



ONDC
elevate
navigate. inspire. evolve.

May 22, 2023

Bengaluru



Network Policy & Transaction level Contract

Overview

1

Critical Network Policy obligations & Expectations from Network participants

2

Transaction-level Contract

3

User Council updates

4

Plan for 2023-24

5

Summary and Key Asks

What governs activity on network

Laws and Regulations

Law of the land, existing statutes including Consumer protection, e-Commerce, etc.

Dependent on Who. Where. What. When. How for any transaction

Network Policy

Policies, Code of Ethics, consensus driven through Network Participant Agreement

Transaction Level Contract

Transactional terms agreed between two parties carrying out transaction on the network – Commercial & Operational

Overview

1

Critical Network Policy obligations & Expectations from Network participants

2

Transaction-level Contract

3

User Council updates

4

Plan for 2023-24

5

Summary and Key Asks

Reiterating NP obligations related to a transaction

Search & Discovery	Selection & order creation	Return, refunds, cancellations	Issues & grievances	Personal Data	Certification & Audits
-------------------------------	---------------------------------------	---------------------------------------	--------------------------------	----------------------	-----------------------------------

Obligations as per network policy

	Buyer Node	Seller Node
Send search to all seller nodes	✓	
Treat all seller nodes fairly, no ad hoc exclusions	✓	
Disclose criteria for filtering and sorting of listings	✓	
Clearly mark sponsored results	✓	
Make all relevant sellers discoverable to all buyer nodes		✓
Treat all sellers uniformly in pushing listings to buyer nodes		✓

Policy reference: [Chapter 2: Business Rules](#)

Reiterating NP obligations related to a transaction

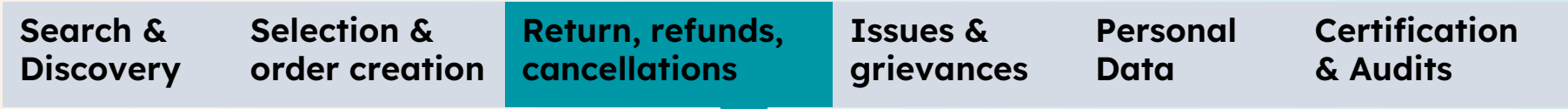
Search & Discovery	Selection & order creation	Return, refunds, cancellations	Issues & grievances	Personal Data	Certification & Audits
--------------------	---------------------------------------	--------------------------------	---------------------	---------------	------------------------

Obligations as per network policy

	Buyer Node	Seller Node
Convey accurate product description		✓
Convey complete and accurate sale terms (fulfillment, refund, cancellation etc)		✓
Display product info received as is from Seller Node	✓	
Display terms of sale received as is from Seller Node	✓	

Policy reference: [Chapter 2: Business Rules](#)

Reiterating NP obligations related to a transaction



Obligations as per network policy

	Buyer Node	Seller Node
Process refund as per sale terms conveyed to Buyer	✓	
Process return/ refund/ cancellation as per the sale terms conveyed to Buyer		✓
Compulsory refund for defective product/ deficient service		✓

Policy reference: [Chapter 2: Business Rules](#) and [Chapter 3: Commercial Model](#)

Reiterating NP obligations related to a transaction

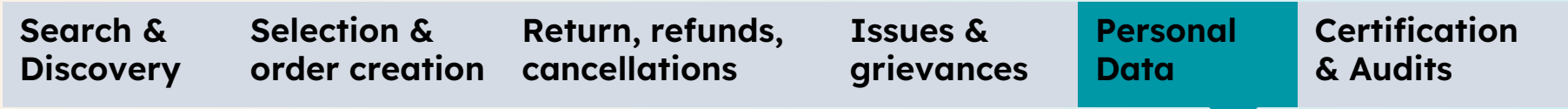
Search & Discovery	Selection & order creation	Return, refunds, cancellations	Issues & grievances	Personal Data	Certification & Audits
--------------------	----------------------------	--------------------------------	--------------------------------	---------------	------------------------

Obligations as per network policy

	Buyer Node	Seller Node
Responsible for buyer's complaints	✓	
Responsible for seller's complaints		✓
Resolve complaint in time, cascade to other NPs if required	✓	✓
Coordinate with all involved NPs to resolve a complaint	✓	✓
Level I: 2 hrs to respond; 24 hrs to offer resolution (per NP)	✓	✓
Level II: 2 hrs to respond; 96 hrs to offer resolution (per NP)	✓	✓
Appoint a Grievance Redress Officer to resolve complaints	✓	✓

For details see [Chapter 6: Issue and Grievance Management](#)

Reiterating NP obligations related to a transaction



Obligations as per network policy

	Buyer Node	Seller Node
Explicit consent MANDATORY to use personal data for anything other than transaction completion and post-confirmation support	✓	✓
Publish a privacy policy	✓	✓
Notify data subject of a breach without undue delay	✓	✓
Take consent from Buyers to share data	✓	
Take consent from Buyers for any use other than completing transaction		✓

For details see [Chapter 7: Network Data Management](#)

Reiterating NP obligations related to a transaction

Search & Discovery	Selection & order creation	Return, refunds, cancellations	Issues & grievances	Personal Data	Certification & Audits
--------------------	----------------------------	--------------------------------	---------------------	---------------	-----------------------------------

Obligations as per network policy

	Buyer Node	Seller Node
Implement security practices as per internationally acceptable standards, on level of or higher than ISO 27001 or COBIT	✓	✓
Breach notification to ONDC within 6hrs if personal data may have been breached	✓	✓
Certification at time of onboarding, and then annually, or upon implementing a protocol update	✓	✓
TSPs engaged by NPs must be certified, as applicable	✓	✓
Incidental audits can be ordered for specified reasons	✓	✓
Certification and audits through empanelled Certification Agencies	✓	✓

For details see [Chapter 8: Network Technology Governance, Certification & Audits](#)

Overview

- 1 Critical Network Policy obligations & Expectations from Network participants
- 2 Transaction-level Contract**
- 3 User Council updates
- 4 Plan for 2023-24
- 5 Summary and Key Asks

Understanding Transaction Level Contract structure

Legally binding, digital contract between Network Participants

Transaction Level Contract

Supplementary documents

Contractual Terms

Common Interpretation

Guidance on static terms

API specifications

Static terms*

Glossary of terms

Reference terms

Transaction-specific varying terms including Commercial, TAT, Settlement

Standard terms including Indemnity, Force majeure, Representations & warranties

Human readable description of terms in API specifications

Guidance for NPs on what should go in static terms

** Proposed in API version 1.2*

Transaction Level Contract: How it works?

Binding contract between Buyer App and Seller App to facilitate a transaction between buyer and seller

API Spec

- ❖ **Attributes in API Spec for configurable terms such as buyer finder fee, fulfillment TAT etc.**
- ❖ **Finalized at the \on_confirm API Call + ACK**



Static Terms

- ❖ **Static Terms to define key contractual terms not available in API Spec**
- ❖ **Cannot Override terms though API Attribute**

Overview

- 1 Critical Network Policy obligations & Expectations from Network participants
- 2 Transaction-level Contract
- 3 User Council updates**
- 4 Plan for 2023-24
- 5 Summary and Key Asks

User Council

- First participatory governance body constituted
- Deliberative and advisory body for policy and governance issues
- First meeting held on 14th December 2022. 4 meetings so far.
- Key decisions taken so far -
 - a. Clarifying provision on Seller Apps' use of buyer data,
 - b. Buyer Apps to disclose sorting and filtering parameters on their website,
 - c. NPs to be permitted to mutually decide SLAs for issue resolution,
 - d. NPs to share non PII Information with ONDC for network health monitoring.
- Intended to represent wide range of NPs' views on governance

Overview

- 1 Critical Network Policy obligations & Expectations from Network participants
- 2 Transaction-level Contract
- 3 User Council updates
- 4 Plan for 2023-24**
- 5 Summary and Key Asks

Major initiatives for 2023-24

1. Updating policy and TLC for new Categories

Mobility, B2B & FS by Jun'23

Pharma, Agri, Export by Sep'23

Travel, Hospitality by Dec'23

Expectations from NP

- Inputs on policies and TLC development
- Feedback post implementation

2. Policy compliance framework

Framework and roadmap by Jun'23

Dedicated team & SOP for compliance
Sep'23

Automation for M&E processes Dec'23

Expectations from NP

- Inputs on framework (upon release)
- Cooperation for better compliance (data/ information submission; co-creation of SDKs)

3. Government clarifications on legal compliance

Tax related clarifications (ongoing)

FSSAI licensing (ongoing)

MoCA clarifications

MoRTH clarifications

Overview

- 1 Critical Network Policy obligations & Expectations from Network participants
- 2 Transaction-level Contract
- 3 User Council updates
- 4 Plan for 2023-24
- 5 Summary and Key Asks**

Summary and key asks from NPs

Area	Expectation from NPs
Network Policy	<ol style="list-style-type: none"><li>1. Key compliances for Buyer Apps:<ol style="list-style-type: none"><li>a. Fair search and discovery<li>b. Display sale terms and product details without modification<li>2. Key compliances for Seller Apps:<ol style="list-style-type: none"><li>a. Make all sellers discoverable<li>b. Complete and accurate sale terms & product details<li>c. Honour return/ refund/ cancellation terms<li>3. Key common compliances:<ol style="list-style-type: none"><li>a. Personal data use only with explicit consent<li>b. Resolve complaints as per IGM timelines<li>c. Report security breaches in timely manner<li>d. Get certified by ONDC empanelled CA

Summary and key asks from NPs

Area	Expectation from NPs
Transaction level contract	<ol style="list-style-type: none">1. Utilise all features of the TLC to reduce ambiguity in obligations2. Honour the terms of TLC (it is a binding contract)
Policy updates	<ol style="list-style-type: none">1. Give feedback on proposed updates and amendments to User Council members2. Flag issues and propose amendments as necessary to UC members
API Spec v1.2	<ol style="list-style-type: none">1. Utilise new features such as 'limitation of liability' attribute2. Buyer Apps and LSPs should utilise the new static terms feature3. Consult with seller apps in advance before finalising static terms, to avoid disputes4. Give feedback on the Glossary of Terms



Business Operations

Things to discuss – Business Operations

1. Network Health at the core of Business Operations

1. Challenges and Learnings

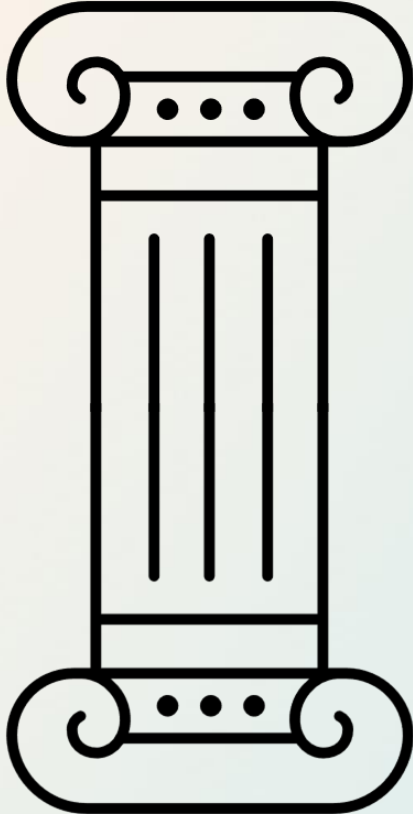
- **Onboarding to Post Order fulfillment**

1. Upcoming areas of attention

- **Customer Support - IGM**
- **Payments & Settlements - RSP**

1. ONDC enablers for scale up

Network Health at the core of Business Operations



1. **Minimum integration errors between NPs occur**
2. **Sellers Accept & Fulfill Orders**
3. **Sellers Ship Orders within promised time**
4. **Minimum disconnect in Commercial terms - RTO,etc.**
5. **NPs ensure that customer issues are duly addressed**
6. **Payments & Settlements released in promised time**
7. **Implement framework for Network Observability**

NPs to share information without PIIs through published interfaces - APIs.

Challenges & learnings – Integration Errors

- **Implementation of error monitoring framework imperative**
- **Non display of Catalogue - Rejection errors require attention**
- **Select vs. on select response Errors**
 - **Monitor for unintended vs. genuine business errors**
- **Real Time monitoring of confirm vs. on_confirm errors**
- **JIRA Issue Resolution TAT - Target 2 days**

Challenges & learnings – Fill Rates

- **Fill rates are improving but can be further improved**
 - **Top 3 constraints**
 - **Inventory & Price Gaps**
 - **Low AOV**
 - **Logistics Issues**
 - **Fill Rates on High Volume Days - advance update of plan**
 - **Item Level vs. Order Level Fill Rates to be tracked**
- **Seller APPs expected to have dedicated operations team**

Challenges & learnings – Delivery within ETA

- **Location PIN accuracy at Buyer APPs**
- **Time to Ship to be updated as per realistic assessment**
- **TTS for Grocery stores & RTS to logistics per store close timings**
- **Store Level Pending Order Monitoring & Restrains, if necessary**
- **Seller APPs to build shipping related enhancements**
- **Shipping Label Printing & Ready To Ship Discipline**
- **Utilise Fulfillment status besides order status to update buyer**
- **Logistics - enhanced support to retail seller Apps required**

Learnings –Commercial Terms

- **Define Static Terms (ver 1.2) to cover areas of disconnect**
- **Eg. Cancellation Requests by Buyers through Buyer APPs**
 - **Pre-ship cancellation for non M2O should be accepted**
 - **Post ship cancellation for non M2O : accept with recovery of forward shipping & RTO costs from Buyer APP, if reqd.**
 - **Post ship cancellation for non M2O & Returnable : accept to avoid returns and related costs**
- **Transmit correct order , fulfillment status with correct reasons**
 - **Logistics sending delivered for RTO orders to be fixed**
- **Terms to allow part cancellation of orders by sellers**
- **Resolve order status mismatch issues on priority**
- **Cover handling of weight difference & other logistics nuances**

Areas of Attention – Customer Support

- **Implementation of IGM APIs is mandatory**
- **IGM APIs do not solve for tracking of issues - CRM imperative**
- **Seller Issues also need to be tracked**
- **Top 3 Present Issues**
 - **Where is my order**
 - **Issue with Product Delivered**
 - **Refund not received - Impact of ineffective resolution**
- **Immediate Challenges**
 - **Process & System gaps in customer support implementation**
 - **Avg. resolution TAT should be resolved in 2 days**
 - **Capacity constraints to handle support tickets**
 - **Issues of delayed refunds and gap in quality of response**

Areas of Attention – Payment Settlement

- **Implementation of RSP APIs is mandatory - Simplified flow of**
 - **Recon Statement per RSP specs (in house or RSP provider)**
 - **Payout Instruction to NP's Bank or NPCI**
 - **Update Recon with Payout Details & Send over API**
 - **On Recon Statement in response; on receipt of payout**
 - **RSP APIs agnostic to nature of Bank Account of NP**
- **Settlement of Payments with order level payout details expected on daily basis - Industry imperative**
- **Payouts to sellers not in direct purview - but concerns emerge**
- **Logistics Invoicing & Payments Settlement needs attention**
- **NPs using TSPs - required to own payouts and settlements**

ONDC enablers for scale – Timelines for Implementation

Ver 1.2
(As per release calendar)

Certification Framework
(Sep'23)

Static Terms of the TLC
(Per ver 1.2)

Operations Support Centre
(Live)

RSP Framework
(Jun'23)

IGM Framework
(Jun'23)

NP Portal
(Sep'23)

Catalog Score
(Jun'23)

Network Observability
(May'23)



06

Implementation of “Reconciliation & Settlement” and “Issues & Grievance” Features

Principles

Trust & Transparency

With enablement of the framework, there will be trust, confidence and transparency in the way funds are being settled among network participants

Contract Enforcement

The framework shall ensure adherence to TLCs by providing a suitable on-network fund settlement mechanism

Participant Centricity

The framework is designed considering the needs, perspectives, and experiences of individuals are at the heart of every decision and action

Systems & process driven

RSP leverages technology as an enabler to for reconciliation and settlement between network participants

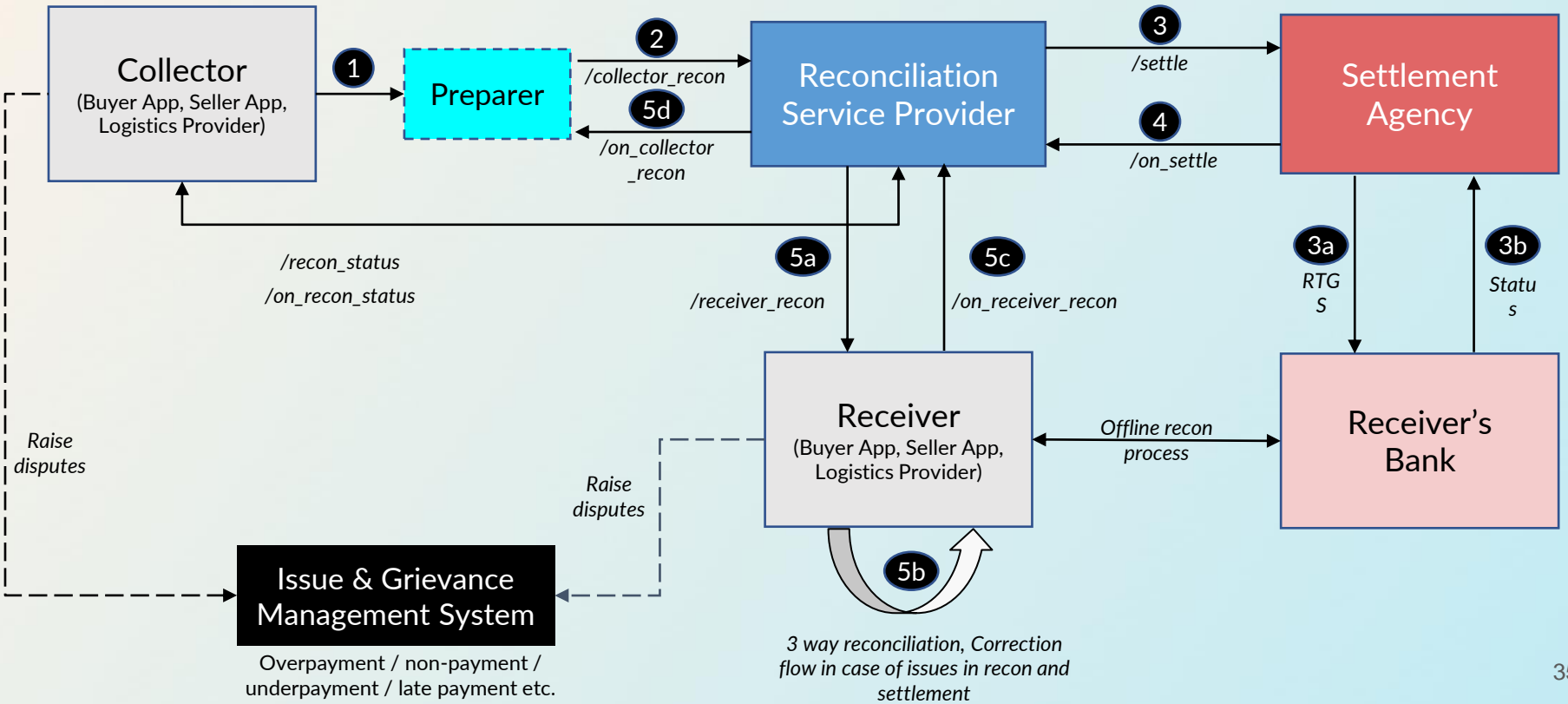
Quick & Convenient

The framework shall provide a one-stop solution for quick and convenient funds movement

- Enable **seamless settlement** of funds collected by participants
- Maintaining **audit trail** for posterity
- Defining **standards for communication** enabling transparency, efficiency and machine readability of Information
- **Building trust** through safeguarding fund flow for a transaction through well defined triggers for money withdrawal from Nodal Like account
- **Ensuring non-repudiability** through digital signatures and payload authentication
- Fostering economic efficiency with **transaction contract linked payment settlement**

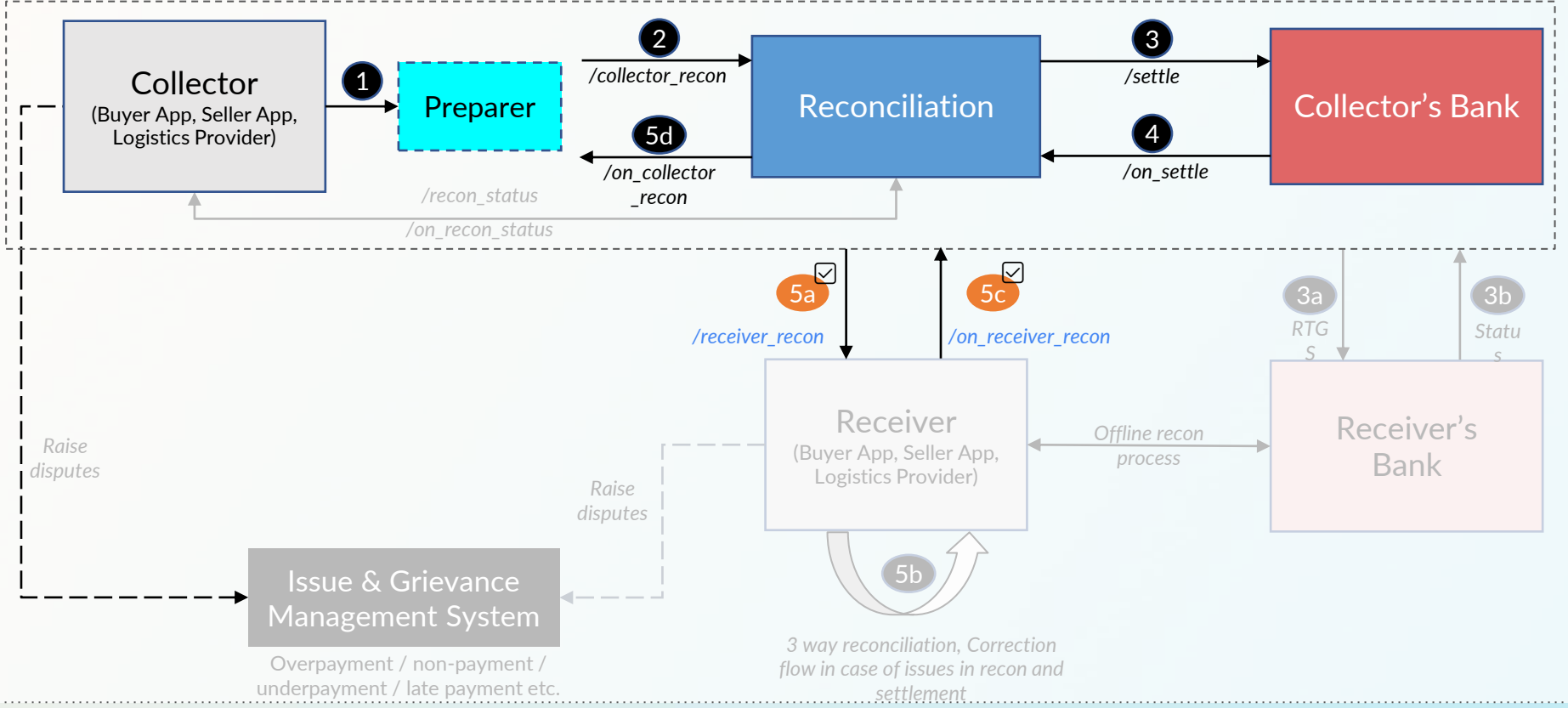
Reconciliation and Settlement Framework

1 PG/Cash collection report, Order book, and Nodal bank account statement

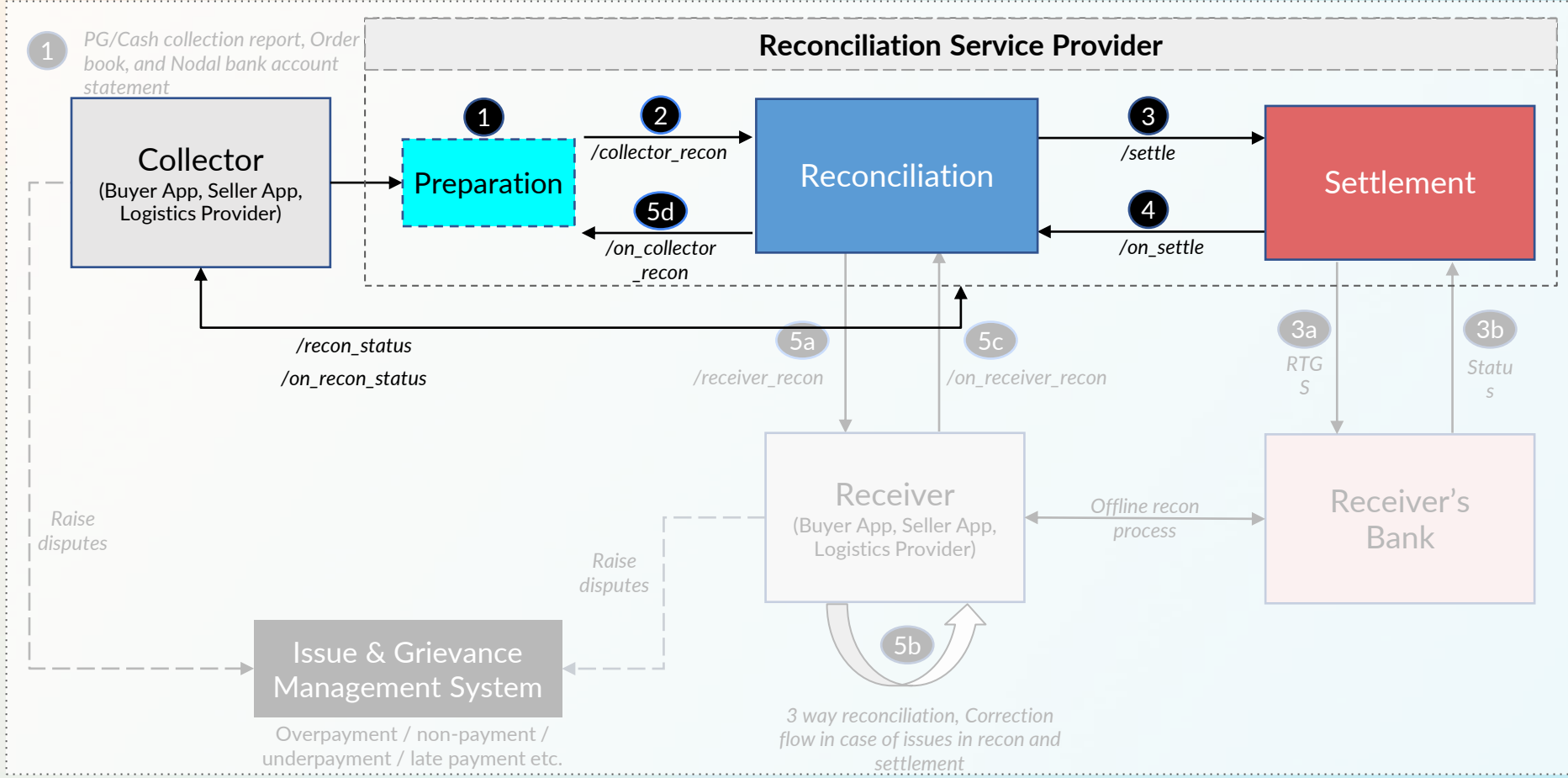


Model 1 - Collector does Recon and Settlement

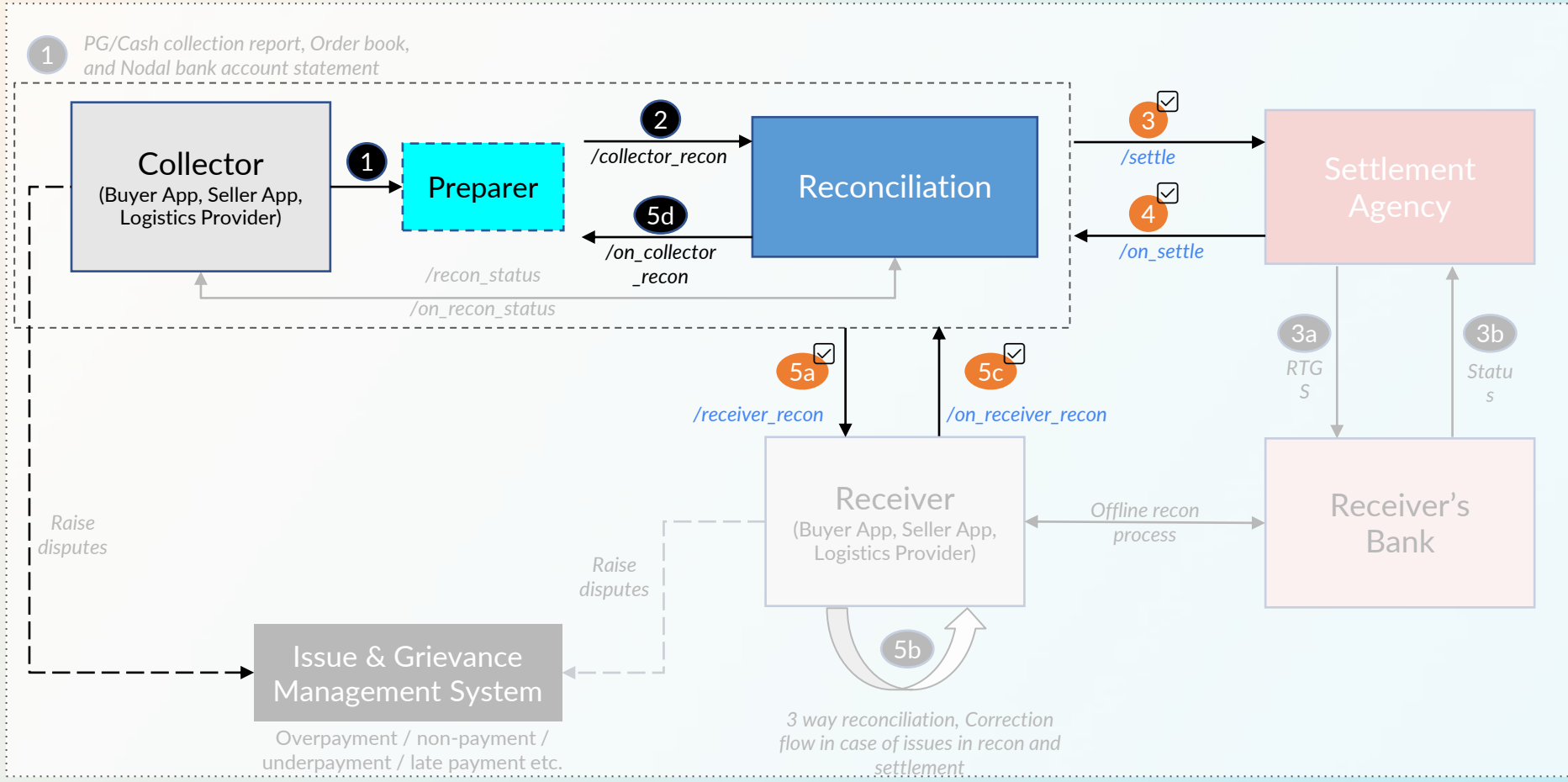
1 PG/Cash collection report, Order book, and Nodal bank account statement



Model 2 - Collector Leveraging RSPs for E2E

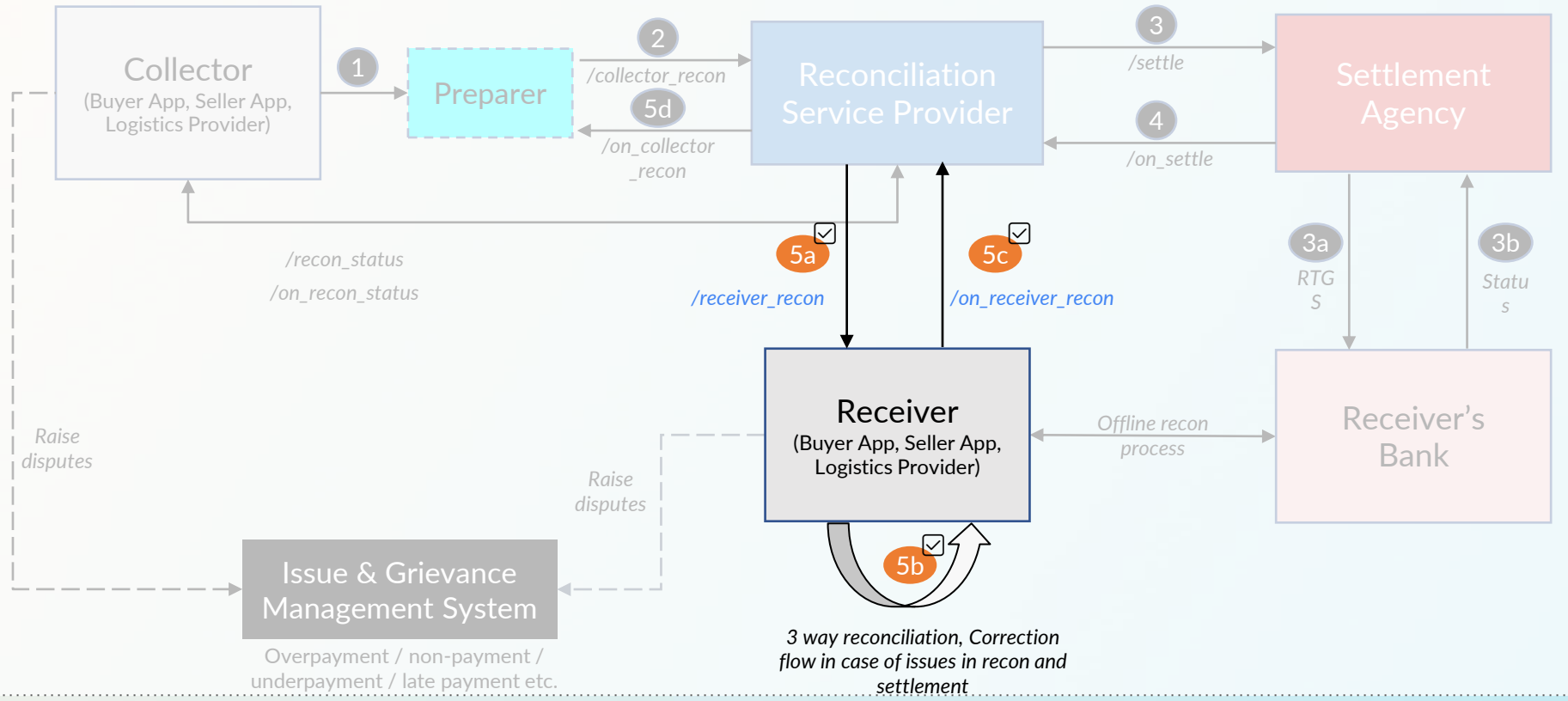


Model 3 - Collector Leveraging SAs



Model 4 - Only for Receivers

1 PG/Cash collection report, Order book, and Nodal bank account statement



Why IGM Framework

End User Satisfaction

Focus is to address complaints in a way that they have seamless and satisfactory experience on the network

Facilitation

Facilitate complaint resolution and tap into expertise of various resolution platforms/ professionals to provide resolutions

Agile & Solution focused

IGM shall go through multiple iterations from time to time enabling enhancements in dispute handling and resolution

Contract Enforcement

Ensures adherence to SLAs and TLCs by providing a suitable redressal mechanism in breach of such agreements

Implication on transactions

Resolution as provided through the IGM will have implications on the transactions and transaction contracts on the network and NPs shall have to take necessary action in order to resolve complaints respecting the resolution finalised through the IGM mechanism

Trust & Transparency

Acknowledge & address complaints so that there is trust, confidence & transparency in the way the network operates

Technology Driven

Leveraging technology and interoperability as an enabler to resolve on-network complaints

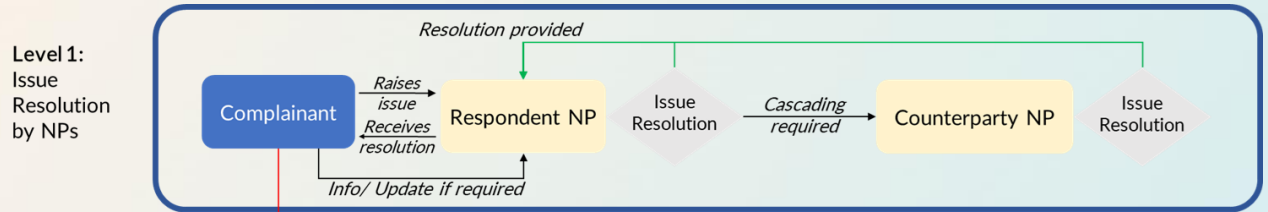
Quick & Convenient

IGM shall be a one-stop destination for quick and convenient resolution of complaints on the network

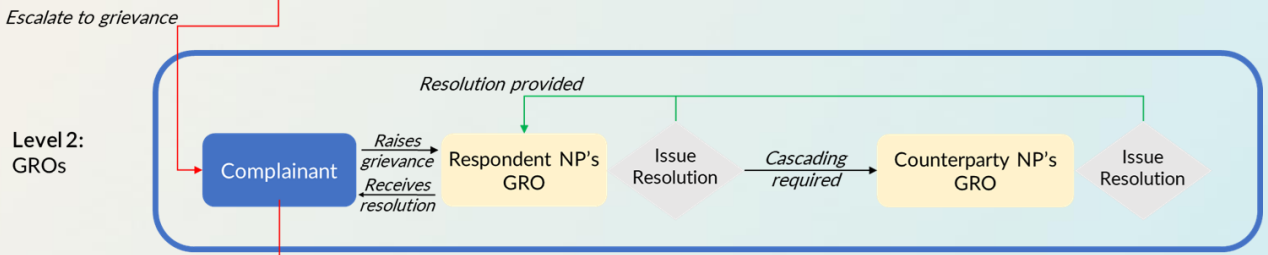
Reputation Assessment

Complaints raised against NPs shall impact their on-network score with implications on their overall reputation

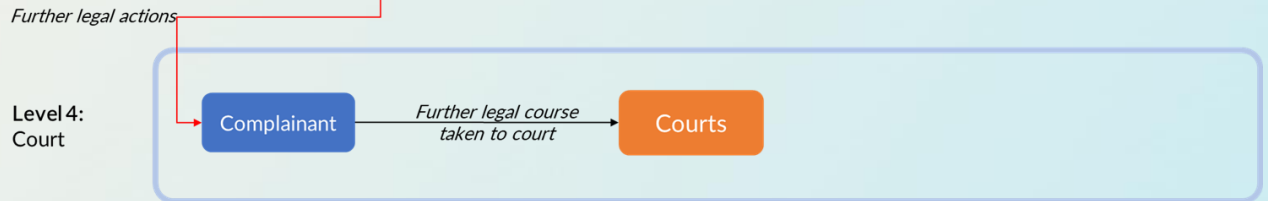
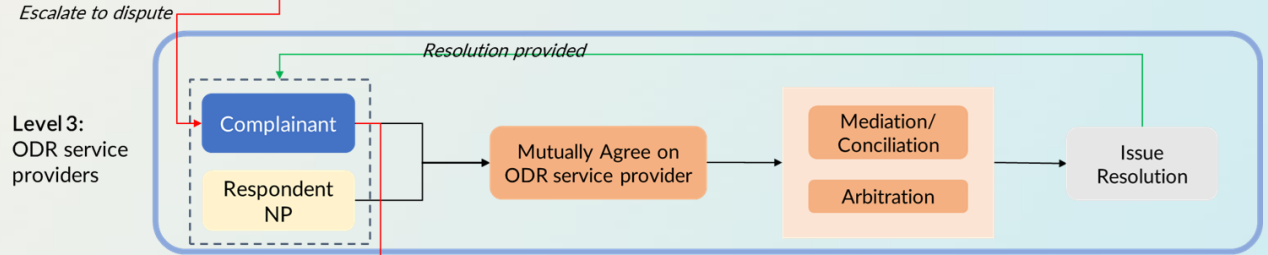
Issue & Grievance Management Framework



MVP Phase 1 Implementation



Phase 2 Implementation



Further legal actions

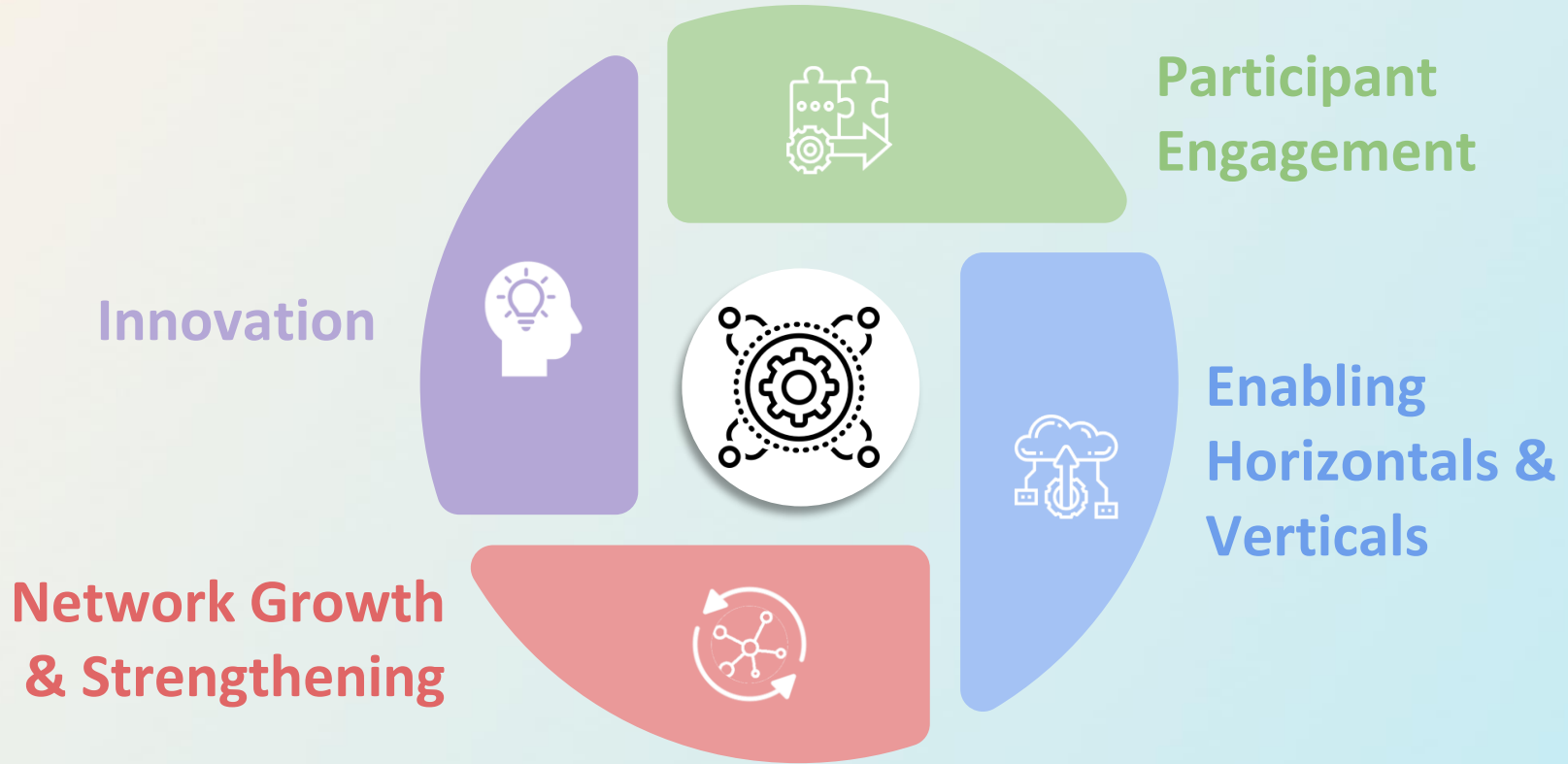
- Unique **Network Issue Id** for each complaint
- Only the complainant or someone on behalf of the complaint has the ability to “close” a complaint
- Complaints will only be marked as “resolved” by a respondent
- Option to escalate the complaint to the next level shall be made available via the interfacing application based on following two conditions:
 - *Time trigger: When time to respond or provide a resolution has elapsed*
 - *Event trigger: After a complaint is marked as resolved by the respondent, the complainant wants to escalate the complaint (within a permissible time period)*
- Suggestive issue handling mechanism for efficient and effective complaint handling (supporting regional languages) include:
 - Chatbot
 - AI enabled ticketing system
 - Voice based support
 - Social media interface
 - Others



07

Network Stability

Zero Touch Enablement



Zero Touch Enablement



Participant Engagement

- Participant Guidebook
- Participant Toolkit
- Community Forum
- Reference Apps
- Sandboxes
- Workflow automations



Enabling Horizontal and Verticals

- API specifications
- Use cases and functionalities
- Release process
- Network services such as Rating, Scoring, IGM, RSP
- Product Taxonomy
- CaaS



Network Growth & Strengthening

- Network Observability
- Certification framework
- Design for performance
- Technical Support Team (TST)
- Information Security
- Open Data Framework



Innovation

- ONDC-in-a-box
- Adaptors
- Tech Utilities

Journey to Zero Touch Enablement

June 23

- Participant Guidebook & Toolkits
- Reference retail BA & SA enhancements
- Release v1.2 [Ret & Log]
 - Features & Functionalities
 - Test Cases/ Scenarios
 - Exit Criteria
- Protocols
 - B2B 1.x
 - Mobility 1.0
 - Financial Services
- Automated Log Validation

September 23

- Automated Issue Management
- Auto Triaging
- Reference logistics app
- Automation of test cases
- Protocols
 - B2B (v2.0)
 - Mobility (v2.0)
 - International logistics
- Reference Sandboxes
- Certification Framework for Certification Agencies
- Developer Portal & Community Forum

December 23

- Community Forum and engagement
- Reference apps for FS, Mobility
- Protocol v2.0 enablement
 - SOP for NP's contribution & collaboration model
 - Consolidation of domains
 - Segregation of Business and Transaction Layer
 - Protocol optimization
- Adaptors

March 24

- ONDC-in-a-box

ONDC v2.x

Flexible Feature Enablement

- **Enhanced live search capabilities**
- **Building efficiency for live search and caching**
- **Optimizing data size transfer on APIs**

Collaborative Feature Development

- **Abstracting Business layer from Core Transaction layer**
- **Collaborative governance structure**
- **Domain agnostic**

Enhancement in Stateless Approach

- **Enhances scalability**
- **Reducing dependencies on network nodes**

Security and Privacy Considerations

- **Enhanced encryption**
- **Key management and rotation**

Integration & Compliance

Use Cases Enablement

More Participants

New Domain

Current challenges



Compliance

Existing Participants

New Participants



Stability

Technical issues reported are not being resolved in a defined timeline

Ad-hoc solution updated in production by NPs leading to integration issues

Non-standard reconciliation mechanisms

Manual issue resolution

Limited integration testing alternatives

Manual compliance checks

No collaborative query resolution

Community participation and collaboration

Infrastructure (Registry & Gateway)

Tools & Utilities

*Limited reference apps/ instances
Documentation around current tools
Technical handholding of prospective NPs*

Onboarding of NPs

*Visibility
Speed*

Integration Enablement



Community Forum



Open source log validation utility



Log verification service for runtime logs



Whitelabel Reference Apps



Sandboxes



Mock API Service



Developer Portal



Adaptors

Design for performance : Gateway 2.0 & Registry 2.0



Evolved Data Models



Automated Onboarding



Features Enhancements

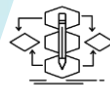


Addition of Domains & Categories

Infrastructure Security



Algorithmic Improvement



Secure Implementation



Network Observability



Release v1.2 - Retail

General functionalities

- **IGM**
- **RSP**
- **Rating**
- **Error Framework**
- **Terms of Reference**

Features

- **Customizations & Variants**
- **Incremental Catalog Refresh**
- **Multiple Fulfillment Options for buyer**
- **Offers and Promotions**
- **Terms of Reference**
- **Payment on delivery**
- **Order / fulfillment state TAT breach**
- **Separating the categories for catalog**

Integration & Compliance

Use Cases Enablement

More Participants

New Domain

Release v1.2 - Logistics

General functionalities

- **IGM**
- **RSP**
- **Rating**
- **Error Framework**
- **Terms of Reference**

Features

- **Cancellation terms**
- **RTO flows**
- **Codifying proof of pickup & delivery**
- **Codifying reverse QC SOP**
- **Handling weight differential**
- **New interim states for inter-city shipments**
- **Terms of Reference**

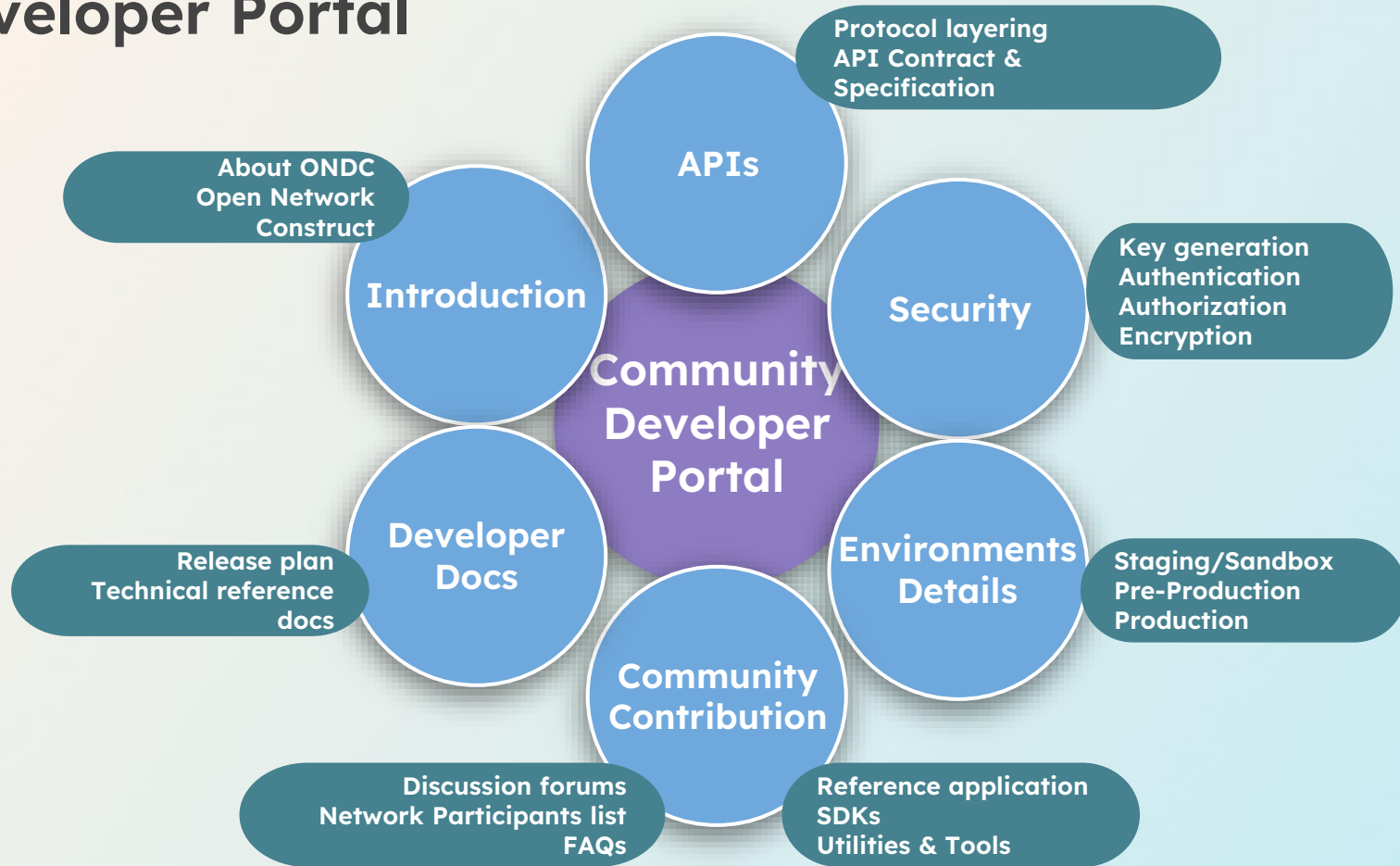
Integration & Compliance

Use Cases Enablement

More Participants

New Domain

Developer Portal



ONDC will create a developer portal. However, ONDC encourages participants to build various developer portals



05

Certification framework

Underlying Components and Approach for Certification for Participants

Need for Certification Framework

1

- **Foundation for trust during transaction in the network**
 - Necessary capacity and ability to carry out their designated role
 - Establish a reliable and secure environment for transactions

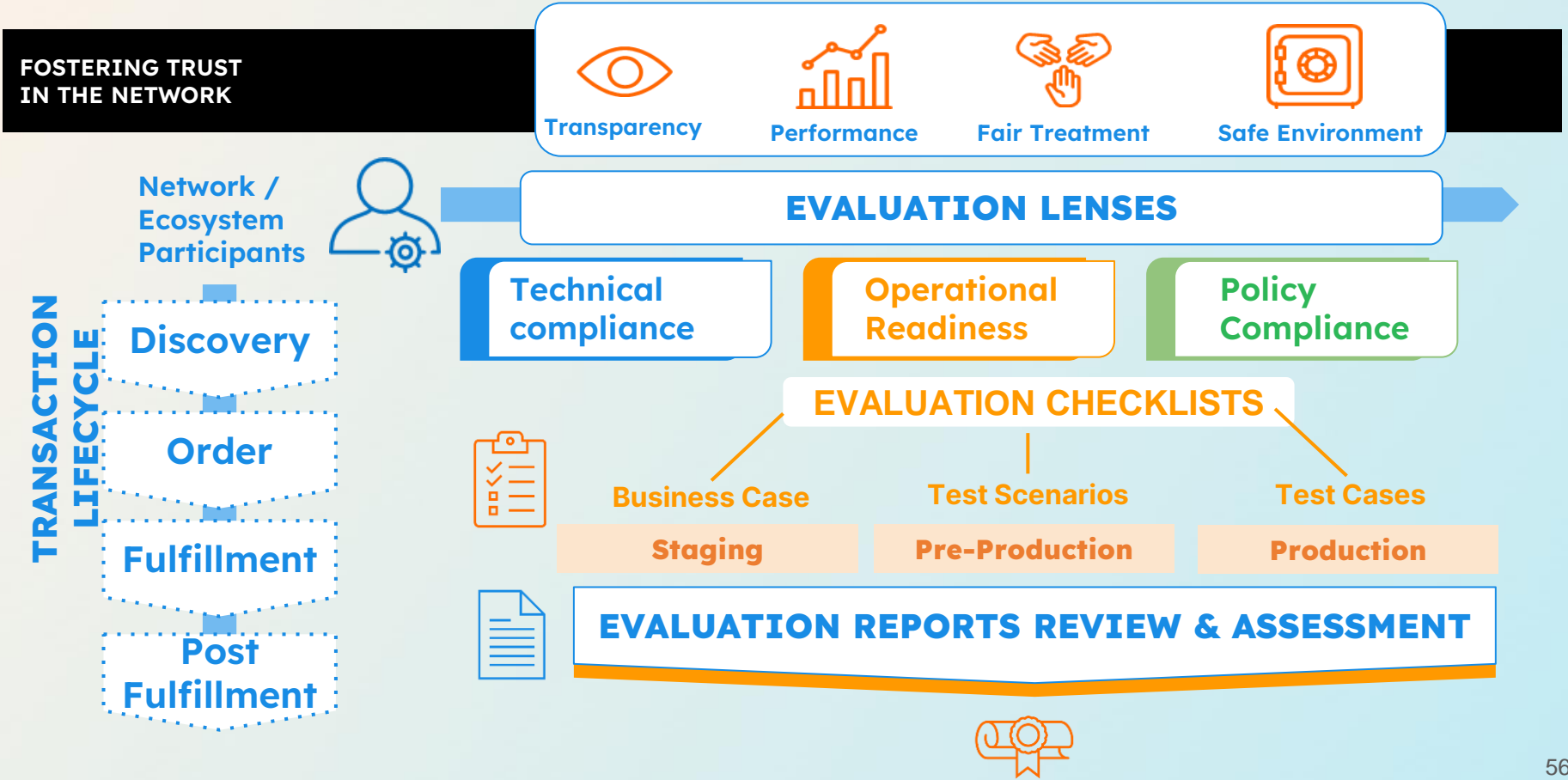
2

- **Consistent onboarding experience for all participants**
 - Technical compliance
 - Operational readiness
 - Compliance to Network policies

3

- **Inclusive approach**
 - Continuous support & handholding by certification agencies
 - Timebound upgrade to new releases to ensure consistency
 - “Ease of compliance” for different types of participants

Certification Framework



Participants in ONDC network

1



Network Participant

These users **participates** in **“transaction”** on ONDC network in the business value chain and are directly responsible for all the compliances defined for their category under ONDC policy.

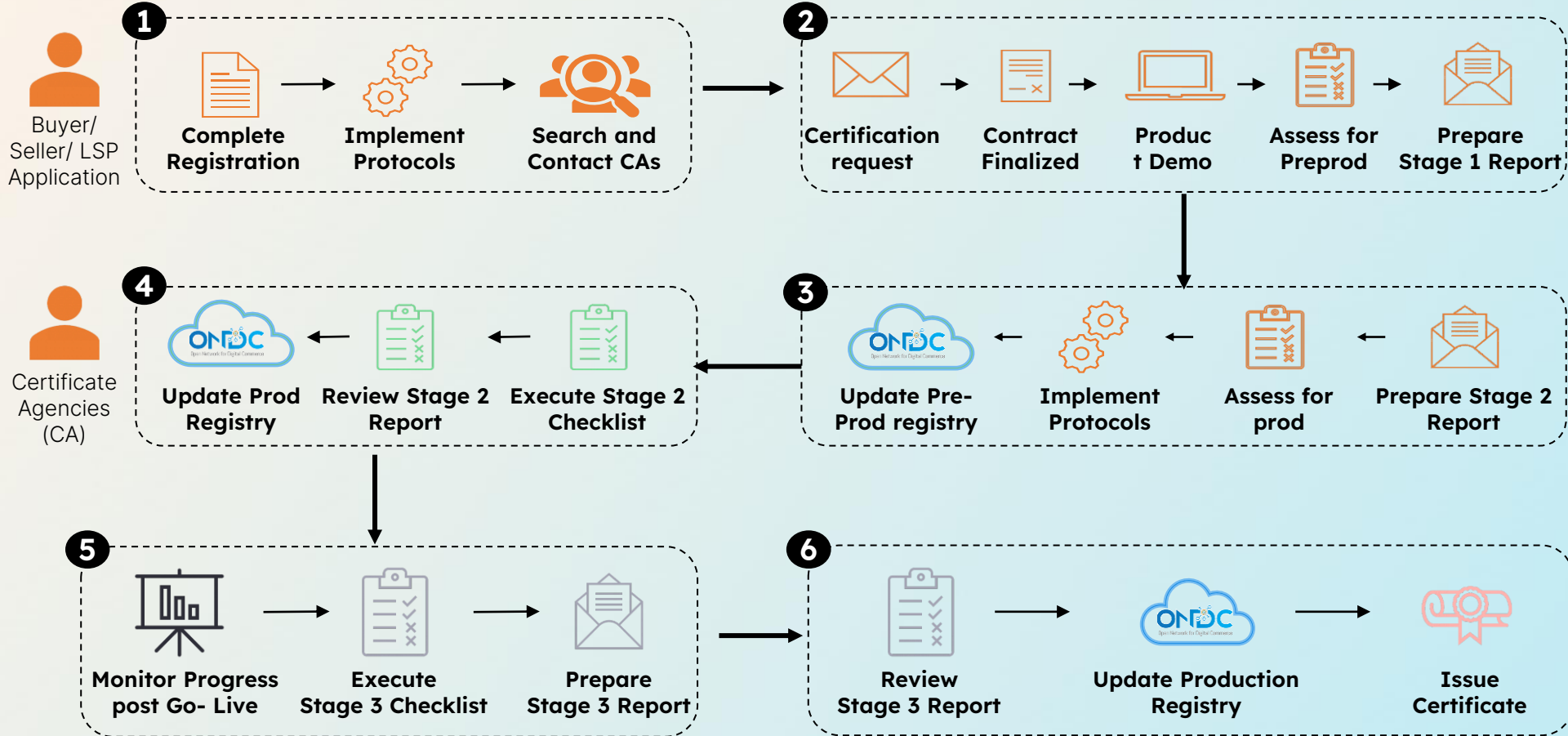
2



Ecosystem Participant

These set of users will be **enabling the transaction** over the network but are not the directly involved in transactions. EPs will be certified based on the compliance, on a particular release version of the API specifications, of their services being **offered to NPs.**

Certification Workflow



Compliance band

Small Scale Compliance

Focus on certification compliance requirements keeping upcoming e-commerce players in mind who & order size



Large Scale Compliance

Focus is on additional requirements that must be met by mature organizations to maintain trust within NPs



1

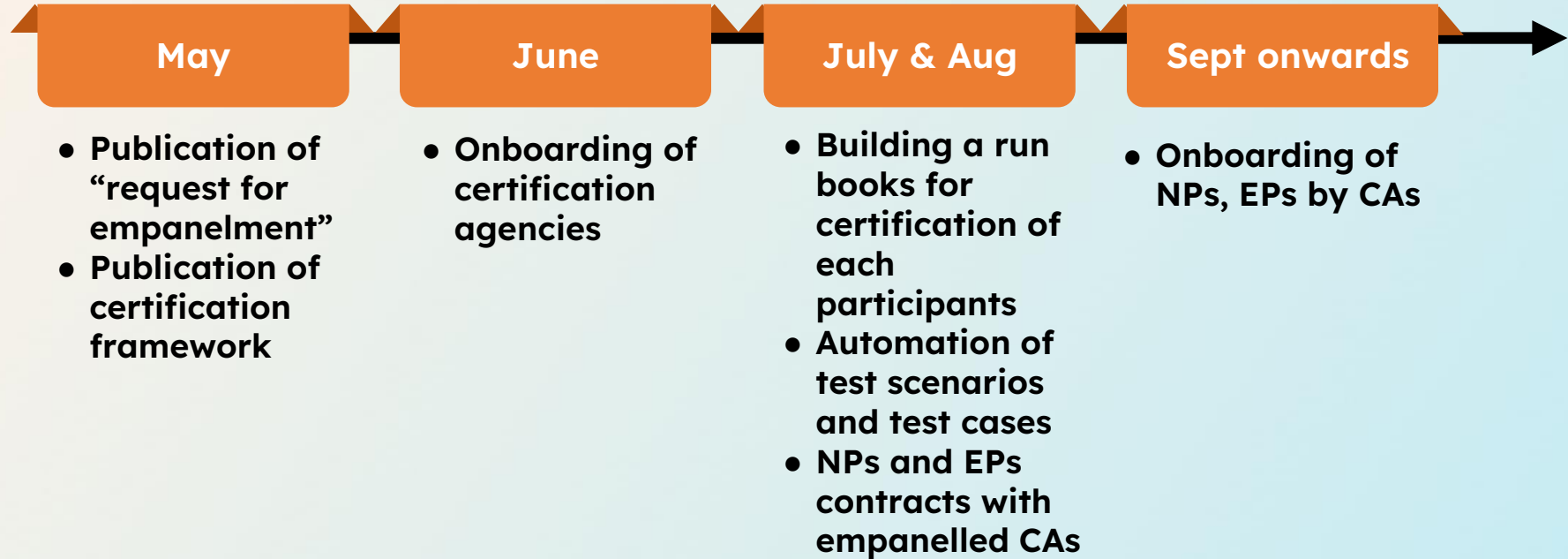
Number of expected transactions per month

2

Average Order Value of the successful transactions

- ***Compliance band shall be confidential***
- ***Self-declaration of compliance band by NPs***
- ***Compliance band not applicable for EPs***

Certification Enablement Timelines



Each NP and EP will get into a contract with one of the empanelled certification agencies for certification and entry to production

Continuous evolution of the certification framework based on the learnings from the NPs and CAs

Network Observability

- A framework to observe data across identified operational and technical metrics to **uncover actionable insights**.
- **Enhance interoperability** and transparency across network / ecosystem participants to help them develop **self-correction** capabilities, and evolve to **scale in an unbundled environment**.

Key Pillars of Network Observability



Data



Metrics



Insights and Action



Feedback

Network Observability Framework

NETWORK OBSERVABILITY

NETWORK GROWTH

DEMAND ON THE NETWORK

Network's effectiveness to attract traffic and drive conversion

SUPPLY ON THE NETWORK

Network's effectiveness to attract more sellers across domains / categories

CONSUMER FUNNEL

Customer journey effectiveness from discovery through conversion

NETWORK HEALTH

OPERATIONS HEALTH

Order fulfilment

Lead indicators of delivery experience

IGM resolution

Lead indicators of operational efficiency

Post Order

Lead indicators of Seller experience

User Feedback

Lead indicators of customer experience

TECHNOLOGY HEALTH

Network Participants

Lead indicators of fulfillment of API requests

Gateway

Lead indicators of Gateway availability and responsiveness

Registry

Lead indicators of Registry availability and responsiveness

POLICY COMPLIANCE

Lead indicators of Network participants' adherence to ONDC policies