Expression of interest

FOR

(i) **Conducting Functional and Non-Functional User Acceptance Test (UAT) of its Business Software, and**

(ii) **Support and Management of the above software, including the associated databases, and of integration with other IT systems of ECGC after GO LIVE.**

Ref: ECGC EOI-TENDER-01/IT/04/2021-22

1. Aim of the Expression of Interest ("EoI")

The objective of this EoI is to solicit proposals from the interested bidders for participation in a bid process for selection of Service Provider for

(i) Conducting Functional and Non-Functional User Acceptance Test (UAT) of its Business Software,

And,

(iii) Providing Limited Support and Management of the above software, including the associated databases, and of integration with other IT systems of ECGC after GO LIVE of Leg-1 of Project (expected by Nov/ Dec 2021) until completion of Leg-2 of Project (completion expected on or before December 2022 : **To be called as Phase-1 Support**

(iv) Providing Full Support and Management of the above software, including the associated databases, and of integration with other IT systems of ECGC post completion of Leg-2 of Project. – **To be called as Full Support**

The Service Provider will be responsible for conducting the UAT of various services as they are delivered into UAT from May / June 2021, until the completion of deliverables and complete GO LIVE, and simultaneously, provide L1 / L2 support for the services (called as Limited support for Phase-1) that achieve GO LIVE at different points in time, for an expected period of around 2 years initially (up to completion of Leg-2). The EoI intends to bring out the details with respect to scope of services that are deemed necessary to share with the interested bidders. The details of full support required post Leg-2 completion of Project will be mutually agreed with selected bidder.

2. Authority

This Expression of Interest (EoI) is issued by ECGC limited ("**the Company**"), a Government of India Enterprise, under the administrative control of Ministry of Commerce and Industry (MoCI), and is intended to short-list potential bidders. The Company's decision with regard to the short-listing of bidders through this EoI shall be final and the Company reserves the right to reject any or all the bids without assigning any reason.

3. Schedule of Events

Sr. No.	Milestone	Date
1	Release of Expression of Interest (EoI)	08-05-2021
2	Last date for submission of EoI Response	21-05-2021, 1 PM
3	Opening of EoI Responses	21-05-2021, 3 PM
4	Declaration of Short listed Firms	To be informed later

4. Availability of EoI Documents

EoI can be downloaded from the Company's website (www.ecgc.in). The bidders are expected to examine all instructions, forms, terms, project requirements and other details in the EoI documents. Failure to furnish complete information as mentioned in the EoI documents or submission of a proposal not substantially responsive to the EoI documents in every respect will be at the bidder's risk and may result in rejection of the proposal.

5. Venue and Deadline for Submission of Responses to EoI

Responses, in their complete form in all respects as specified in the EoI, must be submitted to the Company at eoi.responses@ecgc.in as one or more password – protected PDF files.

The Company may, in exceptional circumstances and at its discretion, extend the deadline for submission of proposals by issuing an addendum to be made available on the Company's website, in which case all rights and obligations of the Company and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

6. Background

The Company is getting its Business Software developed from a Government-

owned / aided entity ("**Software Developer**"), and this software is to encompass all its business and Enterprise Resource Planning (ERP) functions spanning 50-odd logically separate modules. The parts of this software are scheduled to be released into UAT from May / June 2021 onwards and expected to majorly GO LIVE from November/ December 2021 onwards, with complete GO LIVE of Leg-2 expected to be achieved on or before December 2022. Each of the modules / services being so delivered into UAT is expected to be tested on functional and non-functional basis by the bidder, and once the Company and Software Developer certifies the GO LIVE for parts of the system, the bidder is supposed to provide L1 and L2 level support as a bridge between the Company and the Software Developer, as well as handling the application helpdesk for ECGC employees / users / stakeholders.

7. Scope of Work

7.1 UAT for Business Software

The Bidder is supposed to conduct functional and non-functional UAT for each and every module / service delivered into UAT by the Software Developer, with the following broad scope:

- Review the UAT environment in order to validate whether the UAT environment is designed to satisfy the testing expectations
- Prepare overall testing strategy, Test governance, test plan based on Business and Functional requirements
- Validate and incorporate Test cases already prepared by Developer partner QA Team. (same will be shared with selected bidder)
- Create Testing scenarios, test conditions and test cases with required business inputs (As required other than the shared tested cases).
- Design & carry out UAT for acceptance and sign-off.
- Provide Test Case documentations, Testing Methodology and reporting Formats
- Prepare and Publish requirement traceability matrix (RTM).
- Provide Testing Schedule.

- Create dry run test cases/scripts to verify that they execute properly.

- Perform negative testing wherever applicable.

- Document acceptance test results and identify gaps.

- Conduct UAT testing alongside the stakeholders.

- Provide UAT sign off based on acceptance criteria defined in the FRS / SRS.

- Provide recommendations for fine tuning and closure of gaps.

- Perform revalidation testing post closure of gaps.

- Retest failed test cases/scripts or modified scripts for testing the defect/deviation correction, if applicable.

- Record, track, and report all defects/deviations, as well as resolve script and tester defects. Manage and Retest the bugs, Prepare defect resolution tracker.

- Verify the entries in the Database and the Document upload in the DMS.

- Regression Testing.

- End System Compatibility testing.

- Load testing of the various web portals/modules etc. including the Planning, Requirement Gathering, Scripting, Debugging of Scripts, Trial Runs, Execution & Monitoring of the same. (in consultation with the Company and the Software Developer)

- Execute formal performance benchmarking tests (in consultation with the Company and the Software Developer) –various loads to identify transaction which are not meeting the performance acceptable criteria.

- Provide detailed reports and metrics regarding performance outcomes to study the behavior of the system.

- Create and run performance test scenarios. Performance test scenarios will be executed across different customers using different Database server.

- Load pattern review: (Constant Load Pattern, Step Load Pattern and Goal-Based Load Pattern).

- Identify maximum number of business transactions application can sustain in an hour.

- Following parameters will be considered to determine the upper boundaries of the various characteristics: Average response times, Error rates, and Indexing latency.

- Provide test plans, test cases, and test scripts for integration testing.

- Set up and document all test data as described in the test scripts.

- Perform integration testing iteratively with increasingly larger and more complex combinations of components.

- Where multiple systems are involved, perform integration testing with other systems that interface with the current system, consisting of data feeds, where applicable and specified in a project test plan.

- Document all test results, as well as any deviations that have been discovered.

- Provide test plans, test cases, and test scripts for system testing.

- Verify actual application behavior against the expected application behavior.

- Verify that screen design (when needed) has been implemented per specifications.

- Verify that every logical path through the system or program is implemented and functions as designed per approved test plan.

- Data migration assurance to ensure completeness, accuracy, consistency, integrity, stability and smooth transition from the source system to the target system.

- Review the migration strategy document, migration methodology and the tool used for the migration process and review the activities. (in consultation with the Company and the Software Developer)

- Analyze and review the scripts used by Development Partner for extraction, data transformation & migration of data. (in consultation with the Company and the Software Developer)

- Understand & review the mapping of source data to target including the new fields sourced to the target system.
- Identification of critical fields (Master & Transaction Tables) & validation of data (Full Data) to ensure accurate and complete migration.
- Review the adequacy of the checkpoint reports for ensuring effective migration.
- To provide an assurance that data fields have been properly identified and accurately and completely migrated to relevant data fields in the target system by understanding and validating the migration controls, performing independent verification of Data migrations.
- Reconcile data and balances between source and target system.
- Review the Data mappings of source data to target including the new fields sourced to the target system:
    - Validate Data Migration Planning.
    - Data Integrity Checks.
    - Review of Business rules.
    - Review the computed values.
    - Review of Data Sets Pre and post migration (count, control totals).
    - Samples to be checked to cover X% for important tables/data sets.
    - Review of Migration process of uploads like Signature etc. on a sample basis say X % for Active Accounts present in the system. (in consultation with the Company and the Software Developer)
    - Review of Menu Profiles. (in consultation with the Company and the Software Developer)
    - Review of Logs.
    - Review of Configuration/ Parameterization table.
    - Review of Licensing contract and arrangement to ensure the Company subscribes to Enterprise Support for all

components as far as possible. (in consultation with the Company and the Software Developer)

- Review of Batch Jobs, Cron Jobs etc.
- Review of DB Objects.

- Validate Migrated Data.
- Recurring gap analysis and verify that all the gaps/ discrepancies identified in the 'Migration Audit Report' are rectified by Migration Team.
- Data Migration Controls Validation.
- Review of back up procedure to ensure availability of data under conversion at any point of time during/ after the data migration process.
- Review of data reconciliation tests to confirm test results.

The UAT process will largely be driven by three parties viz. Development Partner, ECGC, and UAT Team. The final modalities and division of roles shall be mutually decided at the time of signing of contract. The broad process and responsibilities for the UAT phase (before GO LIVE) are as below:

- QA sign-off - Development Partner team
- Deployment of software into UAT - Development Partner team
- Performance of UAT test cases - UAT team
- Reporting of Bugs - UAT team
- Fixing of issues - Development Partner team
- Testing of issues - Development Partner team
- Deployment of fixes - Development Partner team
- Verification of fixes - UAT team
- UAT sign-off – UAT team and ECGC IT team

The process and responsibility matrix will change on GO-LIVE with the UAT-cum-MSP bidder team taking over more responsibilities. The same shall be mutually decided at the time of signing of contract.

Since it is envisaged that the UAT team and the MSP team would be from the same company, the complete responsibility of training the incoming Limited Support MSP team, including technical as well as functional handover, shall lie with the Bidder. ECGC would prefer that at least some domain experts / personnel from Bidder's UAT team be continued into the MSP team for continuity purposes.

7.2 Managed Services Provider ("MSP") Support

a) The bidder shall provide onsite support for the entire Software system from GO-LIVE or partial GO-LIVE as the case may be.

b) The bidder shall assist ECGC team in configuring standardized helpdesk options in the Ticketing Software so that ticketing can be enabled for this Software. Until such time, calls may be conveyed through email or telephone, and it shall be the responsibility of the bidder to maintain and manage the same in a standard, centralized fashion.

c) The bidder shall post an adequate number of skilled personnel who can support the Software in terms of day-to-day user issues, data issues, program bugs (identification of errors, collection of data, etc.), configuration issues, monitoring etc. This shall be controlled and conveyed by a centralized helpdesk ("**L1 Support**").

d) The bidder shall post an adequate number of configuration experts (as required) to maintain, monitor, and manage the various tools and technologies being used in the Software, in all deployments / components / forms relating to this Business Software i.e. Development, SIT, UAT, Production, Reporting / MIS / DW - BI, DMS, website / portal, APIs, etc. (tentative list of tools and technologies is as per Annexure - 5) ("**L2 Support**"). This is excluding any infrastructure components i.e. servers, VMs, SAN, InfoSec components, etc.

e) The bidder shall post an adequate number of DBAs to manage the database(s), relational or otherwise (please refer Annexure - 5), and ensure proper configuration, administration, backups, restorations, scheduled tasks, replication (to DR and UAT / staging / test) as applicable, optimization, -, etc. ("**L2 Support**")

f) The bidder shall post a suitable project manager or PM team to manage the team, and also to contribute positively to improve the efficiency of support.

g) The selected bidder team will be required to work in close coordination with Infra support team of ECGC and other vendors involved running the Application environment.

h) The bidder shall ensure that all service delivery is via onsite team only, and use of any "back-end" or "remote" team shall not be allowed without written permission of ECGC, which shall be on a case-to-case basis, as required. Bidder is expected to post a team which has the necessary skill set.

7.3 Service Levels and conditions for MSP Support

The support window for L1 Support shall be defined as 9 hours a day * 6 Days a week, and for L2 Support shall be 24 * 7 * 365 / 366. Onsite support shall be made available as per the working hours of ECGC i.e. 9 a.m. to 6 p.m., Monday to Saturday. Further, 24*7, telephonic technical support assist number / self-service portal may be made available in order to raise critical issues identified post working hours.

In case, owing to reasons where travel to ECGC's premises is not possible (e.g. Pandemic, natural calamities etc.) the bidder shall provide support remotely.

Once a bug has been reported by the employee / user / stakeholder / suo-moto, the resolution time expected shall be:

For Show Stopper Issues: 30 minutes

For Major issues: 60 minutes

For Minor issues: two hours

Once bidder has established that the Bug being reported requires (as a resolution) intervention of Software Developer and / or the Company, the same shall be conveyed to both in real-time, and no later than five minutes of such classification. The resolution shall be tracked as per SLA defined with development partner.

The SLA for post full Go-Live shall be mutually agreed with the selected bidder.

The SLA is indicative and shall be specified in greater detail in the RFP.

7.4 Documentation

The team shall be responsible for creating and maintaining documentation for all of the above (UAT as well as MSP scope). Standard software (Service Desk / Bugzilla / any other / a combination) will be mutually agreed upon and used.

7.5 Audits

ECGC undergoes an Information Systems Audit on annual basis, an Audit by the regulator every two years, and may require undergoing various technical, cybersecurity, and other audits at various times. The team shall be responsible for aiding the ECGC and their Auditors in the Audit, as and when required.

7.6 Reporting / MIS and Review

The team / Project Manager shall be responsible for providing daily / weekly / monthly reports of the work done / achievements / challenges / statistics for review of the engagement and its continuance.

8. Payment Model

For the UAT part, the payment is expected to be made monthly in arrears for actual number of resources deployed. For MSP part, payment is expected to be dependent on Service Level Agreement and shall be made quarterly in arrears. Details of these shall be included in the Request for Proposal (RFP).

9. Detailed Specification of Requirements

The requirements given in this Expression of Interest are indicative only and the Company will seek inputs from the pre-qualified bidders in further refining the requirements and all aspects of services before finalizing the Request for Proposal.

10. Conditions under which this EoI is issued

i. This EoI is not an offer and is issued with no commitment. The Company reserves the right to withdraw the EoI and change or vary any part thereof at any stage. The Company also reserves the right to disqualify any bidder, should it be so necessary at any stage.

ii) The Company reserves the right to withdraw this EoI if it determines that such action is in the best interest of the Company.

iii) Short-listed bidders would be issued formal tender enquiry/Request for Proposal inviting their technical and commercial bids at a later date.

iv) Timing and sequence of events resulting from this EoI shall ultimately be determined by the Company.

v) No oral conversations or agreements with any official, agent, or employee of the Company shall affect or modify any terms of this EoI and any alleged oral agreement or arrangement made by a bidder with any department, agency, official or employee of the Company shall be superseded by the definitive agreement that results from this EoI process. Oral communications by the Company to bidders shall not be

considered binding on the Company, nor shall any written materials provided by any person other than the Company.

vi) Neither the bidder nor any of the bidder's representatives shall have any claims whatsoever against the Company or any of their respective officials, agents, or employees arising out of, or relating to this EoI or these procedures (other than those arising under a definitive service agreement with the bidder in accordance with the terms thereof).

vii) Applicants who are found to canvass, influence or attempt to influence in any manner the qualification or selection process, including without limitation, by offering bribes or other illegal gratification, shall be disqualified from the process at any stage.

viii) Each applicant shall submit only one Pre-qualification requirements proposal.

11. Right to the Contents of the bid

For all the bids received before the last date and time of bid submission, the proposals and accompanying documentation of the Pre-Qualification proposal will become the property of the Company and will not be returned after opening of the pre-qualification proposals. The Company is not restricted in its rights to use or disclose any or all of the information contained in the proposal and can do so without compensation to the bidders. The Company shall not be bound by any language in the proposal indicating the confidentiality of the proposal or any other restriction on its use or disclosure.

12. Acknowledgement of understanding of terms

By submitting a bid, each bidder shall be deemed to acknowledge that it has carefully read all sections of this EoI, including all forms, schedules and annexure hereto, and has fully informed itself as to all existing conditions and limitations.

13. Evaluation of the bid

The bidders' Bid in the bid document will be evaluated as per the requirements

specified in the EoI and adopting the pre-qualification criteria spelt out in this EoI. The Bidders are required to submit all required documentation in support of the prequalification criteria specified (e.g. detailed project citations and completion certificates, client contact information for verification, profiles of project resources and all others) as required for evaluation.

14. Language of Bid

The Bid and all correspondence and documents shall be written in English. This shall not be applicable to any pre-printed material.

15. Eligibility Criteria

Kindly refer the Annexure – 2 for the same.

16. Bid Requirements

i) The Response to the EoI Requirements shall be prepared in accordance with the requirements specified in this EoI and in the format prescribed in this document for each of the above mentioned qualifying criteria as proof of having the minimum requirements.

ii) Proposals must be direct, concise, and complete. All information not directly relevant to this EoI should be omitted.

iii) The Pre-Qualification Proposal shall be scanned and password - protected and named "Response_to_EoI_UAT_MSP_Project" (in PDF) and sent to the Company at the email address specified in this document. In case of multiple files, the filename may be appended with an underscore (_) followed by the Part number in Roman (I, II, III,…). In case of multiple mails, the subject line must also indicate the same.

iv) The Company may ask for a printed copy and / or editable soft-copy (via email, or pen drive, or on a CD / DVD / other media) at a later stage.

v) The bidders may submit a digitally signed or stamped, signed document in PDF. In either case, the sign must be of the authorized person and proof of authorization must also be included.

vi) The proposal should contain the copies of references and other documents as specified in the EoI.

vii) The Company will not accept delivery of proposal in any manner other than that specified in this EoI. Proposal delivered in any other manner shall be treated as defective, invalid and rejected.

17. Bid Opening and Evaluation

Due to the prevailing situation of COVID – 19, the physical submission as well as opening of bids is dispensed with. In lieu of the same, the password – protected bids shall be shared with Internal Auditor ("Auditor") of the Company on email with CC to the bidder, at the date and time of the opening of the bid. At this time, the Auditor, the representatives of the Company (and any independent third-party as may be nominated by the Company and informed in advance to the bidders), and the representatives of the Bidders shall have to be logged in to the VC / online meeting (CISCO Webex / Microsoft Teams) as hosted by the Company and informed in advance. Once the email is received by both the Auditor and the Bidder, the Bidder may share the password(s) of the file(s) with the Auditor by email, and the Auditor may then 'open' the bids in the presence of all bidders, and confirm from each bidder prima facie of the bid opening and correct file(s) by quoting details such as number of pages, number of files, and some information as may be quoted by the bidder and displayed on the screen by the Auditor. Once the bids are opened, the Auditor shall 'hand over' the bids to the ECGC Evaluation Team by forwarding the passwords to them, with CC to the bidder. The bid opening process shall be deemed to be completed when this is achieved for all bidders, and the VC / online meeting shall be closed at that point. The recording of this meeting shall be retained with the Auditor and the Company.

The ECGC Evaluation Team shall then prima facie check for completeness and responsiveness of the bids, and those which are found meeting the above requirements, will be evaluated based on the evaluation criteria as per Annexure – 2. The bidders who score more than 60% marks as per the evaluation criteria shall be deemed qualified, and shall be invited for discussions and next steps in the tender i.e. RFP process.

Annexure – 1

Company Profile

Sr No	Description	Details	
1	Name of the company		
2	Legal Status (eg. Proprietorship, partnership, limited liability partnership, corporation etc. (attach a copy of certificate of incorporation)		
3	Registered Physical Address		
4	Correspondence Address		
5	Business profile of the company (attach a separate write-up or brochure regarding business activities of the company)		
6	Incorporation Date		
7	Chairman		
8	Managing Director		
9	Board of Directors	**(i)**	
		(ii)	
		(iii)	
		(iv)	
		(v)	
10	Contact Person Details (Name, Landline and mobile Number, e-mail id)		
11	e-mail id of the company		
12	PAN No of the company		
13	TAN of the company		
14	GST NO		

……………………………………………….
Signature of the authorized Signatory of Company
(Company Seal)
Name :
Designation :
Contact No (Mobile)
Email Id

Bidders Eligibility-cum-Evaluation Criteria

Bidders Company should have at least 20years of existence.	<Please attach evidences >		Maximum Marks 10
Company with 20-30 years of experience		3	
Company with 30-35 years of experience		7	
Company with 35+ years of experience		10	
Bidders should be at least 100 People Company.	<Please attach evidences>		Maximum Marks 10
100 People Company		3	
101-200 People Company		7	
200+ People Company		10	
Bidder's average turnover during last 2 years ending 31st March 40,00,00,000/- or higher, and should provide Audited / Certified Balance sheet, Profit & Loss account for past 2 years ending 31st March 2020.	< IT returns acknowledgments and / or Audited Financial Statements / statements certified by Chartered Accountants to be provided for last two financial years ended on 31.03.2020 >		Maximum Marks 15
Turnover between 40,00,00,000/- to 100,00,00,000/-		10	
Turnover above 100,00,00,000/-		15	
Bidder should be profitable company with net profit of 3-10% in last 2 years. (ending March 2020)			Maximum Marks 15
Company with net profit of up to 5%		5	
Company with net profit above 5% up to 9%		10	
Company with net profit above 9%		15	
Bidder should have significant presence in Mumbai and should have in-house development and testing team	Office Addresses of Mumbai and details and skill spread of team along with strength of team, based in Mumbai, to be provided	10	
Bidders should provide 3 customer references for testing and maintaining the UAT environment, conducting UAT for complex applications. (BFSI references preferred)	<Please attach evidences>	30	

Bidder should have experience in developing, testing, and managing java/ APEX-based applications, 3 customer references required	<Please attach evidences>	30	
Bidder should have experience in support and maintenance of application software and associated databases (i.e. Managed Services for Application setup including DBs), 3 customer references required	<Please attach evidences>	30	
Bidder should have experience in developing, testing, and managing large / complex software based on microservices-based / SOA - based architecture. (Project Management, Codebase / version management, managing teams of engineers / programmers, Software Engineering practices, SDLC, CI – CD pipeline, DevOps, etc.)	<Please attach evidences>		Maximum marks 60
Up to three projects		10	
Four to eight projects		20	
More than eight projects		30	
Any project(s) from above of sizeable and complex nature based on microservices – based archirtecture		Upto 30 marks	
Bidder should have in-house experience in supporting and managing deployments based on open-source tools, including configuration management (minimum requirement is as per the tools list in Annexure - 5).	<Please attach evidences>	20	
Bidder should have experience in supporting and managing and administration of PostgreSQL DB & Mongo DB	<Please attach evidences>	20	
Bidder should have experience in supporting and managing and administration of Relational Database Management System for the complex Application.	<Please attach evidences>	20	

……………………………………………………….
Signature of the authorized Signatory of Company
(Company Seal)
Name:
Designation:
Contact No (Mobile)
Email Id

Annexure – 3

Covering Letter

(Company letterhead)

[Date]

To,

The Deputy General Manager - IT

7th Floor, The Metropolitan,

E Block, BKC, Bandra

Mumbai – 400 051

Dear Sir,

Ref: **Expression of Interest Notice for:**

(i)   Conducting Functional and Non-Functional User Acceptance Test (UAT) of its Business Software, and

(ii)   Limited Support and Management of the above software, including the associated databases, and of integration with other IT systems of ECGC after GO LIVE.

Having examined the Expression of Interest (EoI), the receipt of which is hereby duly acknowledged, we, the undersigned, intend to submit a Pre-qualification requirements bid in response to the Expression of Interest (EoI) as per the subject above.

We attach hereto the response as required by the EoI, which constitutes our proposal.

Primary and Secondary contacts for our company are:

(Please provide Name, Title, Company Name, Address, Phone, Mobile, Email)

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to ECGC Limited is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the short listing process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so, for the subject Project.

We agree for unconditional acceptance of all the terms and conditions set out in the EoI document.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

(Signature)

(Name)

Duly authorized to sign the Tender Response for and on behalf of:

(Name and Address of Company)   Seal/Stamp of bidder

Annexure – 4

DECLARATION FOR NON BLACK LISTING

(on Letter Head)

(To be submitted along with the Qualification bid)

We, /M/s_____ hereby declare/ clarify that we have not been banned by any Government or Quasi-government agencies or Public sector Undertakings.

NOTE: If a bidder has been banned by any Government or Quasi Government Agencies or Public Sector Undertakings, the fact must be clearly stated with details. If this declaration is not given along with Qualification bid, the tender will be rejected as non-responsive.

…………………………………………………..
Signature of the authorized Signatory of Company
(Company Seal)
Name :
Designation :
Contact No (Mobile)
Email Id

Annexure – 5

Scope (Statistics)

Indicative Number of Modules which will be delivered into UAT:

- May 2021 to October 2021: 29
- November 2021 to June 2022: 32

List of Tools and Technologies:

TECHNOLOGY STACK			UAT	PROD
BASIC	Operating system	Windows / Linux	Cent OS 7.6.x (May be replaced with RHEL)	Cent OS 7.6.x (May be replaced with RHEL)
	Hypervisor	Windows	Esxi6.5	NA
DEVELOPMENT	SCM			
		GitLab (Server)	NA	NA
		SCM Revision & Release Operations		
	IDE			
		STS (64-bit)	NA	NA
		Jasper Studio (Development Studio)	NA	NA
	IDE plugins			
		SonarLint	NA	NA
	Stack			
		Java (Open JDK)	8	8
		Thymeleaf	3.0.11	3.0.11
		PostgreSQL	11.5	11.5
		MongoDB	4.2.8	4.2.8
		HTML	5	5
		CSS	3	3
		Bootstrap	4.3.1	4.3.1
		Spring Boot	2.2.6	2.2.6

		Maven	Spring Boot Version.	Spring Boot Version.
		Apache Tomcat	Spring Boot Version.	Spring Boot Version.
		Hystrix	Spring Boot Version.	Spring Boot Version.
		Feign client	1.4.7	1.4.7
		Jasper (JRXML Report generation)	6.12.2	6.12.2
		JQuery	3.4.1	3.4.1
		slf4j	1.6.6	1.6.6
		RabbitMQ	3.8.2	3.8.2
REVIEW	Peer Code Reviews			
		Manual	NA	NA
	Code Analysis			
		SonarQube (Comm Ed)	NA	NA
		OWASP ZAP	2.9.0	2.9.0
INT & DEPLOYMENT	CI-CD			
		Jenkins	NA	NA
		ZAP Proxy	NA	NA
		Ansible	NA	NA
		Docker	19.03.5	19.03.5
		Kubernetes	1.19.3	1.19.3
		Gitlab	11.8.1	11.8.1
		Argocd	1.8.2	1.8.2
TESTING	Unit Testing			
		TestNG	NA	NA

	API Testing			
		Postman	NA	NA
	Functional Testing			
		Selenium WebDriver	NA	NA
	Non-functional Testing			
		JMeter	NA	NA
	Test Management			
		TestLink	NA	NA
	Test Reporting			
		Bugzilla		
SECURITY				
	Discovery Server			
		Eureka	Spring Boot Version	Spring Boot Version
	API Gateway			
		Zuul	Spring Boot Version	Spring Boot Version
	Authentication SSO			
		Keycloak	8.0.2	8.0.2
MONITORING	Observability			
		Elasticsearch	7.6.0	7.6.0
		Logstash	7.6.0	7.6.0

		Kibana	7.6.0	7.6.0
		Grafana	6.6.2	6.6.2
		Sleuth	Spring Boot Version	Spring Boot Version
		Prometheus	1.19.3	1.19.3
		Nagios	4.4.6	4.4.6
DOCUMENTA TION	API documentation	Swagger	2	2

NA – Not applicable for UAT and Production setup. However, tool / technology may be part of Dev, SIT, etc.

Approximate Number of Functional Requirements, Functional Use Cases and Test Cases with complexity:

Functional Requirements (from FRSs): 3700

Functional Use Cases (from SRSs): 5000

Complexity is assumed as:

Complex-Type: 20%

Medium-Type: 20%

Simple-Type: 60%

Distribution of delivery to UAT (indicative):

- May 2021 – 11 Services
- June 2021 – 4 Services
- July 2021 – 25 Services
- August 2021 – 9 Services
- September 2021 – 28 Services
- October 2021 – 20 Services
- November 2021 onwards: Yet to be decided.

Approximate Number of:

Pages of FRSs – 4700

Pages of SRSs – 10400

API Endpoints – 9000 (for services being delivered into UAT by October 2021)

Annexure – 6: Undertaking to ensure standards of integrity

"We hereby agree and undertake that we have not directly or through any other person or firm offered, promised or given nor shall we offer, promise or give, to any employee of ECGC involved in the processing and/or approval of our Expression of Interest / Request for Proposal or to any third person any material or any other benefit which he/she is not legally entitled to, in order to obtain in exchange advantage of any kind whatsoever, before or during or after the processing and/or approval of our Expression of Interest / Request for Proposal."