils the requirement as a standard functionality and provides additional features to the functionalities specified in the requirement
A	The proposed solution fulfils the requirement as a standard functionality with no changes required
B	The requirement can be fulfilled by using provided configuration tools in the system, to be performed by the operational users or members of the IT department of the CCP, without the need for significant training
C	The requirement can be fulfilled by using configuration tools in the system, to be performed by the supplier
D	The requirement will be delivered as a bespoke development
E	The requirement cannot be fulfilled

In the column labelled as "Response Description", the Offeror should indicate (maximum 200 words) the way in which the requirement is fulfilled. The column may also reference the section in the proposal in which the item is fully described. Failure to provide a descriptive response will mean that your response will score less than if one is provided.

Form A.3.

Code	Requirement	Criticality	Response Category	Response Description
1	**Connectivity**			
1.1	**With multiple institutions**			
1.1.1	Receive and process transactions from more than one trading venue (e.g. exchange, MTF, OTF, OTC).	1		
1.1.2	Send instructions to multiple CSDs or TSOs, although for a given instrument, instructions will only go to one CSD or TSO.	1		
1.1.3	Can the system send settlement / delivery instructions on a) Behalf of the CCP? b) On behalf of its participants? Can this be configured by CCP users? Can set-up differ between participants?			

1.1.4	Settlement instructions for the cash legs must be sent to designated bank(s) (either central bank or commercial bank). Please elaborate on possible set-up for settlement of cash leg.	1		
1.1.5	Can the system facilitate multiple settlement banks for a given market? Will the clearing system facilitate / generate payment instructions between the settlement banks? Please elaborate.			
1.1.6	Can there be multiple banks and institutions holding and reporting collateral to the system?	1		
1.1.7	Please explain processes for adding another: Marketplace, TSO, settlement bank, collateral bank to the system	3		
1.1.8	Please explain process for removing a marketplace, TSO, settlement bank or collateral bank from the system.	3		
1.2	**Message validation**			
1.2.1	Please explain what kind of message validation the system performs and can perform. E.g. upon incoming messages from exchanges, participants, TSO/CSD etc.	1		
1.3	**Message formats**			
1.3.1	Does system support FIX protocol (which version?) and ISO 15022? Swift messaging?	1		
1.3.2	Does system support ISO 20022			
1.3.3	Please elaborate on experience and capabilities surrounding bespoke message formats?			
1.3.4	System must handle trade messages in real-time, batch uploads and through manual entry / through file upload (as back-up solution).	1		
1.3.5	How does the system prioritize transactions in a batch (e.g. performed at the same time in an auction)?			

1.3.6	Can the system process non-cleared transactions as a service and forward to TSO or CSD?			
1.4	**Novation and acceptance**			
1.4.1	Does the system allow for both novation of contracts as well as guaranteeing contracts without novation?			
1.4.1.1	Can CCP users set parameters determining which contracts are novated and which are guaranteed?			
1.4.2	Are all trades automatically (and immediately) accepted or rejected by the clearing system? Does the system have features for a holding state where a trade is not yet accepted or rejected, e.g. as the CCP awaits additional margin collateral from a participant? What is the level of CCP flexibility? Please elaborate on functionality.	2		
1.4.3	Can the system handle a setup where trading participants can choose whether certain trades (e.g. OTC transactions where centralized clearing is not mandatory) shall be cleared or not? Clearing will then be determined by whether both parties have indicated that their bid/offer (upon matching) shall be cleared. Please explain functionality and options.			
1.4.4	How does the system handle cancelled transactions (e.g. cancelled by exchange)?	1		
1.5	**Prices**			
1.5.1	Please comment on sources for price information that the system uses today: e.g. from FTP/SFTP, Reuters, Bloomberg, bespoke files from marketplaces, from cleared / received transactions or elsewhere.	1		

1.5.2	How does the system decide which price(s) to use (for e.g. margin purposes or fair value calculations) when there are multiple price sources?			
1.5.2.1	How does the system set a fair market price and/or margin price for untraded contracts, but where similar contracts have been traded more recently? How flexible is the system in this regard?	2		
1.5.3	Please comment on the information that is stored. E.g. last bid/ask/matched price, highs/lows, order book depth, spreads etc.	1		
2	**Account Management and structure**			
2.1	Please comment on the logic and universe of accounts in the system. E.g. for keeping tracks of open / settled positions, margin calculations, collateral, stress tests etc. How does this logic ensure flexibility when new demand arises?	1		
2.1.1	Please comment on the steps required to set-up new clearing participants	1		
2.1.2	Please comment on the steps required to remove clearing participants	1		
2.2	**Member and access types**			
2.2.1	System shall support different clearing participant types; those clearing own transactions only (DCPs) and those who can clear for other trading participants as well (GCPs)?	1		
2.2.1	Do Non-clearing participants (trading participants who clear through a GCP – NCPs) have access to the system? If yes, what do they have access to? If no, can they be given access?			
2.2.2	Can other external non-clearing members access to system? E.g. settlement banks, exchanges, TSOs, central banks, regulatory bodies.			
2.3	**Accounts and segregation**			

2.3.1	Please explain to which extent segregation and co-mingling is possible and can be set up. E.g. cleared positions, collateral, margin requirements, settlement and deliveries. Between NCP and GCP or between NCPs or between different DCPs etc.	2		
2.3.2	System should make it possible to segregate the accounts of the clients of trading participants (irrespectively of whether the trading participant is a GCP, DCP or NCP) from house (i.e. proprietary) trading. If not possible today, please comment on future feasibility. Are clients of one trading participant viewed together (the same trading / clearing / margin accounts) or separately?			
2.3.3	System should allow for the co-mingling of NCPs (either some or all under a given GCP) separately from its GCP as well as co-mingling of GCP and NCP positions. Please comment on possible set-ups.	2		
2.3.4	How does the system treat house positions of an NCP (as house or client positions)?			
3	**Products and contracts**			
3.1	**Electricity contracts**			
	Note: All contracts are physically settled and all market participants have valid agreements with the TSO. System should be able to register and clear the contracts below:			

3.1.1	Balancing contracts arise intraday when there is a mismatch between accumulated trade and forecasted consumption. Additional contracts arise upon mismatches between electricity trade and consumption, and later again based on meter readings. Created by the TSO, who is currently also counterparty to the trades. The cash leg is settled at predetermined dates (every 10 days today). As of today, the prices set for producers (net sellers in the market) may differ from those of the suppliers. Suppliers will all receive the same price during a one-hour period, whereas the producers will have the same prices within 15-minute slots.	2		
3.1.2	Intraday contracts open after the close of the day's day-ahead market auction and stay open until delivery time minus one hour. Each contract represents one or several one-hour periods for delivery of electricity at specific times (minimum one hour ahead and maximum next day at 11pm). Cash is settled on or shortly after (one day) the physical delivery date.	1		
3.1.3	Day-ahead contracts open in the morning and typically close around mid-day (with transactions stemming from an auction) for delivery next calendar day. Transactions for one or more blocks of one-hour periods. Cash leg is settled on or shortly (one day) after delivery date.	1		

3.1.4	Standardized forward contracts that represents delivery (seller) or receipt (buyer) at a specific future one-hour period, or several such periods. E.g. pre-defined peak / off-peak hours, each Mon-Friday starting and ending at fixed dates etc. Standardized contracts defined by trading venues. M2M payments during the contract length is not anticipated. Settlement of the cash leg could be at the end of the whole contract or at pre-determined points during the length of the contract.	1		
3.1.5	OTC forwards where the contract features are less standardized. Bilaterally negotiated trades.	2		
3.1.6	How does the system handle contracts that cover multiple one-hour periods? These periods may span over multiple days. What level of flexibility is possible for the settlement of the cash leg? E.g. lump sum settlement, daily (banking day) settlement etc. Will the system split such contracts into several smaller contracts (for each delivery day or each one-hour delivery period)?	2		
3.1.7	Can the system handle cash elements of contracts linked to reference prices. E.g. a forward contract where the price is linked to an index or the average price in the last x days prior to delivery.	2		
3.2	**Gas markets**			

3.2.1	Please elaborate on ability to clear gas market contracts. Balancing market, spot market and forward markets (standardized and OTC). All with physical delivery through a single TSO.	3		
3.2.2	Can you clear contracts both denominated in cubic meters and in watt?	3		
3.2.3	For contracts denominated in cubic meters, does the system have set-up for a) specific bands of quality and/or b) minimum quality thresholds?	3		
3.3	**Financial instruments**			
3.3.1	Please elaborate on ability to clear following products and features:			
3.3.1.1	Equities			
3.3.1.2	Bonds (fixed, floating, zero-coupon)			
3.3.1.3	Equity futures (with daily mark-to-market) and forwards.			
3.3.1.4	Equity options (European, American, exotic options).			
3.3.1.5	Interest rate Forward Rate Agreements (FRAs)			
3.3.1.6	Interest rate swaps			
3.3.1.7	REPOs			
3.3.1.8	Stock lending contracts			
3.3.2	Can the system organize stock lending arrangements? Either due to pending delivery failures or due to interest in short selling. Please elaborate on how.			
3.3.3	Does the system handle other OTC products, such as structured products, caps and floors? Does it recognize option strategies? Please elaborate.			
3.4	**Other markets**			
3.4.1	Please comment on the ability to clear and experience in clearing the following markets:			
3.4.2	Hard commodities, such as copper, ore, oil.			

3.4.3	Agricultural commodities, such as wheat, corn, coffee, rice etc.			
3.4.4	Other markets, such as emissions, cryptocurrencies etc.			
3.5	**Other requirements**			
3.5.1	Does the system handle trading in multiple currencies and settlement in multiple currencies?	3		
3.5.2	Please elaborate on how new contract types and markets can be added later on. Please specify limitations and barriers	3		
3.5.3	Ukraine practices daylight savings time. This means that once a year there will be two contracts from e.g. 03 to 04 (when the clocks go back) and conversely once a year the clocks will go forward from e.g. 03 to 04, meaning there will be no delivery in the period from 03 to 04. The system must handle this. Please elaborate how.	1		
3.5.4	Does the system make it possible (mandatory or voluntarily) for the CCP to use margin collateral (in the form of cash) posted by a participant for the cash settlement? Please explain why (and how) / why not.			
3.5.5	How does the system handle partial settlement of the cash side?	1		
3.5.6	What about partial delivery of securities (e.g. equities)? Does the system handle partial deliveries, shaping or splitting of settlement transactions (from the CSD)? Can such partial deliveries or splitting (to allow for partial delivery) be subject to non-failing participant accept?			
3.5.7	Corporate action:			

3.5.7.1	Please explain how the system handles corporate actions, including failed settlements subject to corporate actions and effects on margin calculations. Please include mandatory / voluntary, with/without choice, transformations / allocations, tradeable/transferable/neither (for rights etc.).			
4	**Risk Management**			
4.1	Please explain the risk management framework of the clearing system, with emphasis on	1		
4.1.1	How are margins defined and calculated? How is the margin split into smaller parts, e.g. realized gains/losses, potential future losses and potentially many other categories? If the system has several methodologies for calculating margin, please provide an overview	1		
4.1.2	Does the system have features for additional margin components such as e.g. concentrated position risk, balancing trade history risk, stressed scenario margin add-on, market spread risk, correlation risk, credit rating risk add-on and potentially many others? Please explain. How difficult is it to add and enable additional such risk factors?	2		
4.1.3	Are OTC trades margined more conservatively than standardized trades? Please explain how.			
4.1.4	Are the necessary margin related parameters and methodology set by CCP users in the system or by the vendor? Please elaborate.	2		

4.1.5	To which extent are the margin parameters set on the underlying level compared to each contract series (delivery hour for electricity)? Can margin rates (volatility of risk factors, such as prices) be dependent on factors such as time to expiry, delivery day / hour, seasonality etc.?	2		
4.2	How often is risk calculated? How long does calculation take? Please provide reference to current calculation times in other markets using the system.	1		
4.2.1	Please comment on possibilities to speed up calculation times and/or how often the system calculates risk.	2		
4.2.2	Can the trigger to re-calculate risk be non-time specific? E.g. upon receipt of batches of transactions, significant changes to positions (through trading or settlement) or manually?	2		
4.2.3	To which extent are up-to-date prices and positions used when calculating risk?	2		
4.3	Does the system perform margin calls, meaning that participants are required to post collateral to meet a monetary requirement? What can trigger a margin call?	1		
4.3.1	What are the CCP's options for such set-up?	2		
4.3.2	Can ad-hoc margins calls be issued at any time? Can any amount be called? Please explain procedure.	2		
4.3.3	What are the deadlines for participants to meet margin calls? Are they customizable by CCP users?	2		

4.4	Does the system have any form of functionality that will reject transactions if e.g. certain limits have breached or is about to breach? Please explain functionality and possibilities / limitations. Does the CCP set the relevant parameters?	2		
4.4.1	Does the system have functionality for calculating trading (or aggregate order) limits to be sent to marketplaces (based on available collateral)? In real-time? Please elaborate in case of single marketplace and multi-marketplace scenarios.	2		
4.5	How can CCP operators monitor many participants with regards to settlements, whether adequate collateral has been placed and adherence to other rules?	1		
4.5.1	How can CCP operators monitor significant changes intraday, such as: large price moves, sharp increases in trade volumes, increased price spreads etc.?	2		
4.6	To what degree does the margin model offer netting / margin offsets between different contracts: in the same segment (e.g. one delivery hour versus another); between different segments (e.g. day-ahead versus intraday or forward market contracts); between markets (such as electricity versus gas contracts); or any combination of the above?	2		

4.7	How does the model treat unrealized gains of open (not yet settled) contracts? Will such positions cause a reduction in the participant's margin? If the sum of a participant's unrealized gains / losses is a surplus (net gain), will this reduce the margin of that participant? To which extent can the CCP control, adjust such features of the margin model?	2		
4.7.1	Does the total market value or unrealized gains / losses of both original legs to a trade (the buyer leg and the seller leg) have to be zero? If yes, how does the system take into account bid/ask spreads and the potential widening of bid/ask spreads? If no, please explain the available parameters. Does the system also calculate "fair value" of open contracts? Are these values different than those used for margin purposes?			
4.8	In case of multiple segments (electricity, gas, financial contracts etc.), can a single margin requirement be calculated for a member that operate across segments? Can margin requirements be split between segments? Please explain functionality.			
4.8.1	Similarly, can the collateral of such a participant be split between the segments?			
4.9	Can the CCP users set / revise the target level of confidence interval used for margining and/or stress testing?	2		
4.9.1	Can different confidence intervals be used for different markets?			
4.9.2	Can risk be calculated (for internal use) for yet other confidence intervals? Please explain how?			

4.9.3	Can the system calculate and set margin rates (volatility of risk factors, such as e.g. asset prices) given a set confidence interval? Please explain methodology and data requirements.			
4.10	What form may margin rates take? E.g. absolute changes, percentage changes, number of standard deviations, yield, basis points etc.? Can this be determined by the CCP users? Can upwards and downwards margin rates differ? E.g. can the model assume that the price of an asset can move up to 10% downwards and 15% upwards?	2		
4.11	Please explain stress-testing methodology, including the following and comments on the extent CCP users can set the rules and parameters? How are stress test defined in the system? E.g. does it (in the case of large price moves and participant default) calculate potential losses to the CCP, potential losses beyond posted margin collateral etc.?	1		
4.11.1	Can the CCP upload / create theoretical or historical scenarios? How?	1		
4.11.2	Into which level of detail can stress-test scenarios be created?			
4.11.3	Can (theoretical) stress-scenarios be a function of margin rates? E.g. multiplication of 2. If the margining assumes that a price can move 15%, stress testing will assume a price move of 30%.			
4.11.4	Does the system assume the same distribution when calculating stress-test, as with margin rates?			
4.11.5	Does the system calculate stress-test according to various number of participants defaulting? How many participants can be assumed to default at a given time?	1		

4.11.6	Does the system take into account different participants belonging to the same group of companies?	2		
4.11.7	Does the system do reverse stress-testing, to show how much certain criteria / events must be stretched before there is a stress-test breach?			
4.11.8	What kind of stress-test analysis is available? E.g. to see which scenario that caused a large value, which participants, which risks had what effect? Please elaborate.	2		
4.12	Please explain back-testing methodology, including:	2		
4.12.1	Can different products and markets have different look-back periods?			
4.12.2	Can the size of open positions influence assumed look-back periods?			
4.12.3	Can look-back periods be more granular than a day (e.g. hourly)?			
4.12.4	Can the relevant parameters and methodology be set by the CCP users?			
4.12.5	Is back testing performed on both individual risk parameters (price volatility, implied correlations, volatility shifts etc.) as well as on portfolio level? Are collateral valuations back-tested?			
4.13	Please explain front-testing methodology (estimation of next day / future margin requirement).			
4.13.1	To which extent can the system calculate next day or next hour margin requirements, e.g. ahead of settlements.			
4.13.2	Please explain assumptions made and any differences in methodology between markets (financials, gas, electricity, others).			

4.14	Power markets trade and settle 24/7 whereas collateral facilities and payment systems have more restricted operating hours. How does this impact the system's calculation of risk? Does the system make assumptions about future additional exposures when calculating current margin requirements?	1		
4.14.1	Does the margin model take into account holiday calendar, and calculate extra margin ahead of non-banking days / holidays? If so, please explain methodology.	2		
4.15	Can users (CCP and/or participants) simulate margin requirements given changes to their risk profile (e.g. prices, positions, margin rates etc.)?			
4.16	To which extent are the necessary risk parameters calculated by the system (based on what rules), set by the vendor (fixed) or set (uploaded) by the CCP users in the system? Please elaborate.	2		
4.16.1	Can algorithms be created e.g. to automatically update and revise scanning ranges or other risk parameters? For either margining purposes or stress-test purposes.			
4.17	Please elaborate on assumptions made in risk calculations, e.g. historical correlation patterns, historical volatility, type of distribution.	2		
4.18	Does the system allow for messages to marketplaces / TSOs / CSDs to immediately suspend clearing participants (or their NCMs) from further trades / increases in exposure?			
4.19	To which extent do the risk management features facilitate EMIR compliance?	2		
4.20	To which extent do the risk management features comply with CPMI-IOSCO recommendations?	2		

4.21	Please comment specifically on calculating the risk of balancing contracts (for electricity in Ukraine).	2		
4.21.1	How will the system calculate the risks when transactions are estimates based on historical consumption data, customer base and volumes bought in the market? Exposures are then adjusted as consumption data becomes gradually available. Full settlement finality is estimated at 6 months after consumption.	2		
4.22	Upon supplier defaults, the portfolio of customers are transferred to a pre-designated "supplier of last resort" two days after the default. Therefore, there are two days where the defaulted party will still consume electricity, but where any further cash settlement is unlikely. Please comment on how the margin model addresses this risk.	1		
4.22.1	How will the system take into account a supplier's outstanding forward contracts when calculating this risk?	1		
4.22.2	How will the system calculate the risk represented by the potential obligations of suppliers of last resort?	1		
5	**Collateral management**			
5.1	What are the limits or restrictions to collateral that can be registered in the system?	1		
5.1.1	How can new instruments be added?	1		
5.1.2	How can new instrument types be added?	1		
5.2	Explain haircutting methodology and calculation of "risk adjusted collateral values".	1		
5.2.1	Are haircuts split into more than one part? E.g. the haircut of a Eurobond may be determined by base interest rate risk, credit risk and currency risk.			
5.2.2	Can haircuts take various forms, e.g. percentage of value, basis points etc.?	2		

5.3	Can collateral have different assumed liquidation periods? Are these periods explicit in the system?	2		
5.3.1	Can the same instrument (or instrument type) have varying assumed liquidation periods (or just different haircuts) depending on predetermined factors (e.g. absolute size of position, size of position versus market turnover)?	2		
5.4	Does the system net cleared positions (for which margin requirement is calculated) with collateral positions to find overall portfolio risk, or are cleared positions and collateral positions viewed entirely separately?	3		
5.4.1	If yes, is this fixed, or can it be determined by parameters set by CCP users?			
5.4.2	If no, does it mean that if a cleared instrument is held as collateral (e.g. gas in storage), the system will calculate margin requirement on the basis on increased prices (for a short cleared position) and collateral value on the basis of falling prices of the very same instrument on the same day?			
5.5	Does the system allow for automatic collection of collateral if agreed with participants (who gives access to draw on their accounts elsewhere)? Please comment on how this is performed.	2		
5.5.1	Does the system allow for automatic return of collateral (e.g. upon set limits for over-collateralization)?	2		
5.5.2	Can participants request / demand the return of collateral through the system? Which restrictions apply? Please describe process for both requesting return of collateral and the actual return of collateral.	2		

5.6	Does the system distinguish between various forms of collateral, such as direct transfer to CCP, in escrow accounts or by way of pledge etc.? If yes, how?			
5.7	Does the system calculate interest payable to participants on their collateral? Please provide details.	2		
5.8	Does the system separate between participants' margin and default fund contributions?	2		
5.8.1	Can CCP users set up different rules / haircuts / thresholds for the two requirements?	2		
5.9	How can the CCP users monitor aggregate credit exposure to a given counterparty, which may act as guarantors, debt issuers, collateral bank etc.?	2		
6	**Default Handling**			
6.1	Does the system have any particular features for handling participant defaults?			
6.2	Can positions of the defaulted party be easily exported to xls or pdf formats?	1		
6.2.1	Similarly, with the collateral positions?			
6.3	Can a partial or whole portfolio easily be transferred from one participant to another one or more participants?	2		
6.3.1	Can such transfers be made free of payment and versus payment?			
6.4	Is it possible to broadcast messages to all or some participants about suspensions, position transfers, auctions and relevant member default information?			
6.5	Does the system have any form of built in auction tool where positions can be offered to several parties for bids on whole or parts of a portfolio? If so, please elaborate on features and methodology.			
7	**Default Waterfall**			

7.1	Does the system allow for a flexible structure of the CCP's waterfall of resources? Can there be more than one segment (e.g. electricity, gas, financials) with each its own default fund?	3		
7.1.1	How are participants who are active in more than one segment dealt with?			
7.1.2	Can the bottom layer of the waterfall (normally this is "the remainder of the CCP resources") for each segment be flexible and differ? E.g. segment A is capped at a fixed amount, segment B is capped at "total segment contributions * 2" and segment C is uncapped.			
7.2	In case of multiple default funds (or default fund segments), must skin-in-the-game be the same across all funds or can it also be split differently? Will the skin-in-the-game for each segment be calculated by the system (if so, please explain methodology) or entered manually by CCP users?	2		
7.3	Can the waterfall take into account replenishment of the default fund?	2		
7.4	Will the system calculate each participant's default fund contribution requirement?			
7.4.1	How is this calculated and how often. Can CCP users change / set the parameters for this calculation?			
8	**Reporting**			
8.1	Please elaborate on the standard reports available to CCP users, clearing participants and non-clearing participants.	1		
8.2	Are there reports available for viewing (in real-time and/or as of pre-determined times): Current positions, margin requirements, collateral, fees.	1		
8.3	Can users look up historical data with ease? How far back will historical data be available?	2		

8.4	Can users (internal and external) set up its own reports? What are the limitations?	2		
8.5	Can CCP staff access the production database(s) directly e.g. for performing ad-hoc searches for data not available in standardized reports? How will this data be accessible? What (if any) are the restrictions?	2		
8.6	Can external users access databases directly in real-time / non real-time? Are there any limitations / restrictions?			
9	**Fees**			
9.1	Does the system calculate fees for participants?	1		
9.2	Which elements can be used as basis for fee calculation?	2		
9.3	How flexible is the fee calculation? E.g. various discount models, incremental steps, various if-scenarios.	2		
9.4	Can the parameters be controlled and set by CCP users?	2		
9.5	Can participants view their relevant fees in the system? Will they see the basis of the fee calculations?	2		
10	**Maintenance and Support**			
10.1	What are the warranty terms?	3		
10.2	Please explain what level of support that will be available to the CCP. To which extent are resources available for customization of the system to the CCP needs, and to which extent is this included in the offered price?	3		
10.3	Is training provided?	3		
11	**Performance**			
11.1	How many transactions per hour can be performed?	3		
11.2	Is the system capable of operating 24/7/365?	3		

	Please explain process and schedule for system updates. h			

4. Deliverables and Due Dates

The successful offeror shall deliver to Tetra Tech the following, in accordance with the schedule set forth below. The deliverables and due dates below are indicative, and Offerors may offer their schedules considering 12 months period is the limit. Shorter delivery terms will be scored higher.

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Deliverable Number	Deliverable Name	Comments	Due Date
1	Project Kick Off	The successful offeror presents to Tetra Tech and other involved parties a document describing management approach and methodology which describes how the Offeror will manage the delivery of the services	2 weeks after signing the contract
2	Project Plan	The successful offeror presents to Tetra Tech and other involved parties a detailed work plan	4 weeks after project Kick Off
3	Detailed Functional and Technical Specifications	The successful offeror presents to Tetra Tech and other involved parties agreed functional and technical specifications. The plan to be in advance approved by the Tetra Tech and other involved parties.	26 weeks after agreeing functional and technical specifications
4	Training Plan	The successful offeror presents to Tetra Tech and other involved parties a detailed training plan with all respective materials	Not later 12 weeks after project kick off
5	Software Testing Plan	The successful offeror presents to Tetra Tech and other involved parties a detailed software testing plan with all respective materials	2 weeks after delivery of agreed functional and technical specifications
6	Training Delivery Report	After completion of the training activities, the successful offeror presents to Tetra Tech and other involved parties a document describing	Not later than 10 months

		all the training sessions and activities as per training plan	after project kick off
7	System Documentation	The successful offeror presents to Tetra Tech and other involved parties all relevant documentation (not limited to installation instruction document, design document for the solution, test plans, baseline release document, manuals and used guides, technical documentation, correspondence, training materials etc.).	Not later than 10 months after project kick off
8	Licensing and installation	The successful offeror delivers and installs the clearing system and sign with the authorized entity by Tetra Tech the corresponding licenses for clearing software for a period of 2 years	Not later than 11 months after project kick off
9	Migration and Go Live Plan	The successful offeror delivers to Tetra Tech and other involved parties a document describing all the activities to be developed to ensure the successful launching and go live of the system	Not later than 10 months after project kick off
10	System Certification	The successful offeror delivers to Tetra Tech and other involved parties a system certification document describing the result of acceptance test plan	Not later than 11 months after project kick off
11	Installation Support, Migration and Go Live Support	The successful offeror provides to Tetra Tech and other involved parties the obligatory installation support, migration and go live support	Within 12 months after project kick off
12	Progress Reports	The successful offeror delivers to Tetra Tech and other involved parties a monthly reports with agreed performance and the progress of the contract performance	Monthly
13	Maintenance and support services provided after launching the system into production	The successful offeror provides to authorized entity by Tetra Tech maintenance and support service for a period of at least 2 years	A period of at least 2 years after go live

ATTACHMENT B – DETAILED COST PROPOSAL

Offerors shall specify the total costs of delivering and maintaining a clearing system software including necessary details about what such a delivery includes and excludes. For this purpose, Offerors may use the template provided below or design a similar template.

It must be clear weather costs are one-off or recurring, details of what is included (e.g. number of days' work, software/hardware, any rights / obligations). It should also be clear what, if any, additional costs may be for e.g. additional system development needs, additional training, extension of license etc.

TABLE 1 – Detailed cost proposal

№	Item	Unit	Unit Price, USD	Extended Price, USD	Offeror's comments
1	License fee (The license to be preferably paid on annual basis and should be valid at least 3 years after delivery of the system)				
2	Maintenance fee (Details of what is included)				
3	Support fee (Details of what is included. What are the costs if allocated hours prove insufficient?)				
4	Customization (Assumed number of development days? Additional costs if more days required?)				
5	Design study (Details)				
6	Additional costs for specific features (Costs for any specific features not included in the offer.)				
7	Integration / deployment (Details, e.g. on-site or remotely. How many person days assumed? Include cost of travel, per diem etc.?)				
8	Training (Details of assumed person days. Onsite / remote training? Will you provide training of CCP customers?				
9	Additional software, database systems, hardware (What is included				

	/ excluded? Requirement details for CCP or CCP members?)				
10	Length of contract. Buyer option to extend contract at same / similar terms (Cost of option? Flexibility of option length?)				
			Other costs (Any other elements. Please detail.): (_____)		
			GRAND TOTAL, USD excluding VAT (Please split into annual and one-off costs, and total cost of 5-year contract.)		

Prices quoted must be valid for 120 days, and account for ALL remuneration, per diem, travel, communications, report reproduction and other out-of-pocket expenses, taxes and other costs, but excluding the VAT tax that may be originated in **Ukraine**. On this basis Tetra Tech will issue a **Fixed Price Subcontract**, and payment shall be based upon acceptance of services and deliverables described in the TABLE 2.

TABLE 2 – Payment schedule*

Offeror Deliverable	Expected Due Date	Fixed Price Payment Amount
1. Project Kick Off	2 weeks after signing the contract	5%
2. Project Plan	4 weeks after project Kick Off	5%
3. Detailed Functional and Technical Specifications	26 weeks after agreeing functional and technical specifications	10%
4. Training Plan	Not later 12 weeks after project kick off	5%
5. Software Testing Plan	2 weeks after delivery of agreed functional and technical specifications	5%

6. Training Delivery Report	Not later than 10 months after project kick off	10%
7. System Documentation	Not later than 10 months after project kick off	10%
8. Licensing and installation	Not later than 11 months after project kick off	10%
9. Migration and Go Live Plan	Not later than 10 months after project kick off	10%
10. System Certification	Not later than 11 months after project kick off	10%
11. Installation Support, Migration and Go Live Support	Within 12 months after project kick off	20%
12. Progress Reports	Monthly	n/a

***The payment schedule above is indicative and offerors may offer their payment schedules that are based on their deliverables**

ATTACHMENT C – REPRESENTATIONS AND CERTIFICATIONS

Offeror Representations and Certifications

1. Organizational Conflict of Interest Representation

The offeror represents, to the best of its knowledge and belief, that this award:

does [ ] or does not [ ] involve an organizational conflict of interest.

Please see FAR 52.209-8 for further explanation.

2. Data Universal Numbering System (DUNS) Number *(required if cost proposal is more than USD $30,000)*

(please use one box per number or dash)

3. Source and Nationality of Goods and Commodities

(i) This is to certify that the Offeror is:

a. an individual who is a citizen or legal resident of _____.

b. a corporation of partnership organized under the laws of _____.

c. a controlled foreign corporation of which more than 50% of the total combined voting power of all classes of stock is owned by United States shareholders; or

d. a joint venture or incorporated association consisting entirely of individuals, partnerships or corporations. If so, please describe separately the citizenship or legal status of the individuals, the legal status of the partnership or corporations, and the percentage (%) of voting power of the corporations.

(ii) This is to certify that the **Source** (the country from which a commodity is to be shipped from) of the Equipment to be supplied under this Order is:

name of country or countries

4. 52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020).

The Offeror shall not complete the representation at paragraph (d)(1) of this provision if the Offeror has represented that it "does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument" in the provision at 52.204-26, Covered Telecommunications Equipment or Services—Representation, or in paragraph (v) of the provision at 52.212-3, Offeror Representations and Certifications-Commercial Items.

(a) *Definitions.* As used in this provision—

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the

meanings provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) *Prohibition*.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Nothing in the prohibition shall be construed to—

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract or extending or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. Nothing in the prohibition shall be construed to—

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) *Procedures.* The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered telecommunications equipment or services".

(d) *Representation.* The Offeror represents that—

(1) It □ will, □ will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation. The Offeror shall provide the additional disclosure information required at paragraph (e)(1) of this section if the Offeror responds "will" in paragraph (d)(1) of this section; and

(2) After conducting a reasonable inquiry, for purposes of this representation, the Offeror represents that—

It □ does, □ does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror shall provide the additional disclosure information required at paragraph (e)(2) of this section if the Offeror responds "does" in paragraph (d)(2) of this section.

(e) *Disclosures.*

(1) Disclosure for the representation in paragraph (d)(1) of this provision. If the Offeror has responded "will" in the representation in paragraph (d)(1) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(ii) For covered services—

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(2) Disclosure for the representation in paragraph (d)(2) of this provision. If the Offeror has responded "does" in the representation in paragraph (d)(2) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(ii) For covered services—

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the PSC of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

By signing below, the Offeror certifies that the representations and certifications made, and information provided herein, are accurate, current and complete.

Signature: _____ Date: _____

Name of and title of authorized signature: _____

ATTACHMENT D – CERTIFICATE OF CURRENT COST OR PRICING DATA

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 2.101 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.403-4) submitted, either actually or by specific identification in writing, to Tetra Tech in support of [**Firm/Organization**] are accurate, complete, and current as of [**DATE**]. This certification includes the cost or pricing data supporting any advance agreements and forward pricing rate agreements between the offeror and the Government that are part of the proposal.

Firm: _____

Signature: _____