

# Request for Proposal for selection of a System Integrator for building and managing ONDC Web Portal

ONDC/OPS/WP/04-2023/P-08

April 2023



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## Tender Notice

1. Open Network for Digital Commerce (ONDC) invites proposals for “Request for Proposal for System Integrator for building and managing platform for ONDC operations”
2. The content of this Request for Proposal (RFP) enlists the requirements of the ONDC. It includes the Bidding Terms which details out all that may be needed by the potential bidders to understand the terms and bidding process and explain the contractual terms that the ONDC wishes to specify at this stage.
3. The Technical Bids and Financial Proposals must be submitted to <Submission EMAIL Address> on or before <Tender Due Date>

## Tender Summary

##	Particulars	Details
1	Tender title	RFP for selection of a System Integrator for building and managing ONDC Web Portal
2	Name of purchaser	Open Network for Digital Commerce (ONDC)
3	Date of issue	20 April 2023
4	Tender Due Date	03 May 2023
5	Contract Duration	5 + 12 months
6	Validity of proposal	60 days
7	Contact Person Details	Santosh Adsul
8	Submission email address	<a href="mailto:procurement@ondc.org">procurement@ondc.org</a> with a cc to <a href="mailto:santosh.adsul@ondc.org">santosh.adsul@ondc.org</a>

## Section 1: Information on bidding process

### 1 Introduction

#### 1.1 About ONDC

Open Network for Digital Commerce (ONDC) is an initiative aimed at promoting open networks for all aspects of exchange of goods and services over a digital network. ONDC is based on open specifications and open network protocols, independent of any specific platform and technology.

The foundation of ONDC network is built on open protocols for all aspects in the entire chain of activities in exchange of goods and services, similar to hypertext transfer protocol (HTTP) for information exchange over the internet, simple mail transfer protocol (SMTP) for exchange of emails and unified payments interface (UPI) for payments. ONDC aims to decentralise digital commerce through an open network where the platforms/applications are interoperable, and buyers and sellers can transact easily irrespective of platform/application they use to be digitally visible/ available. Open APIs, based on Beckn protocol, will be used for all transactions on the ONDC. These APIs enable the exchange of information for the execution of transactions, allowing all participants of the network to interact and integrate using standardised ONDC API contracts. Please refer to the ONDC strategy for more information

#### 1.2 About this procurement

ONDC wishes to onboard a system integrator to support ONDC in building and managing ONDC Web Portal with features subsequently detailed within the FP.

## 2 Bidding process

1. All information supplied by Bidders shall be treated as contractually binding on the Bidders, on successful award of the assignment by ONDC on the basis of this RFP.
2. Bidders are advised to study all instructions, forms, terms, and requirements in the RFP documents carefully.
3. The proposal is liable to be disqualified in the following cases or in case the Bidder fails to meet the bidding requirements as indicated in this RFP:
  - a. Proposal not submitted in accordance with the procedure and formats as prescribed here
  - b. During validity of the proposal, or its extended period, if any, the Bidder amends the quoted prices.
  - c. The Bidder's proposal is conditional and has deviations from the Terms & Conditions of The RFP.
  - d. Proposal is received in incomplete form.
  - e. Bidder unethical or illegal means to influence the bid evaluation process or engage in unfair practices at any point of time during the bid process.
4. It explicitly clarified that this RFP does not constitute an offer by ONDC. The Bidder's participation in this process may result in ONDC selecting the Bidder to engage towards execution of the contract. ONDC may withdraw the RFP at any time and without assigning any reason, at its convenience. ONDC makes no commitments, express or implied, that this process will result in a business transaction with anyone.
5. Submission of bid response:
  - a. The Bidder has to email the required bid documents to the email address as mentioned in the Tender Summary section. Subject line should Read:  
  
<Company Name>: Response against RFP for selection of a System Integrator for building and managing platform ONDC Web Portal
6. Language:
  - a. The Proposal should be filled by the Bidder in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the authorized signatory of the prospective Bidder. For purposes of interpretation of the Proposal, the English translation shall govern the same.
7. Criteria for Evaluation
  - a. Technical Evaluation:
    - i. The Tender Evaluation Committee ("TEC"), formed by ONDC, will review the technical bids of the short-listed Bidders.
    - ii. The Bidders' technical solution proposed in the bid document will be evaluated as per the Technical Evaluation framework outlined in Section.
    - iii. TEC may seek written clarifications from the Bidders. The primary function of clarifications in the evaluation process is to clarify ambiguities and uncertainties arising out of the evaluations of the bid documents. Written clarifications provide the opportunity for the TEC to state its requirements clearly and for the Bidder to more clearly state its bid.
    - iv. Each technical bid will be first evaluated to verify if the Bidder meets the technical criteria, as outlined in Section 3 ONDC may reject the technical bids of Bidders whose bids do not meet the minimum technical criteria.

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- v. Only Bidders who have demonstrate required technical expertise at this stage, will qualify for the evaluation of their Commercial Bids.
- b. Commercial Evaluation
    - i. The commercial bid of only the Technically Qualified Bidders will be evaluated
    - ii. The commercial bid value exclusive of taxes and levies will be considered for commercial evaluation.
    - iii. The bids shall be evaluated based on the detailed method of evaluation as specified within this RFP section.
    - iv. ONDC may negotiate with bidders during commercial evaluation
  - c. Overall Evaluation
    - i. The bid which is found to be most suitable technically and commercially will be awarded the contract.
8. Resource deployment
- a. Location: All key resources (defined in evaluation) must be available at ONDC's offices in New Delhi as per request.
  - b. Availability: The bidder must ensure that there is availability of required resources (apart from the key resources) at agreed locations, for all business days (i.e., all working days as observed by ONDC).
  - c. Holiday calendar: The resources of the selected bidder will follow the ONDC holiday calendar. Minimum support to ensure portal operations will be available also on holidays

## 9. Dispute

The Bidders shall not dispute the decision of ONDC in any manner whatsoever.

## 10. Fraud/corruption:

ONDC will reject a proposal for award if learns that the bidder recommended for award has, either directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question; and ONDC will terminate the contract, if already awarded and will declare the bidder ineligible to be awarded contracts in the future, either indefinitely or for a stipulated period of time, if at any time it determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Contract. For the purpose of this paragraph, the terms corrupt, fraudulent, collusive and coercive practices shall have the following meanings:

- a. "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value (whether in cash or kind) to influence the action of a public official in the selection process or in Contract execution.
- b. "fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a Contract.
- c. "collusive practices" means a scheme or arrangement between two or more bidders with or without the knowledge of ONDC, designed to establish prices at artificial, non-competitive levels.
- d. "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process or affect the execution of a Contract.

### 3 Evaluation Criteria

The section below provides details on how the process of evaluation which will be carried out at the ONDC after the bid is submitted. All eligible bidders will be evaluated as per criteria below.

ONDC may request bidder to provide sufficient documentary evidences to validate claims related to specific experience or related evaluation criteria. Bidders will be expected to provide necessary documentary evidences to help with the evaluation procedure in a time bound manner.

At any stage if the bidders fail to respond or does not respond satisfactorily for the asks clearly specified by ONDC. ONDC will take decision in relation to the evaluation criteria.

#### 3.1 Who is eligible to bid

#	Criteria	Evidence required
1	Proof of Authorized signatory for the bidder	Power of attorney or board resolution confirming name of authorized signatory
2	Should have a valid RoC with MCA registered prior to January 2018	Copy of RoC verifiable on MCA website
3	Should have more than 100 employees on company payroll tagged to IT development related services	Declaration on Company Letterhead by Authorized signatory

#### 3.2 Technical evaluation criteria

The parameters guiding technical evaluation criteria are given below

1. Relevant experience w.r.t. scope of work, technology proposed which describes the
2. Approach and methodology proposed by the bidder
3. Technology stack proposed and overall cost of ownership to ONDC
4. Overall solution proposed
5. How approach ensures adherence to timelines
6. Technical demonstration of capability
  - a. Obligations workflow
    - i. Creation of a master for obligations by ONDC admin user
    - ii. Flow of NP user submitting the obligation
    - iii. Flow of ONDC user validating the obligation
  - b. Bidders are expected to sufficiently demonstrate expertise in ability to carry-out the use-cases. Demonstration can be in form of visual design, clickable prototype or functional prototype. Weightage will align accordingly.
7. Relevancy and adequacy of resources proposed for project execution. Key profiles to be evaluated:
  - a. Project Manager
  - b. Chief Architect
  - c. Business analyst team lead
  - d. Test team lead
  - e. Development lead



### 3.3 Commercial evaluation criteria

The Commercial Bid of Technically Qualified Bidders will be opened on the prescribed date and time. For the purpose of commercial bid evaluation, the Commercial Bid Value exclusive of taxes and levies will be considered. Any conditional bid would be rejected.

The commercial bid should be submitted as per format in section 4.

## 4 Bid formats

### 4.1 Submission checklist

Two zip folders / documents are to be submitted as proposal response (technical and commercial). Given subsequently is the list of documents that need to be submitted as part of response. Please review each in detail.

#### Technical proposal

##### Contents

1. General information about the bidder
2. Power of attorney / board resolution for authorized signatory
3. Company registration certificate
4. Declaration confirming manpower presence
5. Bidder value proposition
6. Understanding of ONDC Web Portal requirements within RFP
7. Details of solution proposed
  - a. Proposed architecture
  - b. Adherence to design principles
  - c. Proposed Technology stack
8. Approach & methodology should cover at the minimum the following
  - d. Project plan listing activities in a Gantt chart
  - e. How PMIS will be used to run the project
  - f. Resource deployment plan
  - g. Effort estimation checklist

#### Commercial proposal

##### Contents

Commercial format to be submitted on company letter head, signed by authorized signatory

### 4.2 Eligibility related proposal formats

#### 4.2.1 General information about the bidder

##	Details of the bidder	
1	Company Name	
2	Legal status reference details (Private Company or Public Company or Limited Liability Partnership, etc.)	
2	Nature of business	
3	Date of incorporation	
4	Date of commencement of business	
5	Address of the headquarters	
6	Address of the Registered Office	
7	PAN	
8	GSTIN	

##		Details of the bidder
		Primary Contact
9	Contact Name	
10	Designation	
11	Address	
12	Mobile	
13	Office Telephone	
14	Email Address	

Company profile with employees, on roll, clients, completed projects, etc.

**4.2.2 Power of Attorney / Board resolution**

No prescribed format. Bidder may submit resolution which authorizes the signatory for submission of bid on behalf of the firm

**4.2.3 Company registration certificate**

Copy of RoC as provided by MCA

**4.2.4 Declaration from HR head countersigned by Authorized signatory stating compliance to manpower requirement**

On company letter head, signed by HR head and countersigned by authorized signatory

**4.3 Technical proposal formats**

**4.3.1 Conformance to Technical evaluation criteria**

**4.3.2 Bidder value proposition**

No prescribed format

**4.3.3 Understanding of ONDC requirements**

No prescribed format

**4.3.4 Solution details**

*4.3.4.1 Proposed architecture*

No prescribed format

*4.3.4.2 Adherence to design principles*

Design principle as per RFP	Response on how this is being complied

*4.3.4.3 Proposed Technology stack*

Proposed technology stack should include complete bill of material

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#	Component	Proposed technology / software with make/version	Quantity proposed
1	PMIS	<i>Bespoke / Open- source technology proposed with make/version</i>	<i>As per RFP requirements OR a specific number</i>
2	Pre-live component		
3	Post-live component		
4	Dashboard		
5	Operational Reporting		
6	Ticketing software for support		
7	Issue/problem management		
8	Portal Content management		
9	Document & Workflow management		
10	Logging and debugging		
11	Portal and webforms		
12	Messaging and communication		
13	Automated testing		
14	Volume testing		
15	Security testing		
	Any additional items may be added in line with the technical proposal		

4.3.5 Approach & Methodology

No prescribed format unless explicitly specified

- a. Project plan listing activities in a Gantt chart
- b. How PMIS will be used to run the project
- c. Resource deployment plan

Resource role	Total effort	Week-wise deployment
During initiation		
Role 1		
Role n...		
During Phase 1		
Role 1		
Role n...		
During Phase 2		
Role 1		
Role n...		
During Phase 3		
Role 1		
Role n...		
During warranty period		
Role 1		
Role n...		
During migration		
Role 1		
Role n...		

d. Effort estimation details

Work Component	Man-months considered
Project Management including PMIS setup and management	
Web Portal includes requirement gathering, design, development, testing, UAT support, security testing, volume testing and deployment. Phase-wise break required	Total of Phase 1+ Phase 2 + Phase 3
- Phase 1 effort	
- Phase 2 effort	
- Phase 3 effort	
Infrastructure setup	
Migration	
Warranty support	

4.3.6 CV of key resources

1. Name
2. Proposed role
3. Present designation at the firm
4. Total years of experience
5. Employment history (in descending order)

Period of employment	Company name	Last designation
From 2019 to present	XXXX	XXXX

6. Top 5 relevant projects and activities managed by the resource (additional may be added, but first 5 mentioned will be considered for evaluation)
7. Relevant certifications if any

4.3.7 Declaration towards compliance to RFP stated requirements

**<on company letterhead signed by authorized signatory>**

I, as authorized signatory on behalf of my firm <name of the firm> declare that we confirm compliance to RFP stated requirements. I understand in case of any deviation within our proposal, they would be rectified and complied by our firm at no additional cost to ONDC except for deviations as specified below:

Deviations to compliance:

<mention if any>

4.4 Commercial proposal formats

**Covering letter**

**Form 1: Summary**

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#	Component	Price excluding taxes (A)	Price including all taxes, levies, etc. (B)
1	Manpower costs (as per form 2)		
2	Software / technology costs (as per form 3)		
	Total (1 + 2)		

Note:

- Total Value under column B will be considered for commercial evaluation.
- In case there is any other cost other than manpower, the same should be added within Form 3 as a new line item.
- Any mismatch in Form 1 and form 2 & form 3, it will be corrected with the least value among all three for evaluation and will have to be provided by bidder.

**Form 2: Manpower**

#	Work Component	Man-months considered	Total Price excluding taxes	Total Price including all taxes
1	Project Management including PMIS setup and management			
2	Web Portal includes requirement gathering, design, development, testing, UAT support, security testing, volume testing and deployment ( <b>sum of 3,4,5</b> )	Total of Phase 1+ Phase 2 + Phase 3	Total of Phase 1+ Phase 2 + Phase 3	Total of Phase 1+ Phase 2 + Phase 3
3	- Phase 1 effort			
4	- Phase 2 effort			
5	- Phase 3 effort			
6	Infrastructure setup			
7	Migration			
8	Warranty support			
	<b>TOTAL (1+2+3+4+5+6+7+8)</b>			

**Form 3: Bill of Material**

#	Component	Details	Total Price excluding taxes	Total Price including all taxes
1	PMIS	As per technical proposal		
2	Pre-live component	As per technical proposal		
3	Post-live component	As per technical proposal		
4	Dashboard	As per technical proposal		
5	Operational Reporting	As per technical proposal		
6	Ticketing software for support	As per technical proposal		
7	Issue/problem management	As per technical proposal		
8	Portal Content management	As per technical proposal		
9	Document & Workflow management	As per technical proposal		
10	Logging and debugging	As per technical proposal		
11	Portal and webforms	As per technical proposal		

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#	Component	Details	Total Price excluding taxes	Total Price including all taxes
12	Messaging and communication	As per technical proposal		
13	Automated testing	As per technical proposal		
14	Volume testing	As per technical proposal		
15	Security testing	As per technical proposal		
	Any additional items may be added in line with the technical proposal			

## Section 2: Terms of Reference

### 5 Overview

Open Network for Digital Commerce (ONDC) has been established to democratise and fundamentally revolutionise how digital commerce is conducted. The network is made of a number of network players which are expected to play different roles within the network with newer roles getting added as the network and its scope expands. ONDC web portal is expected to provide the necessary web interface to enable interaction between ONDC and the outside world.

Objective: To enable seamless digital interface with ONDC throughout lifecycle of various network players. Network player refers to an entity which will or get impacted via ONDC. It includes existing three types of network participants – viz. Buyer, Sellers, Logistics service provider; technology service providers, gateways, reconciliation service providers, and others. Further details about the players and their roles are available on [www.ondc.org](http://www.ondc.org).

The scope of interaction within the portal is expected to expand as the scope of ONDC as a network expands and, in that sense, the ONDC Web Portal (OWP) will undergo progressive elaboration over the lifetime of ONDC. The design of the portal in that sense needs to be flexible and open to allow for subsequent enhancements.

The scope of this RFP covers building and managing ONDC Web Portal to manage interfaces across three key aspects for any ONDC network player:

1. Process of onboarding of network player on to ONDC
2. Enabling working of existing network participants
3. Managing registration, profile and interaction with extended participants

At present these processes are managed via define process which is mostly offline and uses google forms, Github, Swaggerhub, Slack, JIRA, etc. Details of the existing process can be found within Integration Guide available for download on ONDC website.



## 6 Scope of work

1. Set-up and operate comprehensive project management practice throughout the contract
  - a. Set-up a project management information system which will support functionalities as specified within section 7 – solution details
  - b. Define the project plan detailed to the level of sprints for delivery to outcomes envisaged as per timelines specified
  - c. Progress reporting to be done on a weekly basis in addition to reports available on PMIS
  - d. Manage risks, issues and escalate in case of delays/showstoppers
  - e. Suggested and implement remediation measures to ensure adherence to milestone plan
  - f. Submit weekly progress report via PMIS with actions to be taken and pending activities
2. Design, develop, deploy and manage portal operations
  - a. Requirements and visual design:
    - i. Bidder will deploy sufficient manpower to capture requirements to implement the system as defined within the process. There might be minor changes within the process defined within the RFP, the same have to be factored at the time of requirements capture.
    - ii. The requirements to be captured in form of user stories within the PMIS
    - iii. Visual design of the portal screens to be prepared based on the user stories, validations and requirements to be closed based on the Visual designs which have been prepared.
    - iv. Sign-offs shall be taken on the visual designs, accompanied with workflow, validations of various controls on the screen.
    - v. Visual designs can be prepared using any of the tools proposed
  - b. Development and testing
    - i. Based on the approved visual design, development to go-on within sprints
    - ii. Perform System Integration Testing based on the release to ensure each build released covers the functionality completely
    - iii. Integration with external interfaces defined. There will be requirement to verify information being submitted by user within their profile this includes information such as PAN, GSTIN or e-sign using Aadhaar, etc. Transaction costs of such interfaces will be borne by ONDC
    - iv. These integrations have to be designed and developed accordingly.
  - c. UAT testing
    - i. Build user acceptance test cases in consultation with Business Analysts and defined ONDC users
    - ii. Provide support during UAT by ONDC users
    - iii. UAT may also be carried out by identified end users from NP group. UAT support will have to be extended to these users as well
  - d. Performance testing
    - i. This may be carried out in parallel to UAT
    - ii. A load and performance expectation plan will be created in consultation with ONDC
    - iii. Performance scripts will be developed according to the plan, and testing will be carried out using automated test scripts to be developed.
    - iv. Compliance to performance expectation plan shall be demonstrated with the help of results. In case there is deviation in the performance in production, this

testing may be carried out again. For any major release even during warranty period, it is envisaged that performance testing shall be carried out. Necessity for performance testing shall be determined by ONDC.

- e. Security testing
    - i. Sign-off on vulnerabilities to be verified to be obtained from ONDC. Top vulnerabilities as per OWASP need to be tested mandatorily in addition to any specific guideline which ONDC may be asked to comply from time-to-time.
    - ii. Perform security testing and share report. For any major release even during warranty period, it is envisaged that security testing shall be carried out. Necessity for security testing shall be determined by ONDC based on understanding of the release going to production.
    - iii. Fix issues and rerun to confirm security testing clearance
  - f. Production deployment
    - i. Automated CI/CD pipeline shall be setup to ensure seamless deployment experience across the various environments.
3. One-time migration of existing data and transition to the new portal
- a. Present data will have to be ported on to portal, any gaps to be communicated clearly to ONDC and remediation steps to be worked out in consultation with ONDC
  - b. Current users who are not on portal will have to be migrated to portal depending on the stage that they are in, i.e. pre-live or post-live
  - c. Appropriate data capture formats will have to be prepared and shared with respective ONDC leads who will ensure this data is made available
  - d. Portal support team to be deployed is expected to support during migration and transition of operations to ONDC web portal for each phase
4. Support infrastructure activities related to portal
- a. Setup and manage portal instance on ONDC cloud (currently on AWS)
  - b. Portal instance includes configuring network and security components including load balancer, firewalls, etc. as required for the portal
  - c. Setup IAM for ONDC SPOC and portal support team for management of instance
  - d. Enable log shipping of portals at EOD to ONDC. ONDC wishes to store and analyse these logs at its convenience. These logs have to be made available on a local storage being procured and managed by ONDC.
  - e. Enable single sign-on for ONDC users on portal through LDAP integration. At present, this is on Google, there might be a change, however it will be communicated before start of the
5. Warranty support on the portal functionalities for a period of one year post implementation (includes modifications, enhancements to the implemented functionalities)
- a. Ongoing enhancements under warranty support
    - i. This refers to minor changes within the portal with respect to configuration changes, changes in values within configurable fields. For example: Addition of new domain specific obligations, addition/removal/modification of obligations within onboarding process, compliance framework, OR addition of a field within MIS reports, etc.
    - ii. These enhancements will be carried out promptly as per SLA
    - iii. Major functionality changes when mutually agreed may be taken up as change request.

- b. Portal support desk: It is expected a portal support desk will be setup to help with any issues with respect to the portal and to carryout routine portal operations such as addressing basic user queries on portal, user management, etc.
- c. Content-preparation: Content related to portal in terms of textual content answering to queries about use of portal, etc. will have to be prepared and updated based on releases and changes that are carried out
- d. User manuals will have to be prepared for internal and external users in relation to the functionalities of the portal. This will include FAQs based on queries received at portal support desk.
- e. SOP for management of portal development, enhancement and operations aspects will have to be prepared subsequent to the development of the portal. This will be updated on a quarterly basis and maintained within PMIS
- f. Knowledge transfer and handover: It is expected that appropriate knowledge transfer and handover will be provided to ONDC identified resources / teams, so they may take up some or all activities being done by the team deployed for managing portal operations during the warranty period.

## 7 Envisaged Solution details

### 7.1 Design Principles

ONDC Web Portal will be the core interface of various network players interacting with ONDC. Design of the portal should be given utmost importance and will be the core criteria at the time of evaluation of bids and during execution of the project. Given below are design principles that the portal is expected to adhere to.

**End-user experience:** The design should focus on ensuring the best experience to the end user on the portal. Specific user journeys have to be mapped, designed and monitored through appropriate controls to bridge any gaps in journey to ensure a seamless user experience on the portal.

**Tiered Architecture:** The portal will follow a tiered architecture for logical separation of various components. The architecture should provide for agnostic design not dependent on any technology stack such as database OEMs, etc.

**Openness:** Openness in the overall portal design to allow choices in the products and technologies that can be deployed and connected within portal workflow as ONDC concept evolves. Preference will be for Open-source technology stack which is well supported within Indian context. Solution should ensure no vendor lock-in.

**Agility:** Design should allow for agility in adapting to changing requirements and environment under which ONDC operates. This may include and not limited to the changes to the flow as maybe agreed during discussions or stipulated in this document. Code reusability should be ensured.

**API-first approach:** Design should ensure consistent and reusable APIs that are able to serve different applications with whom the portal is expected to interact with seamless application of business rules irrespective of the interface for interacting with the solution.

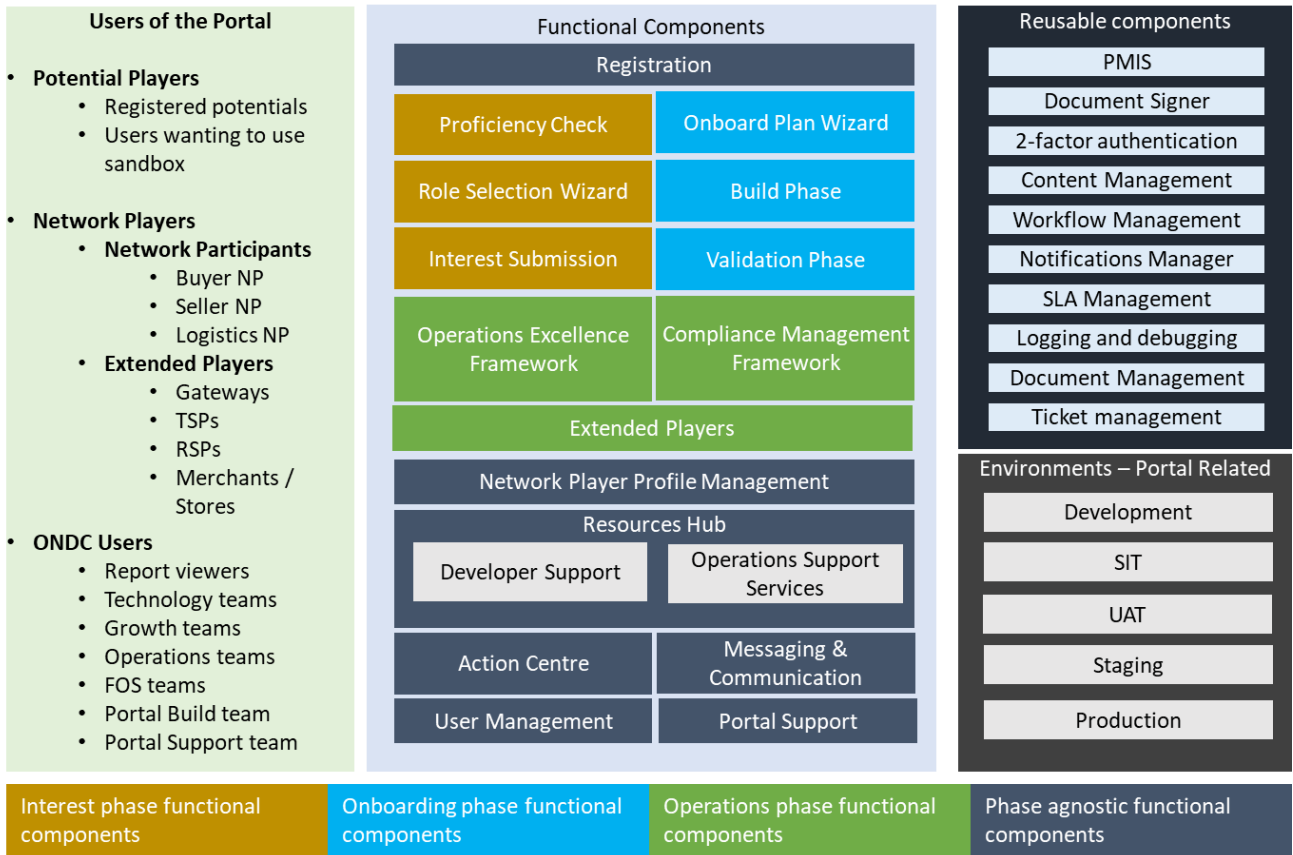
**Scalable architecture:** Design should be able to build horizontal scalable, high performance, fault tolerant system ensuring no single point failures, supports business capabilities, high cohesion, low coupling, and able to sustain user traffic without stress on the system.

**Security by Design** Secure-SDLC practices to be adopted, ensure code security, SOX compliance, enable Appscan, source code scanning, while ensuring code quality.

### 7.2 Functional landscape

The below figure provides blueprint of about the envisaged solution for ONDC web portal

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Each of the components depicted within the solution blueprint is described below:

## 1. Users on the portal

Various users are envisaged to be working on the portal. Table below provides a brief description of the user. To understand their specific interaction please refer the envisaged process flow within the portal

User	Description
Potential Players	These are users who will visit ONDC Web Portal and may be potential network players. They will register on the portal and be able to do primarily two things – <ol style="list-style-type: none"> <li>1. Submit a formal interest to join ONDC</li> <li>2. Submit a request to get access to ONDC sandbox</li> </ol>
Network Players	These are users who will be transacting and working within the ONDC network. These users include <ol style="list-style-type: none"> <li>1. Network Participants – At present ONDC defines these as Buyer NP, Seller NP and Logistics NP</li> <li>2. Extended players – These include gateways, technology service providers (TSP), reconciliation service providers (RSP). There are merchants / stores / sellers who connect to network via Seller NP. These are also being classified under this section for the purpose of system design</li> </ol> Role and functionality of each of the network players is defined and available on ONDC portal
ONDC Users	These include users which are part of ONDC, employees and extended ONDC army. These will include roles related to network growth, technology, operations, FOS, portal build and portal support

User	Description
	teams. Functionality of these teams can be understood by reading the envisaged process flow for ONDC Web Portal

**2. Functional components**

All components specified need to support the process flow defined.

a. Interest phase components

Component	Description
Proficiency check	This component refers to a MCQ based quiz to test the competency of an individual wanting to submit interest to join ONDC. It will have randomly generated questions as per defined areas under assessment.
Role selection wizard	This component will help a potential player pick a role that they can and want to play on the network. It will be a series of questions and based on response an appropriate role will be suggested for the user
Interest submission	Workflow for potential player submitting interest and the same getting approved. For extended players it will be lean approval process

b. Onboarding phase components

Component	Description
Onboard Plan Wizard	This wizard will help derive the onboarding plan for a network participant based on the profile information filled. The plan will undergo internal approval and help guide network participant will filling timelines against specific milestones identified.
Build phase tracking	This component will contain configurable list of obligations which are expected to be completed by a network participant at the time of joining the network.
Validation phase tracking	This component will provide status of validation against list of obligations and evidences submitted by network participant. The workflow will include submission and resubmission of additional, new or updated evidences as may be demanded during validation by ONDC and its extended army

c. Operations phase components

Component	Description
Operations Excellence Dashboard	This component refers to the series of workflows related to ensuring operations excellence for a network participant. This will include: <ol style="list-style-type: none"> <li>1. Reports and scorecards made available to network participants</li> <li>2. Status against growth plans, technology-related plans, operational readiness plans and policy related plans which might be added / updated from ONDC from time to time.</li> <li>3. Conveying and tracking adherence against guidelines and suggestions to NP in order to achieve operations excellence</li> </ol>

Component	Description
Compliance management Dashboard	This component refers to tracking and providing status of NP against the various compliances which are expected to be completed by a network participant
Extended players functionality	This will include profile management to capture information related to the network players and certain reports related to the players

d. Phase agnostic components

These components will be available to all users based on configurable logic

Component	Description
Network player profile management	Each network player will have a profile which will require certain information related to the network player to be captured. Network players will have option to modify these, and some of the updates may require approval from specific ONDC user. During various lifecycle stage, certain fields may get added and some would become mandatory based on conditions.  Network player profile management from ONDC user where-in status of the player on the network will be controllable
ONDC lifecycle support centre	This component will contain all documents, information, access to API documents, operations related SOPs, manuals guidelines, documents, etc. which might be required by a Network player from time-to-time.  It will include functionality of a developer support which will include API specifications and presenting information required for "Build" phase and also during subsequent upgrade of the protocol.
Action Centre	This will be list of TO-DOs for a user, based on defined grouping marked with priority. Since there are so many functions and extensions within the portal, any item which requires the user to act, will be present here. Any time that action is completed either in the specific section, it will be removed from here
Messaging & communication	This will consist of following: <ol style="list-style-type: none"> <li>1. Notification and alerts: from ONDC to network players, players will have option to update preferences within their profile</li> <li>2. Support requests: Support requests from network players including grievances, issues, etc. related to growth, technology, operations, policy or network. Appropriate ticket management (including issue and problem management) aspects will be enabled via back-end from ONDC side to support this functionality.</li> <li>3. Information requests: These could be ad hoc requests from ONDC asking for specific information or any submissions which ONDC users may want to provide to network players.</li> </ol> This module will always impact action centre.
User management	User management through self-service by users will be possible. Refer to process flow for further details. Generic user administration for all users is expected to be carried out.
Portal support	This will be team which will provide support related to portal.

3. Reusable components

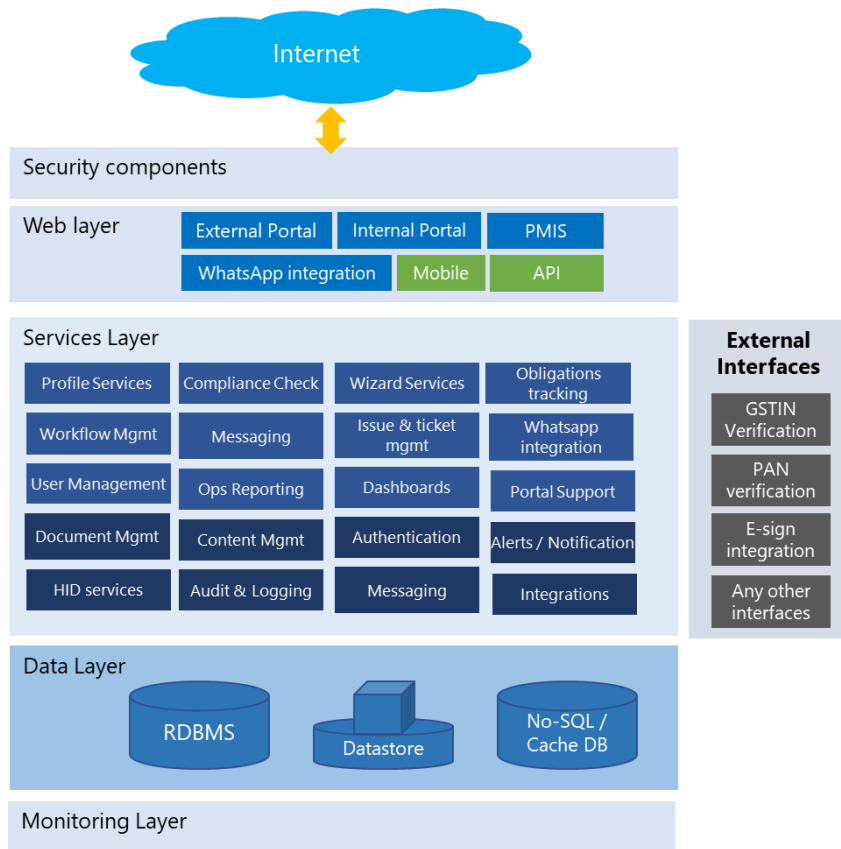
These are some key reusable components which are expected to be used. These are indicative in nature. Bidders are expected to evaluate the solution and consider these in their response within proposed solution.

**4. Environments**

Bidders are expected to maintain five environments viz development, SIT, UAT, Staging and Production with sufficient capacity and infrastructure support as required.

**7.3 Technical Architecture**

The below graphic provides a broad overview of the tiered architecture envisaged for the solution. Security components, web layer, services layer and data layer are envisaged.



This is an indicative representation the bidders are expected to provide a detailed solution architecture view with proposed technological components.

Mobile app and API interfaces are expected to come in future, the design should be capable of handling these types of interfaces.

**7.3.1 Sizing and volumetric assumptions**

Portal should be able to support different types of user workflow as defined within this document. The portal design should be capable to address maximum user concurrency. An indicative number in terms of estimations is being provided herewith.



RFP for selection of a System Integrator for building and managing ONDC Web Portal

##	User Type	Current Total NPs (Live on network + In pipeline)	Envisaged in future
1	Buyer NP	09 + 09 = 18	40
2	Seller NP – ISN	09 + 09 = 18	200
3	Seller NP – MSN	17 + 18 = 35	100
4	Logistics	07 + 03 = 10	50
5	TSP	10+	30+
6	RSP	Does not exist today	30
7	Gateways	01	04
8	Merchants/stores / sellers working with MSNs	35000+	200000+

Note: Today count includes NPs and players that are live on network and in different stage of onboarding after submission of interest. RSP is a new functionality. It may be assumed that an average NP will have about 10 users working on portal. For concurrency could be assumed at 10% of the users actively using the portal depending on the stage.

## 7.4 Process flow expected to be supported by the Portal

The section below provides an overview of the overall process flow expected to be supported by the portal. Bidders are expected to go through the same.

In order to understand the current process bidders may go through the ONDC Integration Guide available on ONDC website.

### A. PRE-LIVE COMPONENT

#### 1. PRE-ONBOARDING ON ONDC

- a. Registration on portal
  - i. Any entity / individual that intends to join ONDC shall have to register on the portal.
  - ii. Basic details will be captured about the individual such as Name, contact email, phone, Company Name (if applicable), Address
  - iii. Contact details would be verified using 2 factor authentication
  - iv. On successful completion, user would be registered on ONDC NP portal with basic functionalities.
  - v. This provisional registration will be valid for a configurable duration (say 60 days) post which ID will be auto-deleted. Expectation is to submit an interest to join ONDC within this period.
  - vi. There will be additional provision for users to request access to the sandbox environment with a specific approval process from the onboarding team where-in the registration timeline will be extended.

**Network Status:** INTEREST AWAITED

- b. Creation of profile for Network participant and network players
  - i. User profile will be created and tagged with registration email. Basic functionalities related to profile management such as reset/change passwords, contact details (with 2 factor authentication) etc. will be available
  - ii. Details to be entered by the user as per the profile form. Details which are currently captured within current NP form and other related forms with more information fields may be included, Details would be specific to the role of the NP - Buyer App, Seller App (Inventory), Seller App (Marketplace), TSP etc.
  - iii. Some fields will be mandatory, some fields will become mandatory as per stage within lifecycle and network status. Depending on the role that a user intends to be onboarded with, a user will have to provide the requisite information
  - iv. Documentary evidences may be asked for upload, digital document signing may be required at this stage
  - v. Details of primary contact will be required to be submitted (if different from the registration user)
- c. Proficiency assessment of potential
  - i. Registered users will be guided to read and understand about joining and doing business within the network
  - ii. For this purpose, users will be expected to go through documents / videos which may be later linked with ONDC academy it gets developed

- iii. There will be a proficiency quiz which the user may give anytime. The quiz will aim to confirm on the key topics which anyone joining ONDC should be aware of. Idea of the quiz is to ensure awareness of these aspects before submission of interest
- iv. Initially, passing of proficiency may be kept optional and subsequently may be made mandatory subsequently based on feedback
- d. Assistance in role selection on the network
  - i. Option will be available to the user to select the preferred role(s) that they want to play on ONDC. Alternatively, wizard-based role selection will also be available for the same.
  - ii. To begin with there will be one role for each registration. There will be user hierarchy to ensure based on user role access to information will be made available
  - iii. Role selection may be available for network players
- e. Formal submission of interest
  - i. Completion of profile along with required documents, passing of proficiency assessment and proper role selection
  - ii. User will submit interest to join ONDC network as a specified network participant
- f. Acceptance of interest by Onboarding Lead at ONDC
  - i. Based on the profile and information submitted, the interest will be received by users within the Onboarding Lead Group. Interest will be assigned to an Onboarding Lead who will be responsible to ensure onboarding of entity
  - ii. Interest will be qualified by Onboarding Lead, who may contact person submitting the interest / primary contact and may carry out checks as required on the information submitted
  - iii. On satisfaction, Interest will be accepted by the Onboarding Lead post which will begin the onboarding journey.
  - iv. In case there is a deficiency in the information submitted along with interest, Onboarding Lead will have two options – either to update themselves or return the interest back to the user to correct and resubmit the information. In case the information is updated the same will be displayed to the user and explicit confirmation on this update will be taken and recorded within the system.

**Network Status:** **ONBOARDING INITIATED**

## 2. ONBOARDING ON ONDC

- a. Updates on user profile at ONDC
  - i. On approval of the interest, NP user will now have authority to create up to a configurable number of sub-users (say 5 under the said account)
  - ii. There would also be some more information which the user will be asked to fill as next stage begins
  - iii. Profile update of defined fields may require confirmation by Onboarding Lead before update is made permanent
- b. Assistance in preparation of Onboarding plan
  - i. Once the interest is approved by Onboarding Lead, based on the profile information, an onboarding milestone plan will be generated by the system.

- ii. The milestones will be divided into 4 types – growth, policy, technology and operational readiness
- iii. NP user can refer to the obligations with respect to the role that has been selected to understand what is the work that is expected to be done. This will include
  - 1. Requirements to be met with respect to Policy to be met first
  - 2. Requirements to be met with respect to growth area
  - 3. Requirements to be met with respect to Technology
  - 4. Requirements to be met with respect to Operations
- iv. NP user will be asked to provide target dates against the milestones specified.
- v. Milestone plan for each of the group will be tracked by respective leads. These leads may be same in some case. Example, lead for policy and operations may be same.
  - 1. Policy - Policy Lead to be completed first
  - 2. Growth – Growth Lead
  - 3. Technology – Technology Lead
  - 4. Operations readiness – Operations Lead
- vi. Role of each of the leads is to certify that necessary obligations have been carried out satisfactorily by the NP.
- vii. Each of the leads is expected to approve the onboarding plan submitted after which the plan will be baselined.
- viii. NP user / leads will be able to update the dates subsequent to baseline. All updates will be audited.
- ix. Onboarding plan will also be prepared for a new protocol version released by ONDC. the process flow will be the same, only network status will be different. It will be driven through the compliance management framework within Post-live functionality.

**Network Status: ONBOARDING IN PROGRESS**

- c. Step 1: Build
  - i. NP users will submit compliance against the obligations and requirements mentioned against each of the parameters.
  - ii. NP user will be asked to submit evidences if and as necessary against each of the compliances
  - iii. There will be an intermediate checkpoint of the app demonstration post. Once the demo is successfully passed it can be submitted for validation. Approval of demo success will be provided by Onboarding Lead
  - iv. During entry for validation, there is a process of sharing of confidential keys with the NP, confirmation of this step via approval from authorized ONDC user will trigger entry into validation phase
- d. Step 2A: Validate (the current pre-production)
  - i. Each of the leads will verify and validate the obligations put out against the respect areas i.e. growth, policy, technology and operational readiness
  - ii. Obligations here refer to all the activities which are current carried out, these will be codified into a checklist template

- iii. Once the obligations are approved, the Leads will provide certification related to the said area.
- iv. Once approval is received from all leads, NP of compliance will be marked as "Validated" against that area.
- v. Once the NP user is "validated" across all areas, the status will be update

**Network Status:** PRODUCTION SANITY IN PROGRESS

- e. Step 2B: Probationary Live to Live on Network
  - i. Sanity runs will be carried out in production as per a defined checklist in production environment
  - ii. Once technology related operations are stabilized, Technology Lead will approve technology go-ahead for live operations
  - iii. After technology approval is received from technology lead, operations lead will give go-ahead for live operations.
  - iv. Onboarding lead will be notified about approvals technology and operations in production environment
  - v. On approval from operations lead which is after technology lead. NP is expected to perform stable operations

**Network Status:** LIVE ON NETWORK

## B. POST-LIVE COMPONENT

### 3. POST ONBOARDING ON ONDC

- a. Managing updates on user profile
  - i. NP can made updates within user profile, triggers / alerts will be initiated to category lead identified for the network participant
  - ii. This will be the interface by which information related to network participant can communicated at a later date
  - iii. There will be a mechanism to turn Network Participant status as "Suspended till xxx" or "Cancelled". This can be based on the operations framework defined below.
- b. Network Participant Operations Excellence Framework
  - i. Growth: Initially template-based capture, will be progressively improved. Growth activities related to buyer NP, seller NP (MSN & ISN), TSP and any other network participant may be managed using the framework. All activities related to NP footprint, transactions and capturing of growth targets and projections will be driven and tracked through the portal.
  - ii. NP Operations: All activities related to NP scorecard, operational hand-holding, pay out reconciliation, operational metrics, etc. will be driven and tracked through the portal
  - iii. Policy: Compliances in respect to policy changes, or deviations with respect to policy adherence would be highlighted to the NP via portal
  - iv. Technology: Compliances in respect to technology changes such as new protocol or related releases, features within the releases will be managed. There will be subsequent integrations with other initiatives being undertaken to automate the data being captured in respect to the Technology compliance
- c. Action Items

- i. Various TO-DOs for the Network participant will be categorized and listed here for action to be taken
  - d. Support request from Network Participant
    - i. NP can request for specific services from ONDC such as operations support, technical support, or any other requests
    - ii. NP can also provide suggestions on modifications / changes required on any of the aspects
    - iii. Raise issues being faced, this will be linked with JIRA in a way that support request will trigger a JIRA ticket
    - iv. Grievances in relation to ONDC may also be raised by Network Participant
  - e. Messaging and communication
    - i. Information request by ONDC from Network participant (flow to be defined, in terms of kind of information)
    - ii. Information request by Network participant from ONDC (flow to be defined, in terms of kind of information)

## C. EXTENDED PLAYERS COMPONENT

### 4. EXTENDED NETWORK PLAYERS FUNCTIONALITY

- a. There will be workflows for registration, role selection, role approval and operations flow for other network players such as Technology Service Providers, Gateways, Merchants / Stores (in case of MSN-type seller NP), reconciliation service providers etc. As such the onboarding process will not be as elaborate as specified above except for basic obligation completion (without onboarding plan). However, post-live components will be extended to these users as well.

## 7.5 Additional solution requirement specifications

The following additional solution requirements specifications are being listed for better understanding of expectations from the bidders. The bidders are expected to enhance the given specifications and present the same as part of their response.

### 7.5.1 PMIS element

Functionalities under PMIS element

1. A comprehensive project management information system shall be implemented to gather, integrate, organize, manage and monitor data flow of project data and information
2. Document approval workflow and versioning, this will include all project related documents
3. Project monitoring report giving details including work pending, work planned and work completed with time and efforts for the individuals involved within the project
4. No proprietary / custom built solution should be proposed. Specific customizations may be required on the solution, however, such customizations should provide lifelong free access
5. Capture requirements as user stories within PMIS
6. Should provide for functionality of co-creating a sprint plan and its approval via workflow
7. Ability to manage development against plan, measure efficiency and identify gaps
8. Enable test case results, raising of bugs during testing & production and bug-fixes workflow
9. Provide traceability across Development, SIT, UAT and deployment to production
10. Implementation of CI/CD pipeline throughout software lifecycle

### 7.5.2 Pre-live element

Pre-live element will include functionalities to enable workflow as mentioned within the pre-live workflow. The section below provides detailed minimum functionality that are required

11. Seamless integration as required with PMIS element
12. User management as detailed out within process flows for network players. Users will also be created by the system based on registration and through a normal user administration window for all other users.
13. Two-factor authentication is required to be enabled using email, mobile, Aadhaar, etc.
14. Document signer using DSC and Aadhaar-based e-sign
15. Ability to verify PAN, GSTIN which may be submitted by the user within their profile
16. OTP verification using phone/email/WhatsApp
17. WhatsApp integration is envisaged for notifications and alerts, due actions etc.
18. MCQ-based randomly generated quiz from a question bank
19. Wizard for role selection on network - this will have series of questions based on which a role will be suggested to the user
20. File upload, field validations on mandatory and conditional mandatory fields (mandatory dependent of other field values, dependent on current status of the user)
21. Approval workflow system based on requests submitted from user. Approval hierarchy should be configurable / auto-configurable based on type of workflow
22. Multiple workflows will be possible based on requests being submitted on external portal or initiated within internal portal
23. Unique identification for every workflow instance generated
24. Audit logging for all changes to be captured, changes in workflow levels, statuses, etc. should be traceable
25. Ability to create sub-users under a specific user type, based on current status and on approval
26. Creation of a milestone plan based on template (to be developed) for easier tracking
27. Workflow for approval or milestone plan. approvers will be able to add/modify steps
28. Rejection workflows in all types of workflows to be included. resubmission should be possible
29. Update of milestone plan created and audit trail to be maintained
30. Repository to provide step-by-step process of activities to be carried out along with links to knowledge resources to be prepared and made available on portal
31. Manage the information in terms of things to be done using content management repository
32. TO-DO module to provide list of items that NP has to complete with status
33. Module to provide status against the TO-DO item, and provide evidences in terms of completion of that TO-DO item
34. Reporting based on network player status
35. Facility to add TO-DOs by NP user and ONDC users
36. Auto-trigger for approval of evidences each time an obligation is verified. This can take place as and when an obligation is complete or when all obligations are complete
37. Work being carried out by NP user with regards to TO-DO will be accessible to respective leads
38. Creation of second level of obligations for stage approval (eg. Production sanity to live) to be created

### 7.5.3 Post-live element

Post-live element will include functionalities to enable workflow as mentioned within the post-live workflow. The section below provides detailed minimum functionality that is required

39. Seamless integration with PMIS and pre-live element

40. Development of operational excellence dashboard via portal

- a. Designing and developing an enabling UI/UX which will contextualize information exchange to take place between ONDC and network participant.
- b. Operational excellence framework will include series of elements such as – guiding network participants plan for growth in terms of sales achieved, coverage improved, display of operational efficiency scorecard and providing guidelines on what more can be done by network participant to achieve operational excellence.
- c. Components envisaged are primarily forms and trackers to help plan and monitor against plan, score-card display and providing actionable to-dos to improve score. Also, provide guidelines
- d. Various reports and dashboards would also be shown to users here
- e. The interface is expected to show some information populated about the user based on inputs from ONDC users, along with action items / observations against that information. Users are expected to provide their inputs against these observations. This communication is expected to be recorded and maintained.

41. Development of a compliance dashboard via portal

- a. This view will help network player understand where they stand with respect to compliance to the various obligations within ONDC
- b. This will be a list of obligations which will be pre-published and should be designed in a way obligations can be added/modified with ease by ONDC users requiring code change or portal restarts and also newer compliances which can be brought on by ONDC from time-to-time. For example, with a newer version of API specification being published, NP will have to comply to these by undergoing – Build and Validation phase with the newer protocol version.

42. Action centre

- a. This will be a view to help user understand the pending to-dos from their end at one place collated from above modules. It will be sufficiently classified based on types of actions, priorities and target dates, etc.

#### 7.5.4 Extended players element

This element reuses the functionalities developed within previous elements especially related to post-live functionality and would include the role selection and interest submission part. Details of these are captured in envisaged process flow for ONDC Web Portal.

#### 7.5.5 Common and Technical Element

43. Portal should comply with the latest GIGW guidelines issued from time to time
44. Portal should provide for configurable workflows with multiple level hierarchies, workflow orchestration, monitoring, auditing and reporting capabilities
45. Portal should provide options for configurable addition/modification of fields and validations such that addition of new fields does not require a significant effort in terms of development, testing, etc.
46. Portal should support consistent adherence to design and usability theme which will have to be defined upfront at the beginning of the engagement with approval from ONDC
47. Multi-lingual user flow should be supported primarily for static content and controls



48. Portal should be compliant to latest Web Content Accessibility Guidelines (WCAG) and overall solution should be compliant to IPV 4 & IPV 6
49. Portal should support different types of encryptions and ensure data security
50. Portal should comply with relevant guidelines for use of Aadhaar within its system
51. Portal should be mobile responsive, which a specific workflow
52. Portal should provide for multiple browser support
53. Portal should have the ability to map user journey on the portal through metrics and carryout analysis of how users are experiencing the portal
54. A robust content management system with approval workflow to manage updates on portal content to be enabled for the portal
55. A robust document and workflow management to be factored for support the mentioned functionality.
56. Bidder shall support for ISO 27001 and ISO 20000 certification when ONDC desires to go for it and ensure that the processes, controls and documentations defined are compliant to these standards.
57. Reporting modules envisaged different reports, these include
  - a. Portal workflow reports\*
    - i. TAT
    - ii. Stage-wise reports
    - iii. Pendency reports
    - iv. Throughput
    - v. Lifecycle / response time measurements
    - vi. Error reports
    - vii. Issue reports
  - b. NP operational performance against metrics. At present these reports are generated from excels
  - c. Network players performance reports
  - d. Basic graphical dashboards including heatmaps, bar charts, time-series analysis, geographical coverage
  - e. FOS operations monitoring in form a reports

## 8 Timelines, outcomes and deliverables

### Outcome milestones

##	Milestone	Timeline	Pay out
1	Enablement of PMIS for the project using JIRA (JIRA licenses will be provided by ONDC)	T + 15 days	P0
	High-level architecture document for ONDC Web Portal	T + 15 days	P0
2	Basic version of portal for pre-live functionality based on requirements that are available <ul style="list-style-type: none"> <li>User Registration</li> <li>Profile view and updates</li> <li>User management by NP</li> <li>Interest Submission</li> <li>Onboarding planning</li> <li>Workflow of approvals and tracking of plan against the obligations (For new and ongoing API version upgrade)</li> <li>Profile update status to 'live on network'</li> <li>Support and queries</li> <li>Alerts &amp; notifications (email-based)</li> <li>Reports related to this process</li> <li>VA/PT</li> <li>Appscan, source code scanning</li> </ul>	T + 1 Month – UAT T + 1.5 Month - Live	P1
3	Basic version of portal for post-live functionality based on requirements that are available <ul style="list-style-type: none"> <li>Profile updates</li> <li>Operations excellence dashboard</li> <li>Compliance dashboard</li> <li>Action centre</li> <li>Alerts &amp; notifications (mobile-based)</li> <li>Messaging and communications</li> <li>Reports related to operations</li> <li>VA/PT</li> <li>Appscan, source code scanning</li> </ul>	T + 2 months T + 2.5 months - Live	P2
4	Basic version of portal for post-live functionality based on requirements that are available <ul style="list-style-type: none"> <li>3<sup>rd</sup> party integrations</li> <li>Remaining functionalities not covered in P1 &amp; P2</li> <li>Enhanced dashboards (graphical, geographic)</li> <li>CI/CD setup</li> <li>Performance testing</li> <li>VA/PT</li> <li>Appscan, source code scanning, code quality checks</li> </ul>	T + 5 months - Live	P3

Warranty and operations support for a period of ONE year to be considered. During this period payment will be made on a quarterly basis based on automated SLA reports. It will be responsibility

of the SI to ensure that SLA clearance process is streamlined and easy to verify by ONDC for timely payment release.

**Deliverables milestones**

##	Deliverable	Due by
1	Project Management Information System to manage software lifecycle	P0
2	Web portal with said major functionalities as per milestone	P1 – P2 – P3
3	Software documentation, Operations Manuals, Technical manuals	PX + 3 months
4	Test scenarios, test cases, test conditions and test results (Unit, SIT)	P1 – P2 – P3
5	Design documents (HDD/LLD)	P1 – P2 – P3
6	Architecture document (High-level architecture, SAD)	P1 – P2 – P3
7	Updated requirements backlog	P1 – P2 – P3
8	SLA management functionality to monitor track performance of the system	P1 – P2 – P3
9	Project Progress Reporting through PMIS	PX and beyond
10	Visual designs to be developed as part of requirement capture process	P1 – P2 – P3
11	User Acceptance Testing support manuals, test cases	P1 – P2 – P3
12	Performance testing reports	P1 – P2 – P3
13	VA/PT reports	P1 – P2 – P3
14	Application scan reports	P1 – P2 – P3
15	Source code scan reports	P1 – P2 – P3

Where: PX refers to each Pay-out milestone

## 9 Payment terms

### 9.1 Price components

For the purpose of payments, the payment to the system integrator can be classified under two major types of components

#	Component	Description
1	Manpower component	This includes manpower effort required to design, develop, manage and operate the different requirements mentioned within the RFP.
2	Software / technology components	This includes cost of licences and support for the software being proposed.

Note:

- As the solution is expected to be hosted out of ONDC cloud (presently on AWS). Costs related to infrastructure, etc. will be borne by ONDC at actuals
- Other transactional costs such as OTP service, e-sign functionality will be paid at actuals by ONDC

### 9.2 Conditions for payments

Payment will be made to the System Integrator based on pay-out milestones defined below. These get linked to outcome milestones and deliverables as defined in section 6.

Do note the payments will be subject to fulfilment of Service Level Agreements.

Pay-out	Component	% Pay out
P0	Mobilization	Price associated with the PMIS component as per commercial bid, not exceeding 3% of the contract value.
P1	Software technology components	33% of the costs associated with software technology component, not exceeding 5% of the contract value
	Manpower	Price associated with the Phase 1 manpower component as per commercial bid, not exceeding 10% of the contract value.
P2	Software technology components	33% of the costs associated with software technology component, not exceeding 5% of the contract value
	Manpower	Price associated with the Phase 2 manpower component as per commercial bid, not exceeding 10% of the contract value.
P3	Software technology components	34% of the costs associated with software technology component, not exceeding 5% of the contract value
	Manpower	Price associated with the Phase 3 manpower component as per commercial bid, not exceeding 10% of the contract value.
P4	Quarterly pay-out 1	Quarterly pay-out of 10% of contract value after making deductions as per SLA compliance
	Quarterly pay-out 2	Quarterly pay-out of 12% of contract value after making deductions as per SLA compliance
	Quarterly pay-out 3	Quarterly pay-out of 14% of contract value after making deductions as per SLA compliance

Pay-out	Component	% Pay out
	Quarterly pay-out 4	Quarterly pay-out of 16% of contract value after making deductions as per SLA compliance

Note:

1. All pay-outs are subject to meeting of applicable SLAs. In case SLA is not measurable due to lack of appropriate data, it will be considered as breached.
2. Total pay-out from P0+P1+P2+P3 shall not exceed 48% of the contract value

### 9.3 Penalties

Penalties will be applicable as per Service Level Agreements subject to the maximum cap defined.

### 9.4 Taxes and other payment related conditions

Bidders should provide an all-inclusive rate against different components with detailed break-up taxes. If there is upward or downward change in the tax rates in future the same will be adjusted ONLY if the break-up of the same has been provided within commercial bid.

### 9.5 Price escalations

No price escalations will be permitted within the quoted rates. In case of extension period, escalations may be mutually agreed, however the same will not increase beyond 5% for two consecutive years of the current discovered rates as per the contract.

### 9.6 Change requests

Any change to necessitating a modification of the solution, subsequent to bid submission shall form the subject matter of a separate change request.

#### 9.6.1 Change Request Process Overview

1. Change Requests shall emanate from System Integrator designated personnel ('Project Manager') who shall be responsible for obtaining approval for the change from ONDC, and act as its representative throughout the Change Request Process.
2. The Project Manager shall complete 'Part A: Initiation' of the Change Request Note ('CRN'), and present it to ONDC via PMIS
3. Qualification of change as
  - a. Type 1: Covered under warranty
  - b. Type 2: Not covered under warranty
4. For "Type 1: Covered under warranty" no further action is expected to be taken
5. For "Type 2: Not covered under warranty" the process will be as given below:
  - a. Project Manager will be expected to classify the type of change into
    - i. Minor complexity change
    - ii. Medium complexity change
    - iii. Major change
  - b. Depending on the complexity base effort shall be derived from "Change Effort Guidance Matrix". From base effort total effort will be derived as below
    - i. Base effort: Effort for analysis, design, coding and deployment

- ii. Derived overheads: Effort for testing (SIT, performance and security), UAT support, program management – which will be capped at 60% of base effort
- iii. Total effort for change request: Base effort + derived overhead
- c. Change Effort Guidance Matrix will be prepared mutually in consultation with the bidder and reviewed periodically during the contract period. Structure of this matrix is as follows:

Area of change	Complexity - Minor	Complexity -Medium	Complexity -Major
UI change			
Data structure change			
Mutually added subsequently			

- d. Based on total effort, value of change request will be approved by ONDC.
  - e. The Selected Bidder will assess the CRN and complete 'Part B: Evaluation' of the CRN, and provide as a minimum:
    - i. A description of the change;
    - ii. A list of deliverables required for implementing the change;
    - iii. A time frame for implementation of the change;
    - iv. An estimate of any proposed charges for implementation of the change; and
    - v. material evidence to prove that the proposed change is not already covered within the Agreement and the Scope of Work.
  - f. If satisfied and after securing all necessary internal approvals, the Project Manager for the Purchaser shall complete 'Part C: Authority to Proceed' of the CRN and submit the completed CRN to the Selected Bidder's Project Manager, subsequent to which the Selected Bidder shall be obliged to implement the proposed change within the agreed timeframe.
6. Classification of Type 1 change shall be mutually agreed.

## 10 Service Level Agreements

A set of parameters has been identified as key to the successful implementation of the Project. If the performance of the System Integrator in respect of any parameter falls below the prescribed tolerance limit, liquidated damages are imposed for the breach. All the payments to the System Integrator are linked to the compliance with the SLA metrics specified in this section. During the contract period, it is envisaged that there could be changes to the SLAs, in terms of addition, alteration or deletion of certain parameters, based on mutual consent of both the parties i.e. ONDC and System Integrator.

### General guidelines for SLA

- a. During O&M phase, the SLA parameters shall be monitored on a monthly basis as per the individual SLA parameter requirements. In case the service levels cannot be achieved at service levels defined in the tables below, it shall result in a breach of contract and shall invoke liquidated damages. Inability to measure any particular SLA shall be considered as breach of that SLA parameter.
- b. SLAs would be reported monthly. A Service Level breach will occur if the System Integrator fails to meet Minimum Service Levels on a monthly basis for a particular Service Level. Root cause analysis (RCA) to be prepared for all cases of breach in SLA's and shared with ONDC.
- c. However, liquidated damages would be levied every quarter. The percentage of SLA violation would be the average of monthly SLA measurements for the months in that respective quarter.
- d. Overall Availability and Performance Measurements will be on a quarterly basis for the purpose of Service Level reporting. Month wise "Availability and Performance Report" will be provided by the System Integrator every quarter in the ONDC suggested format and a review shall be conducted based on this report. Availability and Performance Report provided to the ONDC shall contain the summary of all incidents reported and associated performance measurement for that period.
- e. Liquidated damages are mentioned as a percentage of certain components of cost. During the Development & Implementation phase, the maximum liquidated damages are capped at 10% of Total Project Value. If the liquidated damages during Development and Implementation phase exceed 10% of the Total project value, then ONDC reserves the right to terminate the contract.
- f. During O&M phase, liquidated damages per quarter are capped at 20% of that quarter's payment.  
If liquidated damages calculations exceed 19% of the quarterly payment for two consecutive quarters, then ONDC can take appropriate action including termination of the contract and forfeiting of Performance Bank Guarantee. If liquidated damages calculations in any quarter exceed 30% of quarterly payment, then ONDC can take appropriate action including termination of the contract and forfeiting of Performance Bank Guarantee.
- g. For levying liquidated damages on non-performance during sustenance support period, Quarterly payment instalment of Operations & maintenance phase would be considered for

calculation purpose. Liquidated damages would be deducted from the next payment being made to System Integrator.

- h. SLAs are categorized under two heads depending on the phase the project is i.e. during implementation and Operations & Maintenance.

##	Condition	Measurement	Penalty
1	Missed timelines for achieving milestone as defined within outcome timelines	Measured as the difference between the planned date for the milestone and the actual date of its completion <b>Source</b> Reports published within PMIS	1% of contract value per week of delay
2	Change Management – Handling of change requests	As per timelines defined in Change Management section in the RFP (or timelines agreed during the project) <b>Source</b> Reports published within PMIS	0.5% of contract value per week of delay
3	Availability of critical portal services to end users including those impacting onboarding or operation timelines Monitored from end user machines	Availability will be measured on a monthly basis <b>Source</b> Reports from cloud management console and other related tools	<ul style="list-style-type: none"> <li>• Till 99.6%: No penalty</li> <li>• &lt;99.6% &amp; &gt; 99%: 3% of quarterly payment</li> <li>• &lt;99% &amp; &gt; 97%: 4% of quarterly payment</li> <li>• Below 97%: 5% of quarterly payment</li> <li>• For every 1% drop in availability percentage below 95%, additional penalty of 1% will be</li> </ul>
4	Helpdesk ticket/Incident response time  Acknowledging and responding to issues logged related to portal	Average Time taken to acknowledge and respond once a ticket/incident is logged through one of the agreed channels. This will be calculated for all tickets/incidents reported within the reporting quarter (24x7x365)  <b>Source</b> Autogenerated Reports from the issue tracking tool proposed	<ul style="list-style-type: none"> <li>• Till 10 minutes: No penalty</li> <li>• Beyond 10 minutes: 3% of quarterly payment</li> </ul>



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##	Condition	Measurement	Penalty
5	<p>Time to resolve problems based on severity. Timelines for each severity shall be mutually agreed during implementation. This classification will be automated within the tool.</p> <p>Severity 1 will be issues related to external ONDC Portal user's inability to work with the portal</p> <p>Severity 2 will be issues related to internal user's inability to work with the portal</p> <p>Severity 3 will be remaining issues</p>	<p>Average time taken to resolve the reported problem based on severity. This will be calculated for all tickets/incidents reported against the said severity within the reporting quarter (24x7x365)</p>	<ul style="list-style-type: none"> <li>• Till cut-off time defined for severity level: No penalty</li> <li>• Beyond cut-off time defined for severity level: 3% of quarterly payment</li> </ul>
6	<p>Submission of Root Cause Analysis (RCA) reports. For all Severity 1 &amp; Severity 2 incidents resolved during the quarter, System Integrator to submit RCA reports within PMIS</p>	<p>Time to be calculated from the date of resolution as per issue tracking tool till the date of submission of the RCA report on PMIS.</p>	<p>Within 5 working days: No Penalty</p> <p>&lt;=5 working days &amp; &lt;10 working days: 0.5% of quarterly payment for each incident</p> <p>Beyond 10 working days: 0.75% of quarterly payment for each incident</p>
7	<p>Penetration Testing (external) will be conducted once every year. All detected vulnerabilities to be closed within the quarter.</p>	<p><b>Source:</b> PMIS</p>	<p>Within 15 calendar days: No Penalty</p> <p>&lt;=15 working days &amp; &lt;30 calendar days: 0.5% of quarterly payment for each incident</p> <p>Beyond 30 calendar days: 0.75% of quarterly payment for each incident</p>
8	<p>Average response time of 2 seconds on pages related to business transactions of the portal measured from data centre LAN</p>	<p><b>Source:</b> Reports from cloud management console and other related tools</p>	<p>Till 95%</p> <p>Below 95% - 5% of quarterly pay out</p>

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##	Condition	Measurement	Penalty
9	Outcome of user satisfaction survey on the portal. Average rating as per user score given measured across a quarter	<b>Source:</b> NPS based survey carried through portal	9 and above: No penalty 7 to 9: 1% of quarterly penalty Less than 7: 2% of quarterly payment

### **Section 3: Draft agreement to be signed with successful bidder**

Will be shared with successful bidder.