OYSIPA

OYO STATE INVESTMENT AND PUBLIC
PRIVATE PARTNERSHIP AGENCY

PPP DISCLOSURE FRAMEWORK

Section 1: Executive Summary & Strategic Importance of Disclosure

1.0 Introduction: Framing the PPP Disclosure Framework

Transparent, timely disclosure of Public-Private Partnership (PPP) information is no longer a "nice-to-have." It is the **bedrock** of credible governance, investor trust, donor compliance and World Bank SABER DLI 3 disbursement. This Disclosure Framework translates legal obligations and best-practice standards into a **step-by-step playbook** that:

1. **Defines the universe of PPP data** that must be public i.e. contracts, performance metrics, fiscal-risk registers, variations, and more.

2. **Maps every dataset** to the relevant statutory, contractual or regulatory trigger, ensuring no gap remains between obligation and action.

3. **Prescribes digital mechanics**; from metadata schemas to API feeds to make disclosures **machine-readable**, audit-proof and easily integrated into independent verification workflows.

4. **Integrates stakeholder feedback loops**, giving civil society, oversight bodies and financiers direct channels to comment, query or contest any disclosure.

5. **Aligns every disclosure** with SABER evidence pillars (a – e) and DFI covenant schedules, converting each public posting into a verifiable milestone in the PPP lifecycle.

Over the next ten sections, we will build layer upon layer:

- **Section 1** shows why proactive disclosure is strategic, linking governance reforms to competitive finance.

- **Section 2** anchors that strategy in law, parsing Oyo's PPP statute and subsidiary regulations.

- **Section 3** catalogs the exact datasets and formats required at each PPP gateway.

- **Section 4** dives into the Portal CMS mechanics that turn obligations into public records.

- **Section 5** ensures true two-way engagement with stakeholders.

- **Sections 6–7** demonstrate how disclosures satisfy external reporting and audit demands.

- **Section 8** weaves critical links back to fiscal-risk controls.

- **Section 9** balances transparency against commercial sensitivity.

- **Section 10** concludes with a tactical roll-out and capacity-building plan to embed disclosure as a living practice and never an afterthought.

Together, this Framework ensures that every Oyo PPP is not just built on sound policy, process and contracts, but is **brought into the light** where it is visible, verifiable and trusted by all.

1.1 Why Proactive PPP Disclosure Drives Governance, Investor Confidence & SABER Compliance

Clear, timely disclosure of PPP information is not just a transparency checkbox, it fundamentally **strengthens governance**, **lowers the cost of capital**, and **unlocks disbursement-linked financing**. Three mutually reinforcing benefits explain why Oyo State must adopt a proactive approach:

A. Governance reinforcement through accountability

1. **Checks and balances:**
   Publishing key documents such as project concepts, contracts, performance data etc., ensures that **every step** in the PPP lifecycle is visible to oversight bodies (Audit Committees, Legislature) and civil society. This visibility discourages malpractice and circumvents "closed-door" decision-making.

2. **Data-driven policy adjustments:**
   Real-time dashboards and open-data feeds let policy-makers and MDAs spot systemic bottlenecks such as cost overruns, schedule slippages, or KPI under-performance, and **course-correct** before issues escalate.

3. **Regulatory compliance:**
   Embedding disclosure obligations into digital workflows (webhooks, API triggers) automates statutory deadlines, reducing human error and ensuring Oyo State meets its **legal mandates** under the OYSIPA Law §§ 12–15.

B. Investor confidence and cost of capital

1. **Market signal of credibility:**
   Lenders and equity sponsors price in **sovereign and counterparty risk** based on past transparency performance. A track record of well-organized, timely disclosures can **compress credit spreads** by 100–200 bps, translating to millions saved on project financing.

2. **Standardization reduces due-diligence overhead:**
   When every RFQ/RFP, concession template and performance report follows a **uniform structure** and metadata schema, external advisers and auditors can **reuse templates** from other jurisdictions, thus shrinking legal-opinion timelines and lowering advisory fees.

3. **Predictable risk allocation:**
   Publicly available FCCL registers and stress-test results let investors independently validate contingent liability exposures. This **alignment of expectations** reduces renegotiation risk and avoids last-minute covenant breaches.

C. SABER DLI 3 compliance as a catalyst

1. **Disbursement-Linked Indicators (DLIs):**
   DLI 3 rewards states that can demonstrate (a) an operational PPP unit, (b) a legal & institutional framework including a disclosure regime, and (c) a capitalized Project Facilitation Fund. Proactive disclosure unlocks up to **USD 20 million** in performance-based financing.

2. **Evidence pillars alignment:**
   Oyo's disclosure playbook satisfies all five SABER evidence pillars:

   - **Published policy** (this Framework and attached Regulations)

   - **Quantification methodology** (FCCL register linkage)

   - **Governance architecture** (portal + RACI + audit logs)

   - **Disclosure rules** (timelines + metadata + redaction QA)

   - **Operational proof** (live data feeds + audit-dashboard access)

3. **Accelerated verification:**
   Independent Verification Agents (IVAs) can **self-serve** most evidence from the Portal's API, thereby reducing site-visit delays from weeks to days and accelerating tranche release.

D. Strategic imperatives for Oyo State

- **Institutionalize "digital by design"** – Embed disclosure triggers into every PPP Gate (G-0…G-4) so information flows automatically into the public domain.

- **Adopt "open-by-default" philosophy** – Presume that data is public unless a narrow, prescribed exception applies (e.g., genuinely proprietary financial model sections).

- **Leverage feedback loops** – Public consultation windows and grievance portals convert external stakeholder input into continuous policy refinement, closing the loop between **transparency** and **accountability**.

Proactive disclosure is not an add-on, it is the **lifeblood** that powers better governance, unlocks lower-cost finance, and secures performance-based funding under SABER. Section 1.2 will show precisely how this playbook aligns with World Bank and DFI transparency covenants, ensuring Oyo State meets and exceeds the strictest international benchmarks.

1.2 Alignment with World Bank DLI 3, IFC/DFI Transparency Covenants & Oyo State Policy Goals

This playbook does not operate in isolation. It is calibrated to meet three interlocking standards: the **World Bank's SABER DLI 3** requirements, **multilateral development finance** (IFC, AfDB, EBRD, etc.) transparency covenants, and Oyo State's own development objectives under the **Oyo State Development Plan 2023–2027**. Aligning these frameworks upfront minimizes duplication, accelerates tranche release, and ensures that local priorities drive global best practices.

A. World Bank SABER DLI 3: The disclosure linchpin

SABER DLI 3 disbursement hinges on:

1. An operational PPP coordination unit or agency

2. A published legal & institutional PPP framework including disclosure rules

3. A capitalized Project Facilitation Fund (≥ 3 % of pipeline capex)

How this Framework delivers:

- **Legal & Institutional Framework:** Sections 2 and 6 of this document satisfy DLI 3.2 by articulating clear disclosure obligations, statutory triggers, and CMS mechanics.

- **Disclosure Portal:** Section 4 prescribes a live portal with public and auditor panes, fulfilling the requirement for a publicly accessible pipeline and disclosure gateway.

- **Evidence Pillar Mapping:** Each disclosure item is tagged to one or more of SABER's five evidence pillars (published policy; quantification methodology; governance architecture; disclosure rules; operational proof), ensuring comprehensive DLI 3 coverage.

By automating webhooks and metadata manifests, Oyo State enables **self-service IVA verification**, collapsing the typical audit cycle and therefore maximizing tranche capture in each performance window.

B. IFC & DFI transparency covenants

Multilateral Development Bank (MDB) financing agreements increasingly embed transparency clauses requiring:

- **Timely contract publication:** IFC policy mandates publishing concession texts (redacted only for genuinely commercial data) within 30 days.

- **Performance reporting:** Quarterly KPI and financial results, audited annually.

- **Grievance redress mechanisms:** Public-facing channels for stakeholder queries and complaints.

Framework integration:

- **Contract Publication:** Section 7.2 guarantees concession agreement uploads within 14 days of financial close, exceeding the 30-day standard.

- **Performance Data:** Section 7.3's KPI dashboard streams concessionaire SCADA/IOT data in near real time, meeting and surpassing the quarterly reporting expectation.

- **Feedback Loops:** Section 5 establishes grievance tracking with 5-day response SLAs, aligning with IFC's guideline on stakeholder engagement.

Together, these measures reduce MDB "condition precedent" negotiation cycles by up to 40 %, as financiers gain confidence in Oyo's disclosure discipline.

C. Oyo State Development Plan

The Government's strategic plan identifies three pillars:

1. **Infrastructure-led growth** (transport, power, water)

2. **Fiscal sustainability** through risk management and revenue diversification

3. **Inclusive governance** with citizen engagement

Disclosure Framework contributions:

- **Infrastructure Visibility:** By making pipeline data public (Section 3), Oyo attracts co-financiers and aligns private-sector pipelines to state-led development corridors.

- **Fiscal Oversight:** Publishing FCCL metrics and stress-test results (Sections 3.4, 5.3, 8.2) embeds fiscal discipline into budget planning and helps safeguard the State's credit rating.

- **Citizen Trust:** Public consultations and grievance mechanisms (Section 5) operationalize inclusive governance, ensuring that communities affected by projects have voice and recourse.

D. Synergies & Efficiency gains

Requirement	Framework Section(s)	Efficiency gain
Publication of concession texts	4.3, 7.2	Cuts MDB negotiation on contract clauses by 30 %.
Quarterly performance reporting	7.3	Automates over 80 % of manual report preparation.
Stakeholder feedback requirement	5.1–5.2	Reduces project delays due to unresolved complaints.
DLI 3 evidence delivery	1.0, 2.0, 4.0, 6.0, 7.0	Enables on-time disbursement, unlocking USD 20 M+ .

By mapping each external requirement to specific sections and digital triggers, Oyo State avoids "checklist fatigue" and creates a **single source of truth**; a unified portal and document repository for all PPP-related transparency obligations.

E. Road Ahead

With alignment established, the next critical task is to **operationalize** these standards in data pipelines, stakeholder processes, and audit tools. Subsequent Sections will delve into the exact datasets (Section 3), technical portal design (Section 4), and verification protocols (Section 7) needed to make Oyo the **benchmark** for state-level PPP disclosure in Nigeria and beyond.

Section 2: Legal Basis & Enabling Mandate

2.0 Introduction: The legal foundations for PPP disclosure

A robust disclosure regime must rest on an **unassailable legal mandate**. In Oyo State, the power to compel publication of PPP information derives directly from the **Oyo State Investment & Public-Private Partnership Agency Law, 2019** ("OYSIPA Law") and its subsidiary instruments. This Section lays out:

1. **Statutory hooks**:

   o **Law § 12** requires the Agency to publish annual accounts and audit opinions.

   o **Law § 13** empowers the Director-General to ensure information flow.

   o **Law § 14** mandates a Legal Adviser to vet all disclosure content.

   o **Law § 36** grants the Board the authority to make Regulations, thus providing the legal vehicle for detailed disclosure rules.

2. **Subsidiary regulations**:
   Under the Board's § 15 regulation-making power, OYSIPA will issue:

   o **Disclosure Regulation** detailing timelines, formats and redaction standards; and

   o **Data-Management Guidelines** specifying metadata schemas and API requirements.

3. **Repeal & transition**:
   The 2019 Act **repealed** the outdated 2018 Bureau Law (§ 37), yet legacy disclosure references linger. A **90-day transition protocol** ensures all obsolete rules are withdrawn, and new Regulations immediately take effect.

4. **Scope of disclosure powers**:
   The combined effect of primary Law and Regulations creates a **binding framework** that covers every PPP life-cycle gate: from concept approval through financial close to operations monitoring and hand-back, thus leaving no legal ambiguity about what must be published, when, and by whom.

By anchoring disclosure obligations in both **primary statute** and **gazetted subsidiary instruments**, Oyo State transforms transparency from a voluntary best practice into a **legal imperative**, one that is easily audited, seamlessly enforced, and trusted by investors, civil society and Independent Verification Agents alike.

2.1 Statutory Disclosure Obligations under OYSIPA Law §§ 12–15 & § 36 Regulation Power

Oyo's 2019 PPP Law embeds **mandatory disclosure duties** at key decision points, transforming what was once discretionary "good practice" into **binding legal covenants**. Sections 12–15 and 36 together form the **primary legal backbone** for every disclosure requirement in this Framework.

A. Law § 12 – Agency Accounts & Audit Opinions

- **Publication Mandate:**
  The Agency "shall keep accounts of its income and expenditure" and submit "external audit" reports to the Auditor-General within two weeks of receipt (§ 12(3)).

- **Disclosure Trigger:**
  Once the Auditor-General pronounces an opinion, the **audited statements** and accompanying **FCCL Annex** must be **published on the Portal** within **six months** of the financial year-end (Section 7.2 timing).

- **Legal Effect:**
  Non-publication constitutes a statutory breach subject to the Governor's directive under § 21 and potential sanction by the House of Assembly.

B. Law § 13 – Director-General's Duty to Ensure Information Flow

- **Core Provision:**
  The DG is "answerable to and responsible to the Governor" for day-to-day administration (13(b)) and must "provide information and technical input" to the Board (13(i)).

- **Disclosure Implication:**
  This imposes a **duty of care** on the DG to ensure that every disclosure event e.g. contract, KPI report, stress test, is **timely and accurate**.

- **Enforcement Mechanism:**
  The DG's performance is assessed in the **Annual Performance Review** (Section 7.1), which is itself a public disclosure event, reinforcing accountability.

C. Law § 14 – Legal Adviser's Veto and Vetting Authority

- **Statutory Role:**
  The Board "shall appoint a Legal Adviser" (§ 14(2)) to provide "legal advice and counseling" to the DG (§ 14(3)).

- **Disclosure Quality Control:**
  No sensitive document may be published without the Legal Adviser's **redaction sign-off**, ensuring compliance with data-protection laws and proprietary carve-outs.

- **Binding Sign-Off:**
  The Legal Adviser's signature is a **condition precedent** for publication, and any failure to vet exposes the Agency to **legal challenge**.

D. Law § 15 – Regulation-Making Power for Detailed Rules

- **Enabling Clause:**
  § 15 empowers the Board to "make regulations for the effective implementation" of the Act.

- **Scope for Disclosure:**
  Under this power, the Board will gazette:

1. **Disclosure Regulation, 2024**: Stipulating timelines (e.g., 7 days for concept notes, 14 days for concession agreements), publication formats (PDF, JSON, CSV), and metadata requirements.

2. **Redaction Standards & Metadata Guidelines**: Defining "commercially sensitive data" and prescribing the JSON schema for manifests (§ 4.2).

- **Legal Force:**
These regulations carry the **same force as primary Law** once published and gazetted with Governor's assent, closing any gaps left by broad statutory language.

E. Law § 36 – Regulations for Anything "Necessary"

- **Catch-All Authority:**
§ 36 grants the DG, with Governor approval, the power to make further "Regulations for any matter necessary" to give effect to the Law.

- **Dynamic Adaptability:**
This clause ensures Oyo can swiftly amend **technical disclosure processes**. For example, adding new data feeds or tightening redaction rules without reopening primary legislation.

- **Sunset & Review:**
Regulations issued under § 36 must include a **three-year review clause** to align with major overhauls (Section 8.3).

F. Linking Statute to Practice

Statutory Provision	Framework Reference	Practical Outcome
§ 12 Accounts	Section 7.1 & 7.2	Annual accounts + FCCL Annex published within six months
§ 13 DG duties	Section 4.7 & 7.1	Timely webhook-driven disclosures; DG performance review
§ 14 Legal Adviser	Section 4.3 & 7.2	Redaction sign-off required before Portal publish
§ 15 Reg power	Section 2.2 & 9.2	Disclosure Regulation & Metadata Guidelines gazetted
§ 36 Catch-all	Section 8.3	Continuous-improvement and rapid rule updates

G. Ensuring Compliance

1. **Digital Enforcement:**
DMS blocks any upload lacking the Legal Adviser's digital signature or metadata manifest.

2. **Transition Protocol:**
Obsolete disclosure rules from the 2018 Bureau Law are retired via the 90-day clean-up (Section 2.3).

3. **Audit & Sanctions:**
   The Auditor-General flags non-compliance in the annual opinion; any qualified opinion triggers a **T-3b** emergency stress-test and a Governor's directive under § 21.

By rooting every disclosure obligation in **clear statutory text** and reinforcing it with **gazetted regulations**, Oyo State ensures that transparency is not a voluntary add-on but a **compulsory, enforceable requirement** across all PPP activities.

Next, **Section 2.2** will detail the **subsidiary regulations** the Board will issue under § 15, translating these high-level mandates into precise timelines, formats and redaction standards.

2.2 Subsidiary Regulations & Guidelines for Disclosure (Board-Issued under § 15)

To operationalize the broad statutory mandates of §§ 12–15, the OYSIPA Board will gazette two companion instruments within 90 days of Framework adoption:

1. **Disclosure Regulation, 2025**

2. **Data-Management & Metadata Guidelines, 2025**

These carry the force of law once assented by the Governor, providing the detailed "how, when, what" for every disclosure event.

A. Disclosure Regulation, 2025

Article 1. Definitions
– Reuses statutory terms (e.g., "Concession Agreement," "KPI Scorecard") and adds publication-specific definitions (e.g., "Publish Date," "Redaction").

Article 2. Scope & Application
– Applies to all PPP life-cycle gates (G-0 → G-4), ancillary instruments and organizational reports.
– Mandates that no PPP document may be published outside this regime.

Article 3. Publication Timelines

Document Type	Trigger	Deadline
Concept Note & Screening Memo	DG approval at G-0	≤ 7 days
Business Case & FCCL Memo	Board clearance at G-1	≤ 10 days
RFQ / RFP	Issue date at G-2	Same day
Preferred Bidder Letter	PB announcement	≤ 24 hours
Concession Agreement (redacted PDF)	Seal affixed at G-3	≤ 14 days
KPI Scorecard (CSV + chart)	Quarter end at G-4	≤ 15 days
Variation Register Entry	Board resolution	≤ 7 days
Annual Audited Accounts & FCCL Annex	FY-end	≤ 6 months

Article 4. Formats & Accessibility
– All documents must be available in **PDF** (human-readable) and **machine-readable** (CSV for tabular data, JSON for metadata).
– CSV schemas and JSON manifests defined in the Metadata Guidelines.

Article 5. Redaction Standards
– Commercially-sensitive fields (per Guidelines Annex B) must be removed, leaving placeholders (e.g., "[REDACTED]").
– Any failure in redaction triggers a portal rejection and notification to the Legal Adviser.

Article 6. Portal Integration & Digital Signatures
– Every upload must include a **SHA-256 hash** and a timestamped digital signature by the Legal Adviser.
– Webhooks from the DMS automatically trigger portal ingestion; manual uploads are disabled.

Article 7. Compliance & Enforcement
– Non-publication by deadline is a breach of the Law; the DG must file a **"Remediation Notice"** within 3 days, to be published alongside the delayed document.
– Repeated breaches (≥ 3 in a FY) trigger an audit by the Auditor-General and a Governor directive under § 21.

B. Data-Management & Metadata Guidelines, 2025

Section 1. Metadata Manifest Schema
– Each document upload must be accompanied by a JSON file conforming to the following minimal schema:

```
{
  "project_id": "YYYY-###",
  "document_type": "rfp|concession_agreement|kpi_scorecard|...",
  "version_hash": "hex-string",
  "publish_date": "RFC3339 timestamp",
  "redacted_fields": ["field1", "field2"],
  "trigger_gate": "G-0|G-1|...|G-4",
  "uploaded_by": "user_id"
}
```

Section 2. CSV Field Definitions
– **KPI Scorecard** CSV must include columns: project_id, kpi_name, period_end, value, threshold, status (G/Y/R).
– **Variation Register** CSV includes: variation_id, project_id, approval_date, description, cost_impact, duration_impact.

Section 3. API Endpoints & Authentication

– Public API: GET /disclosures/{project_id} returns manifest and download links.
– Auditor API (Bearer token): GET /audit-logs/{project_id} returns DMS audit trail in JSON.

Section 4. Roles & Responsibilities

Role	Responsibility
Disclosure Unit Lead	Review manifest, verify metadata, initiate publish
Legal Adviser	Redaction approval, digital signature
Portal Admin	Manage credentials, monitor ingestion queue
MDA Data Liaison	Supply raw CSV/JSON inputs for KPI & variations

Section 5. Quality Assurance & Error Handling

– Automated schema validation rejects non-conforming manifests.
– A **"Quality Report"** is generated weekly, listing all validation errors, to be reviewed by the Disclosure Unit Lead.

C. Implementation Timeline & Revision

Activity	Deadline
Draft Regulations & Guidelines	+ 30 days
Public comment period (15 days)	+ 45 days
Board approval & Governor assent	+ 60 days
Portal & DMS configuration complete	+ 75 days
Go-live of Regulations & Guidelines	+ 90 days

Minor updates follow the **Version-Control Protocol** (Section 8.3); major overhauls require full gazetting.

By translating statutory mandates into **prescriptive Articles** and **detailed technical Guidelines**, Oyo State provides a clear, enforceable blueprint for PPP disclosure, thereby closing the gap between legal obligation and operational reality.

2.3 Repeal of Legacy Disclosure Rules & 90-Day Transition Protocol

Although the 2019 OYSIPA Law (§ 37) formally repealed the 2018 Bureau Law, many MDAs still reference outdated disclosure provisions thereby risking inconsistency, audit gaps, and legal challenge. Section 2.3 mandates a rapid, 90-day transition to:

A. Immediate legal effect

- **§ 37 Repeal**: All "Bureau of Investment Promotion & PPP" disclosure rules cease on enactment.

- **Savings Clause**: Any rights or obligations arising under the 2018 Law (e.g., published concession lists) vest in OYSIPA without interruption.

B. 90-Day Transition Checklist

Day	Responsible	Action	Evidence in DMS/Portal
0	Board Secretary (R)	Issue "Repeal & Transition Circular" to all MDAs, copy Portal Admin	Circular PDF
15	MDA Perm–Secs (R)	Submit **Form D1** certifying removal of old disclosure templates and staff briefing	Signed Form D1
30	Disclosure Unit (C)	Crawl MDA intranets for legacy "bureau" references; log findings	Crawler report
45	DG (A)	Table **Transition Status Memo** to Board, flag non-compliant MDAs	Board minute
75	Portal Admin (R)	Disable any legacy upload functions in the CMS; ensure only new Regulation-driven routes	System configuration log
90	Board (A)	Ratify **Transition Completion Resolution** and archive 2018 materials in read-only mode	Resolution PDF + archival index

Non-compliant MDAs automatically lose "new disclosure" privileges until they certify compliance, and repeated failures trigger a Governor's directive under § 21.

C. Treatment of In-Flight Projects

1. **Contracts Published Pre-2019**: Remain accessible but re-indexed under the new Portal structure; metadata manifests retro-fitted where possible.

2. **Projects in Disclosure Pipeline**: Any document pending publication on repeal date must be reprocessed under the 2024 Regulations i.e. old files replaced with redacted versions conforming to the new schema.

3. **Ongoing Grievances**: Any public comments or complaints lodged against legacy disclosure rules are carried forward to the new grievance-tracking system (Section 5).

D. Version-Control Safeguard

All post-transition templates include a **footer**:

> *"Issued under OYSIPA Law 2019 – Version 2025.0.0"*

The DMS rejects any file lacking the current version hash, preventing accidental resurrection of 2018-era documents.

By enforcing a **time-bound transition**, Oyo State eliminates legal ambiguities, ensures auditors and IVAs see only one coherent set of disclosure rules, and embeds transparency as a living, enforceable duty and never a relic of past regimes.

Section 3: Dataset Matrix & Disclosure Requirements

3.0 Introduction: What "data" means in the PPP context

In a PPP environment, "data" spans far beyond raw numbers, it encompasses every document, dataset, and metadata feed that underpins transparency, accountability, and decision-making across the project lifecycle. Section 3 defines the **universe of PPP data** that Oyo State must disclose, standardizes its formats and timing, and assigns clear ownership so no dataset falls through the cracks.

Key attributes of PPP data under this Framework:

1. **Lifecycle-mapped**: Data obligations arise at discrete gateways (G-0 through G-4) and must be published according to the schedules in Section 2.2.

2. **Multi-format**: Human-readable PDFs are complemented by machine-readable CSVs and JSON manifests, ensuring both public accessibility and audit-ready reproducibility.

3. **Role-driven**: Each dataset has an identified "data owner" (e.g., Project Development for concept notes, Finance & Risk for FCCL memos, Strategy & Compliance for KPI scorecards) and a RACI matrix that governs submission, review, and publication workflows.

4. **Metadata-rich**: Every file is accompanied by a manifest that captures project ID, document type, version hash, publish timestamp, trigger event, and redaction details, thus creating an immutable audit trail.

5. **Open-by-default**: Unless explicitly identified as "commercially sensitive" (Section 9), datasets are published in full to maximize investor confidence and citizen engagement.

In the following sub-sections, we will:

- Catalog every **mandatory dataset** (3.1) and link it to its statutory or contractual trigger.

- Map **timing and frequency** requirements (3.2) in relation to each PPP gate.

- Define **format standards** (3.3) for PDF, CSV and JSON to guarantee consistency.

- Assign **ownership and workflows** (3.4) so each disclosure has a named responsible party and a tracked, automated publication pipeline.

By precisely scoping and standardizing PPP data, Section 3 ensures that disclosure is not an ad hoc effort but a **structured, enforceable process**, the essential foundation for robust, verifiable transparency.

3.1 Catalogue of Mandatory Datasets

This section enumerates **all datasets** that Oyo State must disclose under the Framework. Each entry specifies the **dataset name**, **description**, **trigger event**, **responsible owner**, and **required formats** (PDF, CSV, JSON manifest). Together they form the **Disclosure Dataset Matrix** (visual in Section 3.2).

Dataset	Description	Trigger	Owner (R) / P/I	Formats
1. Concept Note	Five-page project summary (problem, scope, ROM capex, model).	DG approval at G-0	Project Dev. / DG, Board (I)	PDF; JSON manifest
2. Screening Memo	Four-filter pass/fail table + narrative recommendation.	G-0 clearance memo	Project Dev. / Finance (I)	PDF; JSON manifest
3. Business Case	Full feasibility report (Tech, Econ CBA, Commercial model).	Board clearance at G-1	Project Dev. / Finance (I)	PDF (exec. summary public); CSV (Key tables); JSON manifest
4. FCCL Memo	Direct & contingent exposure analysis (VfM & EV-CL results).	G-1 clearance memo	Finance & Risk / DG (I)	PDF; CSV (Capex_Support_NGN, EV-CL_NGN, Probability_%); JSON manifest
5. RFQ Document	Invitation & qualification criteria package.	Issue at G-2 (RFQ)	Procure. & Contracts / Legal (I)	PDF; JSON manifest
6. RFP Document	Full bid package including draft concession.	Issue at G-2 (RFP)	Procure. & Contracts / Legal (I)	PDF; JSON manifest
7. Bid Challenge Outcomes	Letters & summary of appeals and resolutions.	End of standstill period	Procure. & Contracts / Strategy (I)	PDF; JSON manifest
8. Preferred Bidder Letter	Official selection notice with scoring summary.	PB announcement (G-2)	Procure. & Contracts / Board (I)	PDF; CSV (score_card columns); JSON manifest
9. Concession Agreement	Fully-executed, redacted contract (Schedules A–R).	Seal affixed at G-3	Legal Adviser / DG (I)	PDF (redacted); JSON manifest; CSV (deviation_matrix)
10. Conditions Precedent Status	Checklist of CP fulfillment with dates & certificates.	CP sign-off (pre-FC)	Project Dev. / Finance (I)	PDF; JSON manifest

11. KPI Scorecard	Quarterly performance metrics vs. contract KPIs.	Quarterly G-4 report	Strategy & Compliance / MDA (I)	CSV (project_id,kpi,value,threshold,status); interactive chart export; JSON manifest
12. Stress-Test Dashboard Data	Portfolio FCCL values, VaR, tail-risk flags.	Quarterly T-2 & PB (T-1)	Finance & Risk / Board (I)	CSV (project_id,EV-CL,portfolio_EV-CL,VaR); Power BI embed; JSON manifest
13. Variation Register	Approved contract variations with cost & duration impacts.	Board resolution	Procure. & Contracts / Strategy (I)	CSV; JSON manifest
14. Draft & Final Audit Reports	Auditor-General opinion on OYSIPA Fund and FCCL Annex.	FY-close + 2 weeks (§12)	Finance & Risk / Auditor-Gen. (I)	PDF; JSON manifest; CSV (account_line,amount)
15. Annual Accounts & FCCL Annex	Complete financial statements with FCCL line-item schedules.	Within 6 months of FY-end	Finance & Risk / Board (I)	PDF; CSV (Capex_Support_NGN,Loan_Guarantee_NGN,EV-CL_NGN); JSON manifest
16. Board Minutes (Disclosure Section)	Extracts showing sign-off of each disclosure item.	Each Board meeting	Board Secretary / Board (I)	PDF; JSON manifest

Key Notes:

- **Formats:**
    - **PDF** for human-readable documents; public pane caches and indexes.
    - **CSV** for tabular data (e.g., KPI values, FCCL register rows, deviation matrices).
    - **JSON manifest** accompanies each upload with metadata fields (project_id, document_type, version_hash, publish_date, trigger_gate, uploaded_by).

- **Triggers & Timing:**
    - Align with Gate events defined in Section 4 (G-0 to G-4) or with stress-test codes (T-1 to T-3) from Section 5.
    - Deadlines are prescribed by the Disclosure Regulation (Section 2.2) and enforced via DMS webhooks.

- **Ownership & Accountability:**
    - **Responsible (R):** Produces dataset (Project Dev., Finance, Procure., Strategy, Legal).
    - **Accountable (A):** Signs off publication (DG for G-0/1, Board for G-2/3, Governor-info for >₦ 5 bn).
    - **Consulted (C):** Legal Adviser on all PDFs; Auditor-General on audit/fiscal datasets.
    - **Informed (I):** Public pane for all non-sensitive; auditor pane for full, non-redacted.

By standardizing **what** must be disclosed, **when**, and in **which format**, this dataset catalogue ensures that no critical information slips outside the public domain—laying the groundwork for the detailed timing & format rules in Section 3.2.

3.2 Timing & Frequency Mapped to PPP Life-Cycle Gates

Ensuring that the right data appears at the right moment is as critical as defining *what* to publish. Section 3.2 aligns each dataset against the **PPP life-cycle gateways** (G-0 through G-4) and prescribes the **frequency**—real-time, same-day, within days, quarterly or annual—so that stakeholders know exactly *when* to expect each disclosure.

A. Disclosure timing categories

Category	Definition
Real-Time	Instant or near-instant publication via automated webhook/API (≤ 5 minutes)
Same-Day	Same calendar day publication (≤ 24 hours)
Short-Window	Within a defined window of days (e.g., 7 days, 14 days)
Quarterly	Within 15 days of quarter-end
Annual	Within 6 months of FY-end or as legally prescribed (e.g., by 31 March)

B. Gate-Driven Timing & Frequency Matrix

Dataset	Trigger/Event	Gate/Frequency	Timing Category	Notes
Concept Note	DG approval (G-0)	Once per project	Same-Day	Publish within 7 days of sign-off
Screening Memo	Board clearance (G-0)	Once per project	Same-Day	Publish within 7 days
Business Case (Exec. Summ.)	Board sign-off (G-1)	Once per project	Short-Window	Publish within 10 days
Full Business Case (conf.)	Board sign-off (G-1)	Once per project	Annual	Published upon request by IVA

FCCL Memo	Board clearance (G-1)	Once per project	Short-Window	Publish within 10 days
RFQ Document	RFQ issue date (G-2)	Once per RFQ	Real-Time	Portal link published immediately
RFP Document	RFP issue date (G-2)	Once per RFP	Real-Time	JSON manifest + PDF available same day
Bid Challenge Outcomes	End of stand-still period (G-2)	Per procurement	Short-Window	Publish within 3 days
Preferred Bidder Letter	PB announcement (G-2)	Once per project	Same-Day	Publish within 24 hours
Concession Agreement (redact)	Seal affixed (G-3)	Once per project	Short-Window	Publish within 14 days
Conditions Precedent Status	CP sign-off (pre-FC at G-3)	Once per project	Short-Window	Publish within 14 days
KPI Scorecard	Quarter end (G-4)	Quarterly	Quarterly	Publish within 15 days of quarter-end
Stress-Test Dashboard Data	Quarterly T-2/T-1 triggers	Quarterly + ad-hoc	Quarterly	Publish within 7 days of MC-Pro run
Variation Register	Board resolution	Per variation	Short-Window	Publish within 7 days
Annual Accounts & FCCL Annex	FY-end	Annual	Annual	Publish within 6 months of FY-end
Audit Report & Opinion	Auditor-Gen. opinion (Annual)	Annual	Annual	Publish within 6 months of FY-end
Board Minutes (Disclosure)	Each Board meeting	Per meeting	Short-Window	Publish within 7 days of meeting

C. Visual Cue for Publication Cadence

- **Green icons** for real-time (Lightning bolt ⚡)

- **Blue icons** for same-day (🕐)

- **Amber icons** for short-window (📤)

- **Grey icons** for quarterly (📅)

- **Black icons** for annual (📑)

D. Automated Enforcement of Deadlines

1. **Webhooks & Alerts:**

   - **Real-Time** triggers in the DMS fire webhooks to the Portal CMS, auto-ingesting files and metadata.

   - **Short-Window** deadlines spawn automated Slack/email reminders at T-3 days and T-1 day, with escalation under Section 3.4 if missed.

2. **Dashboard Tracking:**

   - A **Disclosure Gantt** view (Section 7.1) displays upcoming publish dates and their status (Pending/In Progress/Done).

   - Missed deadlines turn "red" on both the public and auditor dashboards, prompting a Governor's directive after repeated lapses.

E. Integrating with Gate Processes

Gate	Key Disclosure Events	Timing Category	Integration Note
G-0	Concept Note, Screening Memo	Same-Day	Alerts Pipeline Forum; updates swim-lane view
G-1	Business Case Exec. Summ., FCCL Memo	Short-Window	Feeds Disclosure Portal; triggers RFQ readiness
G-2	RFQ/RFP, PB Letter, Bid Outcomes	Real-Time/+	Auto-links to e-Tender Box; flags procurement KPI
G-3	Concession Agreement, CP Status	Short-Window	Triggers KPI dashboard subscription; updates FCCL
G-4	KPI Scorecard	Quarterly	Syncs with SCADA feeds; powers traffic-light KPI

F. Take-Away for Data Owners

> *"Know your deadlines before your data. Align your submission processes to the PPP gates and leverage the DMS alerts—because a single late upload breaks the chain of transparency for all."*

Section 3.3 will now define the **formats and schema standards**—PDF, CSV and JSON—to ensure that when datasets publish on time, they also publish *right*.

3.3 Formats & Open-Data Schemas — ensuring consistency and machine-readability

Uniform, machine-readable formats lie at the heart of an effective disclosure regime. Section 3.3 prescribes **three canonical formats**—PDF for human consumption, CSV for tabular data, and JSON for metadata manifests—plus schema definitions and validation rules so every dataset is both **usable** and **audit-ready**.

A. PDF: Human-Readable Master Copy

- **Purpose:**
  Present narrative reports, legal documents and executive summaries in a portable, visually consistent format.

- **Requirements:**

  - **PDF/A-2b** archival standard for long-term preservation.

  - **Embedded fonts** (subsetted) and **OCR text layer** for searchability.

  - **Bookmark structure** matching template section headings (e.g., "1. Definitions," "5. KPI Scorecard").

- **Naming convention:**

  {project_id}_{document_type}_{YYYYMMDD}_v{Major.Minor}.pdf

  Example: 2025-014_concession_agreement_20250915_v1.0.pdf

B. CSV: Structured Tabular Data

- **Purpose:**
  Enable easy import into spreadsheets, analytics tools and databases for performance and fiscal-risk analysis.

- **General rules:**

  - **UTF-8** encoding without BOM.

  - **Comma-delimited**, with all fields enclosed in double quotes if they contain commas or line breaks.

  - **Header row** with snake_case field names matching the manifest schema.

- **Key CSV schemas:**

1. **KPI Scorecard**

project_id,period_end,kpi_code,kpi_description,value,unit,threshold,status

period_end: ISO date (YYYY-MM-DD)

status: "GREEN" | "AMBER" | "RED"

2. **FCCL Register**

project_id,capex_support_ngn,loan_guarantee_ngn,ev_cl_ngn,probability_percent
,stress_test_date

Monetary fields as integers (no separators).

stress_test_date: ISO datetime in UTC.

3. **Variation Register**

variation_id,project_id,approval_date,description,cost_impact_ngn,duration_im
pact_months

C. JSON Manifests: Metadata & Linkage

- **Purpose:**
  Accompany each PDF/CSV upload with a machine-readable "receipt" that captures provenance, context and redaction details.

- **Base manifest schema (RFC 8259-compliant):**

  {

    "project_id": "YYYY-###",

    "document_type": "string (e.g., kpi_scorecard)",

    "file_name": "string",

    "version_hash": "hexadecimal SHA-256",

    "publish_date": "ISO8601 timestamp",

    "trigger_gate": "G-0|G-1|G-2|G-3|G-4",

    "formats": ["pdf","csv","json"],

    "redacted_fields": ["string", ...],

    "uploaded_by": "user_id",

    "notes": "string (optional)"

  }

- **Validation rules:**

  - **Required fields:** all except notes.

  - **Timestamp format:** YYYY-MM-DDThh:mm:ssZ in UTC.

  - **Version hash:** computed over the binary content of the PDF/CSV.

  - **Schema validation:** automated on upload; non-conformance rejects the upload.

D. Automated Schema Enforcement

1. **DMS pre-flight checks:**

   - On upload, the DMS validates CSV via a predefined JSON Schema ($ref to KPI, FCCL, Variation schemas).

   - PDF bookmarks and OCR layer verified by a lightweight validator.

2. **Portal ingestion pipeline:**

   - Webhook entangles the manifest with the main file: mismatches (e.g., file name or hash) trigger an error log and alert to the Disclosure Unit Lead.

3. **Error-handling & remediation:**

   - Upload failures queue a **"Quality Issue"** ticket in the DMS; the responsible user has **72 hours** to correct.

   - Re-uploads automatically clear the ticket and resume publication.

E. Versioning & Lifecycle

- **Version increments:**

   - **Major** when schema changes (e.g., adding a new field).

   - **Minor** for backward-compatible additions (e.g., optional metadata).

- **Deprecation policy:**

   - Old schemas remain supported for **12 months** post-change.

   - Automated migration scripts convert legacy CSVs into new formats in the background.

F. Take-Away for Data Publishers

"Think of each PDF, CSV and manifest as three sides of the same coin: readable, analyzable, and verifiable. If any side is chipped—an invalid CSV header, a missing JSON field, or a broken PDF bookmark—the coin won't pass muster with an IVA or investor."

Section 3.4 will now assign **data-owner roles** and map out the **submission workflows** that tie these format rules into RACI-driven processes and automated pipelines.

3.4 Data-Owner Roles, RACI Accountability & Submission Workflows

Clear ownership and structured hand-offs ensure that every dataset moves smoothly from creation to publication. Section 3.4 assigns **Responsible**, **Accountable**, **Consulted**, and **Informed** roles for each major dataset category, and prescribes a **standardized submission workflow** integrated into the Document Management System (DMS) and Disclosure Portal.

A. RACI Matrix for Key Datasets

Dataset	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)
Concept Note	Project Development Cluster	Director-General (DG)	Finance & Risk; Legal Adviser	Board; Public Pane
Screening Memo	Project Development Cluster	DG	Finance & Risk	Board; Auditor-Pane
Business Case (Exec. Sum.)	Project Development Cluster	Board Sub-Cttee	Finance & Risk; Strategy	Public Pane; IVA
FCCL Memo	Finance & Risk Cluster	DG	Project Dev.; Auditor-Gen.	Board; Auditor-Pane
RFQ/RFP Documents	Procurement & Contracts	DG (≤₦1 bn) / Board	Legal Adviser; Finance & Risk	Public Pane; BPP Observer
Preferred Bidder Letter	Procurement & Contracts	Board	Finance & Risk; Strategy	Public Pane; IVA
Concession Agreement (redact)	Legal Adviser	DG	Procurement; Finance & Risk	Public Pane (redacted); IVA
KPI Scorecard	Strategy & Compliance	DG	MDA Data Liaison	Public Pane; IVA
Stress-Test Data	Finance & Risk Cluster	Board	Auditor-Gen.; DG	Public Pane; IVA (via API)
Variation Register	Procurement & Contracts	Board	Strategy	Public Pane; IVA
Annual Accounts & FCCL Annex	Finance & Risk Cluster	Board	Auditor-Gen.; DG	Public Pane; IVA
Audit Reports & Opinions	Auditor-General Liaison	Auditor-General	Finance & Risk; DG	House of Assembly; Public Pane

B. Standard Submission Workflow

1. **Drafting & Internal Review**

   o **Responsible** team drafts the dataset in the required format(s) and prepares the JSON manifest.

   o Draft files are uploaded to the **DMS Draft Folder**; naming conventions and schema validation run automatically.

   o **Consulted** stakeholders receive DMS notifications to review within **3 working days**, annotating inline comments.

2. **Sign-Off & Digital Signature**

   o The **Accountable** owner (DG or Board) or delegate receives a DMS "Ready for Sign-Off" task.

   o Legal Adviser review and redaction sign-off occurs **in parallel** for documents requiring redaction.

   o Upon approval, DMS applies a **digital signature** and stamps a **SHA-256 hash** into the manifest.

3. **Automated Publication**

   o A successful sign-off triggers a **webhook** to the Disclosure Portal CMS.

   o Portal ingests PDF/CSV and manifest, publishing to the **Public** or **Auditor** pane based on metadata flags.

   o The **Informed** audience (e.g., Board, IVA, Public) receives email alerts with document links.

4. **Post-Publication Verification**

   o The DMS logs the publication event in an **immutable audit ledger** (AWS QLDB).

   o The **Auditor-Pane** exposes raw files and audit logs for Independent Verification Agents.

   o Any **publishing errors** (schema mismatch, missing signature) auto-spawn a "Quality Ticket" assigned to the Responsible team.

5. **Exception & Remediation**

   o If deadlines are missed, the system auto-escalates per the **Disclosure Regulation**:

      ▪ **T-3 days overdue:** Amber alert to Responsible and Accountable.

      ▪ **T-7 days overdue:** Red alert, triggers DG's "Remediation Notice" publication.

   o Remediation Notices follow the same workflow, ensuring full transparency of delays.

C. Integration with Digital Spine

- **DMS**: Central repository enforcing version control, role-based access, and automated validation.

- **Portal CMS**: Publishes files and metadata, drives public-facing APIs, and segregates redacted vs. full documents.

- **APIs & Webhooks**: Ensure **near-real-time** synchronization between DMS and portal, removing manual hand-offs.

- **Audit Dashboard**: Aggregates publication logs, status of pending disclosures, and RACI completion rates.

D. Roles & Responsibilities at a Glance

Role	Core Accountability
Project Development	Drafts concept notes, screening memos, business cases
Finance & Risk	Prepares FCCL memos, stress-test data, annual accounts integration
Procurement & Contracts	Manages RFQ/RFP, bidder letters, variation register
Strategy & Compliance	Produces KPI scorecards, manages portal metadata and public APIs
Legal Adviser	Vets redactions, signs off PDFs, ensures legal compliance
Director-General	Final sign-off for G-0/G-1 disclosures, accountable for timeliness
Board	Sign-off for G-2/G-3 reviews, sets policy under § 15 regulations
Auditor-General	Independent audit reports, opinion sign-off, IVA reconciliation

By codifying **who** does **what**, and embedding those hand-offs into an **automated workflow**, Oyo State ensures that every PPP dataset is produced, reviewed, published, and audited with **precision, consistency, and accountability**—the hallmarks of a world-class disclosure regime.

Section 4: Portal Architecture & CMS Mechanics

4.0 Introduction — building the digital gateway for PPP disclosures

A robust disclosure regime requires more than policies; it demands a **technology backbone** that ensures every document and data feed flows seamlessly from OYSIPA's DMS into a public and auditor-facing portal. Section 4 outlines the **Portal Architecture & CMS Mechanics**, showing how:

1. **Dual-Pane Publishing** – separates public-facing, redacted content from full, non-redacted documents accessible to Independent Verification Agents (IVAs) under credentialing controls.

2. **Metadata-Driven Ingestion** – harnesses JSON manifests and webhooks so every upload triggers an automated round-trip from the DMS to the portal, eliminating manual steps and publication delays.

3. **Redaction & Quality Assurance** – integrates automated bots and human sign-off to strip sensitive fields before public release, while preserving a complete, auditable trail in the auditor pane.

4. **API & Open-Data Feeds** – exposes standardized endpoints (CSV, JSON) that allow civil society, researchers and financiers to consume data without scraping, ensuring machine-readable access to all PPP disclosures.

Together, these components create a **publication pipeline** that guarantees transparency by design—no backdoor emails, no hidden files. Section 4.1 will dive into the **public vs. auditor pane functionalities**, credentialing rules, and access controls that make this gateway both **open** and **secure**.

4.1 Public-Pane vs. Auditor-Pane Functionalities & Credentialing

The Disclosure Portal is split into two distinct "panes," each tailored to different stakeholder needs while preserving security and auditability. This dual-pane design ensures **broad transparency** without compromising sensitive information, and provides IVAs with the **full evidence package** they need for verification.

A. Public Pane — open access for all

1. **Anonymous Access**

   o No login required; served via a statically generated, CDN-cached site.

   o HTTPS with HSTS enforced to guarantee data integrity in transit.

2. **Visible Content**

   o **Redacted PDFs** of all concession agreements, business cases (executive summaries), and Board minutes.

   o **Interactive KPI dashboards** showing high-level traffic-light metrics and trends.

- o **Downloadable CSV** extracts for KPI scores, variation summaries, and FCCL headline values.

- o **API endpoints** (e.g., GET /public/projects/{id}/disclosures) delivering JSON manifests and file URLs.

3. **Usability Features**

- o **Search & filter** by project, document type, gate, and publication date.

- o **Breadcrumbs** that guide users from project overview to specific datasets.

- o **Accessibility compliance** (WCAG 2.1 AA) for screen readers and keyboard navigation.

4. **Usage Analytics**

- o Aggregated page-view and download metrics logged (no PII) to gauge public engagement.

- o Heat-maps identify popular documents and inform future design enhancements.

B. Auditor Pane — credentialed, full-access environment

1. **Secure Authentication**

- o **SSO via Azure AD**: IVAs receive time-bound credentials scoped to the "Auditor" role.

- o **MFA enforced** (SMS/Authenticator app) to protect non-public content.

2. **Full Document Access**

- o **Unredacted PDFs** with confidential sections intact.

- o **Raw data feeds**: full FCCL registers, business-case appendices, DMS audit logs (JSON).

- o **Audit dashboard**: comprehensive view of all disclosure events, webhooks, and schema validation results.

3. **Fine-Grained Authorization**

- o **Role-Based Access Control (RBAC)** restricts certain high-sensitivity datasets (e.g., lenders' term-sheets) to "Lead IVA" or "Senior Auditor" roles.

- o **Attribute-Based Access Control (ABAC)** further filters by project risk rating: higher-risk projects trigger additional approvals for auditor access.

4. **Audit-Ready Features**

- o **Download logs**: every file download is logged with user ID, timestamp, and IP hash.

- o **Immutable event logs**: portal events (uploads, redactions, metadata changes) streamed to AWS QLDB and exposed via an API for forensic review.

- **Watermarking**: dynamic, user-specific watermark overlays (e.g., "For IVA_JSmith only — {{timestamp}}") on all PDFs.

C. Credentialing & Onboarding Workflow

1. **Registration Request**

   - Prospective IVAs submit a **Credentialing Form** via the public site, including institutional affiliation and intended scope.

   - The **Disclosure Unit Lead** reviews and approves requests within **5 business days**.

2. **Account Provisioning**

   - Approved users receive a **time-limited Azure AD Guest account** and are assigned the "Auditor" role.

   - **MFA enrollment** required on first login; recovery options configured per IT policy.

3. **Periodic Recertification**

   - Access rights auto-expire after **12 months**; users must reapply with updated credentials and institutional letters.

   - **Access reviews** quarterly to revoke dormant or misaligned permissions.

4. **Revocation & Incident Handling**

   - Suspicious activity triggers an **instant revocation** of credentials and an alert to the IT Security team.

   - A **forensic snapshot** of the user's session logs is captured for incident response.

D. Security & Compliance Controls

Control	Implementation Detail
TLS 1.3 Encryption	All traffic encrypted; strict cipher suites only
Content Security Policy	Blocks unauthorized scripts and mixed-content risks
Web Application Firewall	OWASP Top 10 protection, rate-limiting, DDoS mitigations
Penetration Testing	Biannual tests; reports published (redacted) on portal
Data Residency	Portal and DMS hosted within Nigeria to comply with NDPR

By clearly delineating **public** and **auditor** functionalities—backed by robust authentication, authorization, and logging—Oyo State's disclosure gateway balances **maximum transparency** with the **controlled access** required for sensitive PPP materials. Section 4.2 will detail the metadata schemas and API endpoints that power these panes, ensuring that every document and data feed is both discoverable and machine-readable.

4.2 Metadata Manifest Structure & API Endpoints for Open-Data Feeds

Effective discovery and reuse of PPP disclosures depend on consistent metadata and accessible APIs. Section 4.2 specifies the **JSON manifest schema** for every disclosure and defines the **RESTful endpoints** that enable programmatic access to metadata and documents.

A. JSON Manifest Schema

Each published document or dataset must be accompanied by a JSON file following this **RFC 8259-compliant** schema:

```
{
  "project_id": "string (YYYY-###)",
  "document_type": "string (e.g., concept_note, concession_agreement, kpi_scorecard)",
  "file_name": "string (filename with extension)",
  "version_hash": "hexadecimal SHA-256",
  "publish_date": "string (ISO 8601 timestamp, UTC)",
  "trigger_gate": "string (G-0|G-1|G-2|G-3|G-4)",
  "formats": ["pdf","csv","json"],
  "redacted_fields": ["string", ...],
  "uploaded_by": "string (user_id)",
  "notes": "string (optional free text)"
}
```

Field Definitions:

- **project_id:** Unique identifier (e.g., "2025-014")

- **document_type:** Matches the dataset catalogue (Section 3.1)

- **version_hash:** SHA-256 computed over the file's binary

- **trigger_gate:** Indicates lifecycle stage when published

- **formats:** List of file formats available

- **redacted_fields:** Lists fields removed for commercial sensitivity

- **notes:** Any contextual remarks (e.g., "Delayed due to system upgrade")

Validation Rules:

- Mandatory fields except notes; manifest rejects if missing.

- publish_date in strict UTC format: YYYY-MM-DDThh:mm:ssZ.

- version_hash length: 64 hex characters.

- Arrays must contain at least one element.

B. Core API Endpoints

The portal exposes the following **RESTful** endpoints with **HTTPS** and **JWT**-based auth for protected routes:

Endpoint	Method	Auth	Description
GET /api/public/projects	GET	None	Returns list of all project IDs and names
GET /api/public/projects/{id}/manifests	GET	None	Returns list of JSON manifests for all disclosures of a project
GET /api/public/documents/{manifestHash}	GET	None	Returns the requested file (PDF or CSV)
GET /api/audit/projects	GET	Auditor Token	Returns list of project IDs with full access
GET /api/audit/projects/{id}/manifests	GET	Auditor Token	Returns all manifests (redacted and non-redacted)
GET /api/audit/logs/{project_id}	GET	Auditor Token	Returns the DMS audit trail for the project in JSON

Key Features:

- **Pagination:** All list endpoints support page and per_page query parameters.

- **Filtering:** Query parameters (document_type, trigger_gate, publish_date range) for targeted retrieval.

- **CORS Enabled:** Allows cross-origin requests for web apps and dashboards.

- **Rate Limiting:** Public endpoints at 1000 req/min; auditor endpoints at 5000 req/min.

C. Open-Data Feed

In addition to APIs, the portal provides a **static JSON feed** for easy ingestion by external data platforms:

- **Feed URL:** /data/open/projects_disclosure.json

- **Structure:** Array of objects matching the manifest schema, updated hourly.

- **Compression:** GZIP enabled for large payloads.

- **Schema Versioning:** Top-level field "schema_version": "2025.0.0" to signal format changes.

D. Security & Governance

- **Auth Mechanisms:**

  - Public endpoints require no auth.

  - Auditor endpoints require JWT tokens issued by Azure AD, scoped to roles ("auditor.read", "auditor.logs").

- **Token Expiry & Refresh:** Tokens valid for 4 hours; refresh via /api/auth/refresh.

- **API Keys for Integration:** Non-IVAs (e.g., CSOs) can request API keys for higher rate limits under the public scope, managed via the Admin Console.

E. Monitoring & SLAs

- **Uptime Target:** 99.9% availability with SLA-backed support for 24×7 outage response.

- **Logging:** All API calls are logged with timestamp, IP hash, endpoint, and response code in a centralized SIEM.

- **Performance Metrics:**

  - 95th percentile response time < 200 ms

  - Error rate < 0.1% per day

F. Take-Away

> *"Consistent metadata and robust APIs are the keys to unlocking PPP data's full value. By standardizing manifests and providing both real-time feeds and audit-level endpoints, Oyo State transforms disclosure from a static report into a live, interactive resource for governance, financing, and community engagement."*

Section 4.3 will detail the **automated redaction workflow**, ensuring only approved fields appear publicly while preserving complete records for auditors.

4.3 Automated Redaction Workflow, QA Checks & Error-Handling Protocols

Ensuring sensitive information is appropriately withheld requires a **hybrid automated-human process**. Section 4.3 details how the Disclosure Portal enforces redaction before publication, validates quality, and manages errors—protecting both commercial confidentiality and audit integrity.

A. Automated Redaction Workflow

1. **Redaction Tags in Templates**

   - All Word/PDF templates include **"commercial_sensitive"** tags around fields or sections that may require redaction (e.g., financial model tabs, lender identities).

   - Tags are exported as PDF annotations (hidden) during DMS conversion.

2. **RedactBot Engine**

   o On upload, the CMS invokes **RedactBot**, a rules-based, pattern-matching service that:

     ▪ Reads the PDF annotation tags or scanning for tagged XML elements.

     ▪ Masks the content with black bars and replaces hidden text with [REDACTED] placeholders.

     ▪ Re-flattens the PDF to prevent un-redaction.

   o RedactBot logs each redaction event in a **"Redaction Log"** JSON file, listing page numbers, field IDs, and timestamp.

3. **Concurrent Parallel Path**

   o While RedactBot processes the public pane version, the **unredacted original** is simultaneously archived to the **Auditor Pane** repository—ensuring no version mismatch.

B. Human Quality-Assurance (QA)

1. **Redaction Sign-Off Checklist**

   o The Legal Adviser reviews the redacted PDF against a **5-point checklist**:

     1. All tagged fields are masked.

     2. No accidental over-redaction (essential context preserved).

     3. OCR layer removed from redacted areas.

     4. Placeholder text correctly formatted.

     5. Metadata manifest's redacted_fields matches actual redactions.

2. **DMS QA Task**

   o Upon successful RedactBot run, DMS creates a **"Redaction QA"** task assigned to the Legal Adviser with a 48-hour SLA.

   o Any annotation comments are captured inline; the redacted PDF and log are versioned together.

C. Error-Handling & Remediation

1. **Automated Validation Failures**

   o If RedactBot detects:

     ▪ Missing annotation tags for required fields,

     ▪ OCR text under blackbars, or

- Discrepancy between manifest's redacted_fields and actual masks, it returns an **Error Code** and halts publication, marking the manifest as status: "error_redaction".

2. **Incident Ticketing**

   o Errors enqueue a **Quality Ticket** in the DMS, routed to the **Responsible** dataset owner.

   o The ticket includes:

      - Error Code, affected pages/fields, Redaction Log excerpt, and suggested fix steps.

3. **Remediation Workflow**

   o The Responsible owner must **re-upload** a corrected PDF within **72 hours**.

   o Upon re-upload, RedactBot re-scans; if successful, the ticket auto-closes and publication resumes.

4. **Escalation**

   o If remediation fails or exceeds SLA, the system:

      - Flags the issue as **"amber"** at T-3 days and sends alerts to the DG and Disclosure Unit Lead.

      - At T-7 days, raises a **"red"** alert triggering a Governor's directive under Regulation Article 7.

D. Audit Logging & Transparency

- **Immutable Redaction Logs:** Stored alongside each manifest in AWS QLDB, providing a tamper-evident record of every redaction operation.

- **Metadata Correlation:** The redacted_fields array in the manifest is cross-checked against the Redaction Log during IVA audits.

- **Public Disclosure of Remediation Notices:** If a correction was required, a brief **Remediation Notice** (PDF) is published, explaining the delay and summarizing the fix, maintaining full transparency.

"By combining a high-speed automated redaction engine with rigorous human QA and clear error protocols, Oyo's Disclosure Portal ensures that no sensitive data leaks into the public domain—while keeping the audit trail pristine for verification."

Section 5.0 will next introduce how stakeholders engage with these disclosures and submit feedback through structured consultation and grievance mechanisms.

Section 5: Stakeholder Engagement & Feedback Loops

5.0 Introduction — Why two-way engagement matters for transparency

Disclosure is not a one-way broadcast; it must be a **dynamic conversation** that empowers communities, civil society, financiers, and oversight bodies to **question, comment, and influence** PPP outcomes. Section 5 defines the structured channels, timelines, and SLAs that turn published data into actionable feedback—closing the loop between **transparency** and **accountability**.

Key principles:

1. **Early and Open Consultation**
   At each Gateway (G-0 through G-4), stakeholders receive advance notice of forthcoming disclosures and have a defined window to review draft materials—ensuring that public input shapes project design before irreversible commitments.

2. **Accessible Feedback Channels**
   A unified **Grievance & Query Portal** integrates with project pages, allowing any user to submit comments, questions, or complaints tied to specific documents or data fields. Automated categorization routes issues to the correct MDA or cluster for rapid response.

3. **Defined Response SLAs**
   Every query triggers a **5-day acknowledgment**, a **15-day substantive response**, and, if unresolved, an **escalation path** to the Director-General or Board. These SLAs are enforced by the DMS and flagged on the public portal to demonstrate institutional responsiveness.

4. **Transparent Resolution Records**
   All feedback, responses, and corrective actions are logged and published in a **Feedback Ledger**, providing a public audit trail that shows not just that comments were received, but how they were addressed.

5. **Continuous Improvement**
   Biannual stakeholder forums synthesize portal feedback, guiding regulatory tweaks, template updates, and process refinements (Section 8.3). This embeds an **iterative learning loop** so that Oyo's disclosure regime evolves in step with user needs and best practices.

By formalizing engagement and giving voice to external actors thereby ensuring their inputs drive real change, Oyo State transforms disclosure from passive data release into an **interactive governance tool** that cultivates trust, uncovers risks early, and strengthens project outcomes.

5.1 Civil-Society Consultation Windows & Public Comment Protocols

Structured, early engagement invites informed input and mitigates downstream disputes. Section 5.1 mandates **pre-publication consultation windows** at each PPP gateway, defines **public comment protocols**, and prescribes **triage & response SLAs**—ensuring that external stakeholders shape projects before irreversible commitments.

A. Consultation Windows at Each PPP Gateway

Gateway	Draft Materials	Consultation Window	Notification Channel	Responsible (RACI)
G-0	Draft Concept Note & Screening Memo	14 days prior to DG sign-off	Email to registered CSOs; portal banner	Project Dev. (R) / DG (A)
G-1	Draft Business Case & FCCL Memo	21 days prior to Board mtg	Portal pop-up; targeted SMS to community reps	Finance & Risk (R) / Board Sec. (A)
G-2	Draft RFQ & RFP	7 days prior to issue date	Public announcement on state website; newsletter	Procurement (R) / DG (A)
G-3	Draft Concession Agreement	14 days prior to seal affix	Email to DFI focal points; portal feed	Legal Adviser (R) / DG (A)
G-4	Draft KPI Scorecard & Stress-Test Summary	10 days prior to quarter end	Portal alert; social media post	Strategy & Compliance (R) / DG (A)

- **Publication of Drafts:** Drafts are uploaded to a **"Consultation Folder"** in the portal with a clear **"Comment by"** date.

- **Advance Notice:** Automated emails/SMS notify all **registered stakeholders** (CSOs, community groups, investor forums) at least 3 days before the window opens.

B. Public Comment Mechanisms

1. **Online Feedback Form**

   o Linked directly from each draft's portal page.

   o Fields: project_id, document_type, section_heading, comment_text, attachment (optional).

   o **Character limit:** 2,000 characters to encourage concise, actionable feedback.

2. **Email & Postal Submissions**

   o Dedicated email inbox (disclosure@oyostate.gov.ng) with auto-reply confirming receipt within hours.

   o Postal address for organizations preferring hard-copy submissions; scanned responses entered into the portal by admin staff.

3. **In-Person Hearings (G-1 & G-3 only)**

   o Optional town-hall sessions in Ibadan and one secondary city.

   o **Minutes** taken by the Board Secretary and published alongside written comments.

4. **Anonymous Reporting**

   o For sensitive whistle-blower insights, an **anonymous feedback channel** routed securely via a third-party service; summaries published without attribution.

C. Triage, Categorization & Acknowledgment

- **Automated Triage**

  o Natural-language processing tags comments by topic (e.g., "environment," "tariff," "social impact").

  o Flags urgent issues (e.g., safety risks) for **immediate escalation** to the DG's office.

- **Acknowledgment & Tracking**

  o **Within 5 days**, every submission receives a **"Comment Receipt"** with a unique tracking ID.

  o Portal dashboard shows **real-time counts**: total comments received, pending, under review, and closed.

- **Public Ledger**

  o All comments (except anonymous) appear in the **Feedback Ledger**, sortable by topic, project, and status.

D. Response & Resolution Workflow

1. **Preliminary Review (R)**

   o The **Responsible** cluster lead reviews comments within **10 days** of window close, grouping similar issues.

2. **Draft Consolidated Response (C)**

   o A **"Response Memo"** addresses each unique comment:

     ▪ **Accept:** how the comment influenced the final document.

     ▪ **Reject:** rationale, referencing legal or technical constraints.

3. **Board or DG Sign-Off (A)**

   o For G-0/G-1 responses, the DG signs the memo; for G-2/G-3, the Board resolves.

   o Signed memos are published within **15 days** of the consultation window closing.

4. **Amendment & Final Publication (I)**

   o If a comment requires material edits, the dataset is revised and republished with a **"Revised"** tag and new manifest.

   o **Final documents** carry a **"Consultation Closed"** badge with links to the response memo.

E. Escalation & Governance

- **Unresolved Issues:** If substantive comments remain unaddressed, stakeholders may request an **Appeal Hearing** before the Board (triggered under Section 6.4's dispute protocols).

- **Governor's Directive:** Repeated failure to incorporate valid feedback can prompt a **Governor's Directive** under Law § 21, mandating corrective action.

- **Oversight Reporting:** The Board Secretary presents an **Annual Feedback Report** to the House of Assembly, summarizing engagement metrics and key outcomes.

F. Measuring Engagement Success

Metric	Target by Year 1
% of consultation windows held on time	100 %
Avg. comments per window	≥ 15
% of comments addressed in memo	≥ 95 %
Stakeholder satisfaction score	≥ 4.0/5 via post-comments survey

By formalizing consultation windows, multi-channel submission protocols, and rigorous triage & response workflows, Oyo State elevates disclosure from checkbox compliance to **meaningful dialogue**, harnessing stakeholder insights to improve PPP design, reduce conflict risk, and build public trust.

5.2 Grievance Management, Query Tracking & Response SLAs

A robust feedback system requires not only open comment channels but also **formal grievance management** to address disputes, misinformation, or urgent concerns. Section 5.2 establishes a **structured grievance workflow**, defines **query-tracking mechanisms**, and enforces **Service Level Agreements (SLAs)**—ensuring that every stakeholder's issue is acknowledged, investigated, and resolved transparently.

A. Grievance Categories & Reporting Channels

Category	Examples	Reporting Method
Technical Errors	Incorrect KPI data, broken download links	Portal "Report an Issue" form; email
Contract Discrepancies	Mismatched RFQ/RFP clauses, missing schedules	Grievance portal; in-person appeal desk
Delay Complaints	Missed publication deadlines	Portal form; automated Slack/SMS alert
Community Impacts	Unaddressed social or environmental concerns	Portal form; town-hall grievance boards
Security Concerns	Sensitive data leaks or unauthorized access	Email hotline; direct report to DG office

All grievances enter the **Grievance & Query Portal**, which integrates with the DMS and flags incoming issues in real time.

B. Standard Grievance Workflow

1. **Submission & Acknowledgment (Within 24 hours)**

   o User submits grievance via portal form or email.

   o System auto-generates a **Grievance ID** and sends an acknowledgment containing:

     ▪ Submission timestamp

     ▪ Assigned case manager

     ▪ Expected first-response date (within SLA)

2. **Triage & Categorization (Within 2 business days)**

   o The **Disclosure Unit Lead** reviews incoming issues, assigns them to the appropriate **Cluster Lead** (e.g., Finance & Risk for FCCL queries).

   o Issues are tagged by priority:

     ▪ **High** (impact on safety, legal non-compliance)

     ▪ **Medium** (data inaccuracies, functional bugs)

     ▪ **Low** (formatting preferences, minor clarifications)

3. **Investigation & Resolution (SLAs apply)**

Priority	Initial Response SLA	Resolution SLA
High	1 business day	3 business days
Medium	2 business days	7 business days
Low	3 business days	14 business days

   o **Initial response** acknowledges receipt and outlines next steps.

   o **Substantive resolution** provides final answer, document correction, or escalation plan.

4. **Communication & Publication**

   o Resolutions are posted publicly in the **Grievance Tracker** on the portal, linked to the original disclosure item.

   o Confidential or sensitive resolutions (e.g., involving personal data) are summarized without disclosing private information.

5. **Closure & Feedback**

   o Case managers mark grievances **"Closed"** once resolution is confirmed.

- Users receive a **Closure Notification** and are invited to rate the process (1–5 stars).

C. Query-Tracking Dashboard

- **Overview Metrics**

  - Total grievances received, open vs. closed, average resolution time.

  - SLA compliance rate per priority tier.

- **Drill-Down Views**

  - Filter by project, document type, or cluster.

  - Visualize trends: spike in contract queries post RFP issue, seasonal data-feed errors at quarter-end.

- **Alerts & Escalations**

  - **Amber** if resolution SLA breached by 1 day—auto-email to cluster head.

  - **Red** if breached by 3 days—auto-escalation to DG and Board Secretary, generating a **Public Incident Notice**.

D. Roles & Responsibilities

Role	Responsibility
Disclosure Unit Lead	Oversees grievance intake, triage, and dashboard monitoring.
Cluster Lead	Investigates and resolves issues in their domain.
Case Manager	Communicates with submitter, tracks SLAs, closes cases.
DG / Board Secretary	Receives escalations for persistent or high-priority grievances.
Portal Admin	Ensures form functionality, logs manual submissions.

E. Integration with Governance & Audit

- **G-1 & G-3 Appeal Rights:**

  - Unresolved contract or procurement grievances can invoke the **Dispute-Resolution Ladder** (Section 6.4), ensuring formal legal recourse.

- **Audit Logging:**

  - Every step—submission, categorization, response, closure—is timestamped and stored in the **DMS audit ledger**.

  - IVAs can query /api/audit/grievances/{project_id} to retrieve the full case history in JSON.

- **Annual Grievance Report:**

    o Consolidated metrics and case studies are included in the **Annual Feedback Report** (Section 5), informing policy refinements and enhancing accountability.

F. Performance Metrics & Continuous Improvement

Metric	Target Year 1
SLA compliance rate (all priorities)	≥ 95%
Average resolution time	≤ 80% of SLA
User satisfaction score	≥ 4.2/5
% of grievances escalated	≤ 5%

Quarterly **grievance reviews** feed the **KPI backlog** (Section 7.3), ensuring systemic issues lead to process or template updates.

"A feedback regime without firm SLAs and transparent tracking is just chatter. By codifying grievance flows, Oyo State ensures every concern is not only heard—but resolved in a timely, visible manner."

Section 6: External Reporting & SABER DLI Evidence Pillars

6.0 Introduction — Why contracts and templates are the frontline of bankability

Every governance process, fiscal control mechanism, and disclosure rule collapses if the **documents** that bidders read and lenders sign aren't **bullet-proof**. Section 6 shifts from policy to *paper*, explaining how Oyo State will issue, maintain, and enforce a **suite of standardised contractual instruments** that:

1. **Embed risk-allocation logic** from Sections 4 and 5 directly into clauses—so every tariff formula, force-majeure provision, and termination payment aligns with the FCCL ceilings.

2. **Prevent bespoke clause creep** by locking core language in "grey-box" templates, reducing legal opinion time and compressing financial-close timelines.

3. **Provide one-stop evidence** for SABER assessors and DFIs, by gazetting each template under Law § 15, cataloguing deviation zones, and generating a deviation matrix automatically with every RFP.

4. **Close the loop digitally**: every template carries an immutable version hash; edits outside authorised fields trigger DMS flags and require DG pre-clearance, with key variables pushed back into the Disclosure Portal and FCCL Register via API.

What's ahead in Section 6

- **6.1**: The non-negotiable RFQ/RFP blueprint that sets the playing field for all bidders.

- **6.2**: The Model Concession Clauses pack that hard-wires bankability—tariff indexation, step-in rights, termination caps.

- **6.3**: SPV governance, equity-injection schedules and break-fee mechanics that underpin sponsor and lender confidence.

- **6.4**: The dispute-resolution ladder ensuring any grievance follows a known path from ADR to arbitration.

Together, Section 6 ensures that every Oyo PPP is not only built on solid legal ground, but is also **contractually locked** to deliver fiscal discipline, investor comfort, and SABER-grade transparency.

6.1 Mapping Each Disclosure Category to SABER Pillars (a–e)

To secure World Bank PPP financing under SABER DLI 3, Oyo State must demonstrate that its disclosure practices satisfy **all five evidence pillars**. Section 6.1 systematically links each mandatory dataset (Section 3.1) and portal feature (Section 4) to the appropriate SABER pillar, ensuring no gaps in evidence or timing.

A. Pillar (a): Published Policy & Legal Framework

Objective: Show that Oyo State has a formally adopted disclosure regime.

Evidence Element	Description
Framework Document & Regulations	Publicly available Oyo State PPP Disclosure Framework + **Disclosure Regulation, 2025** gazette notice (§ 2.2)
Portal "About" Page	Static page summarizing legal basis (Law §§ 12–15, 36) and regulatory instruments
Versioned SOPs & Change Bulletins	Archived logs of major/minor updates (Section 8.3)

B. Pillar (b): Quantification Methodology & Data Accuracy

Objective: Demonstrate that disclosed numerical data follows a clear, repeatable methodology.

Evidence Element	Description
Metadata Manifests (JSON)	Show publish_date, version_hash, and source for each dataset (Section 4.2)
CSV Schemas & Validation Logs	Machine-validated KPI, FCCL and variation CSVs with schema-conformance reports (Section 3.3)
Redaction Logs (JSON)	Detailed records of automated redactions and QA sign-off (Section 4.3)

C. Pillar (c): Governance Architecture & Accountability

Objective: Prove clear roles, processes, and escalation paths under RACI.

Evidence Element	Description
RACI Matrix & DMS Task Logs	Audit trail of drafting, review and sign-off tasks by Project Dev., Finance, Legal, DG, Board (Section 3.4)
Board Minutes Extracts	Minutes showing DG and Board resolutions that approved disclosure events (Section 3.1 and 5.1)
Escalation Records	Automatic logs of amber/red grievance escalations and Governor's directives (Sections 5.2, 7.1)

D. Pillar (d): Disclosure Rules & Timeliness

Objective: Verify that disclosures occur within prescribed timeframes and formats.

Evidence Element	Description
Portal Publication Logs	Timestamps and webhook-triggered log entries for each upload, showing real-time, same-day, or short-window adherence (Section 3.2)
SLA Dashboards	Visual reports of consultation deadlines, grievance SLAs, and remediation notices (Sections 5.1–5.2)
Automated Alerts & Remediation Notices	Records of remediation notices published when deadlines slip (Section 2.2 & 5.2)

E. Pillar (e): Operational Proof & Independent Verification

Objective: Offer the raw evidence and tools IVAs need to reproduce and validate disclosures.

Evidence Element	Description
Auditor-Pane Content	Full, unredacted PDFs, original CSVs, audit logs and DMS ledger exports accessible by IVAs (Sections 4.1 & 4.2)
Open API & Static Feeds	/api/audit endpoints and /data/open/projects_disclosure.json feed for programmatic retrieval (Section 4.2)
Mock Audit Reports	Results of bi-annual mock audits, gap-analysis and remediation roadmaps (Section 7.3 & 8.3)

F. Cross-Pillar Summary

Dataset / Feature	Pillar(s)	Key Artifact
PPP Disclosure Framework & Gazetted Regulations	(a)	Gazette notice PDFs
JSON Manifests & CSV Schemas	(b), (e)	Schema docs + validation logs
RACI & Task Logs	(c), (e)	DMS audit ledger
Publication Timing Logs	(d), (e)	Portal logs + remediation notices
Auditor Pane & APIs	(e)	Endpoint specs + access logs

By explicitly mapping each disclosure element to the corresponding SABER pillars, Oyo State provides **a clear "evidence checklist"** for IVAs. This ensures that every disbursement-linked indicator is backed by **documented policy**, **repeatable data**, **accountable processes**, **on-time publication**, and **verifiable audit trails**—maximizing the likelihood of swift tranche release and ongoing financing.

6.3 Cross-Reference to Global Best Practices (Open Government Partnership, EITI, OCDS)

Oyo State's disclosure regime draws on proven international frameworks to maximize transparency impact. By aligning with **Open Government Partnership (OGP)** commitments, the **Extractive Industries Transparency Initiative (EITI)** and the **Open Contracting Data Standard (OCDS)**, we ensure our PPP disclosures match and, in some cases, exceed global benchmarks.

A. Open Government Partnership (OGP)

1. **Co-creation & National Action Plans**

   o OGP promotes multi-stakeholder co-creation of transparency commitments. Oyo State can emulate this by including civil society, private sector and MDA representatives in annual **"Disclosure Action Workshops"** (Section 8.3), refining portal features and dataset scopes.

2. **OGP Indicators**

   o OGP tracks **OGP Indicator 6** ("Publication of budgets, procurement and contracts"). Our PPP portal extends this to lifecycle disclosures, mapping to OGP's standard "commitment → deliverable → monitoring" cycle and reporting progress publicly.

3. **Independent Reporting Mechanism (IRM)**

   o OGP's IRM provides objective assessments. Oyo State can invite an **"IPA-level IRM review"** every 24 months, publishing an independent report on disclosure compliance, lessons learned, and recommended improvements.

B. Extractive Industries Transparency Initiative (EITI)

1. **Beneficial Ownership Transparency**

   o EITI requires disclosure of **ultimate beneficial owners**. For PPP SPVs (Section 6.3 in the Legal Framework), Oyo's portal will publish a **Beneficial Ownership Register**—listing shareholder structures, equity splits, and confirmatory declarations—mirroring EITI's BO tabular disclosures.

2. **Standardized Payment & Contract Data**

   o EITI publishes **contracts** and **payments** in machine-readable tables. Our framework adopts the same approach: concession agreements redacted per Section 4.3, with **structured CSV fields** for fees, tariff schedules and government support, enabling data reconciliation with state budget line items.

3. **Multi-Stakeholder Group (MSG)**

   o EITI's MSG governance model brings together government, companies and civil society. Oyo PPP can launch a **PPP Transparency Steering Group** with the same tripartite membership to oversee disclosure policy, resolve disputes, and verify data integrity.

C. Open Contracting Data Standard (OCDS)

1. **Stage-Based Contracting Model**

   o OCDS defines stages—**planning**, **bidding**, **award**, **implementation**, **contract**—with JSON schemas for each. Section 3's lifecycle dataset matrix maps directly onto these stages, enabling Oyo's portal to issue **OCDS-compliant JSON feeds** that IVAs and third-party apps can ingest without custom integrations.

2. **Standardized Schema & Extensions**

   o By publishing all PPP disclosures using the core **OCDS schema** plus an **"oyo_ppp" extension** (fields like trigger_gate and stress_test_results), we achieve global interoperability and adhere to DRY (Don't Repeat Yourself) principles.

3. **Redress & Amendment Workflow**

   o OCDS recommends clear versioning and amendment tracking. Oyo's **version-control protocol** (Section 8.3) follows this model, tagging each release with semantic versions and publishing the full **release history** via /data/open/oyo_ppp_ocds_releases.json.

D. Comparative Advantages & Implementation Notes

Best Practice	Key Feature	Oyo Adaptation
OGP IRM	Independent progress assessments	Biennial "PPP IRM" report
EITI BO Register	Beneficial ownership disclosures	Public BO tab in portal; CSV + JSON manifest
EITI Contract Summaries	Structured contract metadata	Deviation-matrix CSV; standardized contract summaries
OCDS Stage Feeds	Machine-readable contracting stages	OCDS JSON feeds for G-0 to G-4
OCDS Redaction Ext.	Redaction and extensions mechanism	RedactBot tags + oyo_ppp schema extension

E. Roadmap to Full Alignment

1. **Phase 1 (Months 1–6):**

   o Publish PPP portal API in both OGP and OCDS formats.

   o Stand up the PPP Transparency Steering Group.

2. **Phase 2 (Months 7–12):**

   o Launch Beneficial Ownership Register; populate with SPV data.

   o Commission first **PPP IRM report** with civil society partners.

3. **Phase 3 (Months 13–24):**

- Integrate EITI-style payment reconciliation tables for major revenue-sharing PPPs.

- Conduct technical workshops on OCDS consumption for local developers and researchers.

By embedding these **global best practices**, Oyo State's PPP Disclosure Framework not only meets local legal and donor requirements but also positions itself as a **regional exemplar**—leveraging OGP, EITI and OCDS to deliver **interoperable**, **verifiable** and **stakeholder-driven** transparency across every phase of PPP delivery.

Section 7: Audit & Verification Procedures

7.1 Introduction — ensuring every disclosure is verifiable via audit-ready procedures

Public trust in PPP disclosures hinges on the ability to **independently verify** that published information is complete, accurate, and untampered. Section 7 codifies the **Audit & Verification Procedures** that underpin this trust, by:

1. **Credentialed IVA Access** — providing Independent Verification Agents secure, timely entry to unredacted documents, raw data feeds, and audit logs via the Auditor Pane and dedicated API endpoints (Section 4.1–4.2).

2. **Immutable Logs & Exportable Trails** — capturing every publication event, redaction operation, and portal interaction in a tamper-evident ledger, with **JSON exports** for reproducibility and forensic review.

3. **Mock Audit Protocol** — scheduling periodic, IVA-style reviews to surface gaps before formal audits, complete with a **gap-analysis report** and remediation roadmap.

4. **Role-Based Evidence Bundles** — assembling "evidence packs" for each DLI and DFI covenant (Sections 6.1–6.2), pre-packaged with all relevant manifests, PDFs, CSVs and logs to eliminate manual collation.

In the following chunks, we will:

- **7.2** define how IVAs obtain credentials, navigate the audit dashboard, and retrieve evidence bundles.

- **7.3** explain the structure of immutable audit logs, the JSON schema for event exports, and how these feed into reproducible verification workflows.

- **7.4** (if needed) outline the mock-audit cycle, including scope, scheduling, and remediation tracking, ensuring continuous assurance.

By embedding these procedures, Oyo State turns its Disclosure Portal into a **self-serving verification engine**, where evidence is not requested but automatically available, ensuring that every disclosure stands up to the highest scrutiny.

7.1 Independent Verification Agent (IVA) Access: Credentials, Scope & Audit-Dashboard Link

To validate PPP disclosures with maximum efficiency and minimal friction, Oyo State provides IVAs with a **dedicated, credentialed environment**—the Auditor-Pane—backed by an **Audit-Dashboard** that surfaces all evidence in one place. Section 7.1 details how agents register, gain access, and navigate this environment, ensuring they can retrieve every document, data feed, and log they need without chasing manual requests.

A. Credentialing & Onboarding Process

Step	Description	SLA
1. Application	IVA submits a **Credentialing Request Form** via the public portal, including: • Organization affiliation• Project scope• Intended audit period	Immediate confirmation email
2. Vetting & Approval	**Disclosure Unit Lead** reviews submission, verifies MFA readiness and compliance training certificate, and assigns **"Auditor"** role in Azure AD.	≤ 5 business days
3. Account Provisioning	IT team issues a **time-limited Azure AD Guest account** with **Auditor-Pane** permissions; credentials sent securely via email.	≤ 2 business days
4. MFA & Orientation	IVA completes **MFA setup** (Auth app or SMS), then attends a 30-minute **portal walkthrough** webinar.	On first login

Note: Access tokens expire after 4 hours. IVA may refresh via the portal's "Request New Token" feature without re-registering, provided the original account remains active.

B. Scope of Auditor-Pane Access

Upon login, IVAs see:

1. **Unredacted Document Library**

    o Concession agreements, full business-case appendices, raw financial models, DMS audit logs.

    o **Watermarked PDFs** (e.g., "For IVA_JSmith only – 2025-08-10T14:22Z").

2. **Raw Data Feeds**

    o **CSV** exports of KPI Scorecards, FCCL registers, Variation Registers.

    o **JSON** event logs for manifest and publication history.

3. **Audit-Dashboard**

    o **Overview tab:** Visual summary of all disclosure events for a given project: counts, timeliness metrics, redaction status.

    o **Evidence Pack builder:** One-click bundle creation (ZIP) containing all manifests, files, audit logs and redaction records for a specified gate or date range.

4. **Query & Annotation Tools**

    o Inline comment feature on PDFs and CSV previews; annotations saved to the DMS and visible to Agency staff.

    o Exportable comment logs to feed gap-analysis reports.

C. Audit-Dashboard Features

Dashboard Component	Function
Project Selector	Dropdown to choose project(s) by ID, name or sector.
Timeline View	Interactive Gantt showing each disclosure event (RFQ, contract, KPI report) with status color (Green/Amber/Red). Clicking an event opens its manifest and download links.
Timeliness Metrics	Percentage of disclosures on-time per gate and per dataset category; historical trend since 2025.
Redaction Compliance	Ratio of files passing automated redaction checks on first upload vs. those requiring remediation.
Audit Log Explorer	Filterable table of all portal events—uploads, edits, redactions, SLA breaches—with JSON export option.

All dashboard data refreshes every 15 minutes via API calls to the portal's backend. IVA sessions persist across refreshes, and any filters or annotations remain active until manually cleared.

D. Security & Data Integrity

- **Session Management:** Idle sessions auto-expire after 30 minutes; unsaved annotations are preserved locally for re-authentication.

- **Immutable Ledger:** Underlying audit logs reside in AWS QLDB; any tampering with portal records triggers an alert and lockdown of affected project feeds.

- **Access Revocation:** If an IVA's account is disabled (e.g., contract end, credential expiry), all active tokens and sessions are invalidated immediately.

E. Reporting & Feedback

- **Periodic Health Check:** IVA can download a **"Portal Health Report"** summarizing API uptime, average response times, and recent error rates.

- **Issue Reporting:** A **"Report a Portal Issue"** button in the Auditor-Pane tickets the IT team directly, with logs of the user's session context.

- **User Satisfaction Survey:** Quarterly pop-up invites feedback on usability, data completeness, and additional feature requests—feeding into the continuous-improvement backlog (Section 8.3).

F. Best Practices for IVAs

1. **Prepare Evidence Requests** using the Evidence Pack builder to avoid ad hoc downloads.

2. **Leverage Annotations** to document any discrepancies or clarifications needed, streamlining remediation.

3. **Monitor Timeliness Metrics** to flag systemic delays early, enabling proactive engagement with OYSIPA.

4. **Share Health Reports** with Agency counterparts to improve platform stability and performance.

By providing IVAs with a **dedicated, secure, and self-service environment**, complete with an intuitive Audit-Dashboard and powerful bundle-building tools, Oyo State ensures that every disclosure is **verifiable on demand**—fulfilling donor requirements, satisfying SABER evidence pillars, and reinforcing the credibility of its entire PPP program.

7.2 Immutable Audit Logs, JSON Event Exports & Reproducible Verification Workflows

A cornerstone of independent verification is the ability to **reconstruct exactly what happened, when, and by whom**. Section 7.2 describes how every portal and DMS event—publishes, redactions, metadata changes, SLA alerts—is captured in an **immutable audit ledger**, exposed via JSON, and assembled into **reproducible verification workflows**.

A. Audit Ledger Architecture

1. **Storage Technology**

   o **AWS QLDB** (Quantum Ledger Database) underpins the audit ledger, providing cryptographic chaining and history-tracking out of the box.

2. **Event Types Captured**

   o **Publication Events**: File uploads, manifest ingestion, webhook triggers.

   o **Redaction Actions**: Automated and manual sign-offs, error corrections.

   o **Metadata Changes**: Manifest edits, version-hash updates.

   o **SLA Alerts & Remediation**: Timestamps for amber/red alerts, remediation notices.

   o **User Actions**: Login, download, annotation submissions (Auditor Pane).

B. JSON Event Export Schema

Every event is exposed via a JSON API following this schema:

```
{
  "event_id": "uuid-v4",
  "timestamp": "2025-08-10T14:22:05Z",
  "project_id": "2025-014",
  "document_type": "kpi_scorecard",
  "event_type":
"publication|redaction|metadata_update|sla_alert|remediation",
```

```
"source": "DMS|Portal",

"details": {

  "user_id": "jdoe",

  "version_hash_before": "abc123...",

  "version_hash_after": "def456...",

  "redacted_fields": ["financial_model_tab"],

  "sla_status": "amber|red",

  "error_code": null

  }

}
```

- **event_id**: Globally unique ID

- **timestamp**: RFC3339 UTC

- **event_type**: Predefined set

- **details**: Contains context (user, hashes, redaction arrays, SLA status, error codes)

Exports support **pagination**, **time-range filtering**, and **event_type** filtering.

C. Reproducible Verification Workflows

1. **Evidence Pack Builder (Auditor Pane)**

   o Select a **gate or date range**, then pull:

      ▪ All manifests

      ▪ Matching event exports

      ▪ Redacted and unredacted file URLs

   o Generates a **ZIP bundle** with a folder structure that mirrors QLDB's event sequence, ensuring audit steps can be replayed.

2. **Automated Verification Scripts**

   o A reference **Python script** (provided in the Framework Annex) ingests the event JSON, recalculates each file's SHA-256, and verifies:

      ▪ No tampering (hash mismatches)

      ▪ SLA adherence (timestamps vs schedule)

      ▪ Correct redaction (fields in details.redacted_fields align with PDF tags)

3. **Audit Trail Reports**

- o **Chronological reports** list every event, associated user, and outcome.

- o **Gap analysis** scripts compare expected events (per Disclosure Regulation timelines) against actual events to flag missed or late publications.

D. API Endpoints for Audit Logs

Endpoint	Method	Auth	Description
GET /api/audit/events	GET	Auditor Token	Returns all events; supports start, end, type query params
GET /api/audit/events/{event_id}	GET	Auditor Token	Returns full JSON for a single event
GET /api/audit/events/summary	GET	Auditor Token	Aggregated counts by event_type, per project

E. Tamper-Evidence & Integrity Checks

- **Cryptographic Chaining**
  Each QLDB journal block references the previous block's hash, making any modification immediately detectable.

- **Periodic Integrity Audits**

  - o A **"blockchain proof"** report is generated monthly, publishing the latest block hash on the portal for external verification.

  - o Discrepancies trigger an **immutable alert** to the IT Security and Disclosure leads.

F. Integrating with SABER & DFI Verification

- **SABER Pillar (e)** requires "operational proof" that disclosures occurred as claimed. The **event exports** satisfy this by providing timestamped evidence of every publication and redaction.

- **DFI Covenants** often stipulate audit rights; the **Audit API** and **ZIP bundles** remove manual document requests, streamlining lender compliance checks.

*"Immutable audit logs transform the portal from a publication tool into a full-fledged **forensic engine**—where every disclosure can be traced, validated, and defended, ensuring that Oyo's PPP transparency stands up to the most rigorous scrutiny."*

7.3 Mock Audit Protocol, Gap-Analysis Report & Remediation Roadmap

To maintain continuous assurance and surface process weaknesses before formal audits, Oyo State conducts **mock audits**—simulated IVA reviews that mirror real verification. Section 7.3 defines the **protocol**, outlines the **gap-analysis methodology**, and prescribes a **remediation roadmap** so findings drive rapid improvement rather than lingering risks.

A. Mock Audit Scope & Frequency

Element	Details
Frequency	Bi-annual (Months 6 and 18 of each rollout cycle)
Scope	End-to-end disclosure lifecycle across 3–5 live projects, plus system-level controls (DMS, portal, APIs)
Audit Team	Cross-cluster "Audit Squad" comprising: • 1 Senior IVA• 1 Legal Adviser• 1 IT Security Representative
Mandate	Validate compliance with Regulations (§2.2), RACI workflows (§3.4), redaction rules (§4.3), and API event logging (§7.2)

Preparation:

- Project teams nominate 3–5 active PPPs covering varied sectors (e.g., transport, water, power).

- Data owners collate **Evidence Packages** (manifests, files, logs) via the Audit-Dashboard "Pack Builder."

Kick-off Workshop:

- Audit Squad reviews objectives, checklist, and timeline; clarifies any methodology questions.

B. Audit Checklist & Evaluation Criteria

Area	Checkpoints
Policy & Regulation	— Regulations published and versioned (§2.2)— Transition protocol executed (§2.3)
Dataset Completeness	— All datasets per Section 3.1 present— Formats conform to schema (§3.3)
Timeliness	— Publication timestamps vs. schedule (§3.2)— SLA adherence for grievances (§5.2)
Redaction Quality	— RedactBot logs match manifests (§4.3)— Human QA sign-off present
RACI & Workflows	— DMS task logs show drafting, review, sign-off— No orphan tasks
API & Logs Integrity	— Audit-log exports complete (§7.2)— Cryptographic chain intact
Stakeholder Engagement	— Consultation windows held (§5.1)— Responses and memos published

Each checkpoint is rated: **Green** (compliant), **Amber** (minor issue), **Red** (critical gap).

C. Gap-Analysis Methodology

1. **Data Collection:**

   o Export full event logs (JSON) and manifests for selected projects.

   o Retrieve redacted and unredacted files from Auditor-Pane.

2. **Automated Validation:**

   o Run **Reference Scripts** (Python) to verify:

      ▪ Schema conformance of CSV/JSON.

      ▪ SHA-256 hash validations.

      ▪ Timestamp comparisons against expected SLAs.

3. **Manual Review:**

   o Legal Adviser spot-checks redactions, Board Secretary verifies minute extracts, IT reviews portal configurations.

4. **Issue Classification:**

   o **Process gaps:** Missing DMS tasks, delayed webhooks, incorrect SLAs.

   o **System gaps:** API errors, missing audit-log entries, broken bookmarks.

   o **Policy gaps:** Unpublished regulations, outdated templates.

5. **Severity & Impact Assessment:**

   o Map each gap to risk categories (reputational, financial, legal) and quantify potential exposures (e.g., delayed tranche release, DFI covenant breaches).

D. Remediation Roadmap & Tracking

Phase	Action Item	Owner	Deadline	Status
Immediate	Fix critical system errors (API failures)	IT Security	+2 weeks	⏳ In progress
Short-Term	Update redaction templates & retrain staff	Legal Adviser & HR	+1 month	⏳ Pending
Medium-Term	Refine DMS workflows to eliminate orphan tasks	DMS Admin & Cluster Leads	+3 months	⏳ Pending
Long-Term	Gazettal of minor Regulation amendments	Board & Legal Adviser	+6 months	⏳ Pending

- **Tracking Dashboard:** Live "Remediation Tracker" in the portal showing issue status, owner, and next-step milestones.

- **Progress Reporting:** Audit Squad delivers a **Gap-Analysis Report** to the Board within 4 weeks of mock-audit completion, with quarterly status updates until closure.

E. Integration with Continuous Improvement

- **Feedback Loop:** Remediation outcomes feed the **KPI backlog** (Section 7.3) and inform the **Version-Control Protocol** (Section 8.3).

- **Annual Review:** Mock-audit findings are synthesized into the **Annual Board Compliance Review** (Section 7.1) and shape next year's training modules (Section 8.2).

- **Stakeholder Transparency:** Summarized gap-analysis highlights and remediation progress are published in the **Public Incident Log**, demonstrating a commitment to learning and accountability.

By institutionalizing a rigorous **mock-audit cycle**, complete with automated checks, manual spot-reviews, and a clear remediation roadmap, Oyo State ensures its Disclosure Framework is not just compliant on paper but **resilient in practice**—ready to withstand the most exacting independent verifications.

Section 8: Integration with FCCL & PPP Process

8.0 Introduction — linking disclosure to fiscal-risk controls and the PPP life-cycle

Disclosure doesn't exist in a vacuum; it must be **seamlessly woven** into the mechanisms that track and cap the State's contingent liabilities. Section 8 demonstrates how every publication event—from concession seals to quarterly KPI reports—triggers updates in the **FCCL Register**, feeds into the **PPP Gate** processes, and powers real-time fiscal-risk alerts. This integration ensures that transparency drives **financial discipline**, not just public visibility.

Key integration points:

1. **Gate-Driven Handshakes**
   Each PPP Gate (G-0 through G-4) in the **Disclosure Portal** is paired with a corresponding update in the **FCCL Excel Register**: whether capturing ROM capex at G-0, flagging CP exposures at G-3, or syncing contingent-liability tails post-stress-test.

2. **API-Powered Synchronization**
   Webhooks fire on every approved manifest upload, pushing JSON payloads to the FCCL service. This ensures **zero lag** between what's published and what's counted in the State's liability dashboard.

3. **Real-Time Risk Flags**
   The **KPI Dashboard** (Section 7.3) and **FCCL Register** share a common data spine. Any variance— such as a new variation entry or stress-test breach—immediately flips a traffic-light indicator and alerts the **Finance & Risk Cluster** and the **DG's office**.

4. **Audit-Ready Reconciliation**
   Every cross-system transaction is captured in the immutable audit logs (Section 7.2), enabling independent verification that the same disclosure event appears identically in both the **public portal** and the **State's fiscal-risk ledger**.

What's ahead in Section 8

- **8.1** will map the precise disclosure triggers at each PPP Gate and show how they update the FCCL Register.

- **8.2** will detail the **bi-directional data handshake**—API specifications, payload schemas, and error-handling for seamless sync.

- **8.3** will explain how **real-time fiscal-risk flags** feed alert dashboards, SLA protocols, and Board reporting calendars.

By binding disclosure and fiscal-risk management into a single, automated workflow, Oyo State ensures that **transparency isn't just seen—it's sized, quantified, and managed**.

8.1 Disclosure Triggers at Each PPP Gateway & FCCL Register Updates

Integrating disclosure with fiscal-risk controls ensures that every published event immediately recalibrates Oyo State's liability profile. Section 8.1 maps each PPP Gate to its corresponding **FCCL Register update**, defining the **trigger event**, **payload**, and **responsible systems** for real-time synchronization.

A. Gate-to-Register Trigger Matrix

PPP Gate	Disclosure Event	FCCL Register Payload	Trigger Mechanism
G-0	Concept Note published (ROM capex entry)	{ "project_id", "estimated_capex" }	Portal webhook → POST /fccl/estimates
G-1	FCCL Memo published (EV-CL & prob.)	{ "project_id", "ev_cl", "probability" }	Portal webhook → PUT /fccl/projects/{id}
G-2	Preferred Bidder announcement (no liability change)	N/A (for informational purposes)	Portal logs event; no register change
G-3	Concession Agreement sealed (final capex confirmation)	{ "project_id", "final_capex" }	Portal webhook → POST /fccl/final_capex
G-3	Conditions Precedent status (certificate of risk)	{ "project_id", "cp_risk_exposure" }	Portal webhook → PATCH /fccl/cp_status
G-4	Quarterly KPI Scorecard (performance-linked risk)	{ "project_id", "performance_metric", "status" }	Portal webhook → POST /fccl/performance

B. Payload Schema Examples

1. **Initial Estimate (G-0)**

```
{
  "project_id": "2025-014",
  "estimated_capex_ngn": 15000000000
}
```

2. **EV-CL & Probability Update (G-1)**

```
{
  "project_id": "2025-014",
  "ev_cl_ngn": 4500000000,
  "probability_percent": 0.65
}
```

3. **Final Capex Confirmation (G-3)**

```
{
  "project_id": "2025-014",
  "final_capex_ngn": 14500000000
}
```

4. **Conditions Precedent Risk (G-3)**

```
{
  "project_id": "2025-014",
  "cp_risk_exposure_ngn": 2000000000
}
```

5. **Performance-Linked Risk (G-4)**

```
{
  "project_id": "2025-014",
  "performance_metric": "availability",
  "status": "RED"
}
```

C. Trigger Mechanism & Error Handling

1. **Webhook Delivery**

   o On each approved disclosure publish, the **Portal CMS** fires a **secure webhook** carrying the JSON payload to the **FCCL API** endpoint.

   o Webhooks include an **HMAC signature** (using the portal's secret) to authenticate requests.

2. **Idempotency & Error Retries**

   o Each payload includes a unique **event_id** to ensure idempotent updates—duplicate webhook deliveries do not create multiple entries.

   o In case of delivery failure (non-200 response), the portal retries up to **5 times** with **exponential backoff**, then logs the failure as a **"Sync Error"** with a timestamped ticket in the portal's error dashboard.

3. **Data Validation**

   o The FCCL API validates fields (e.g., numeric ranges, mandatory keys).

   o Invalid payloads trigger **400 Bad Request** responses with detailed error codes; the portal surfaces these in an **administrative alert** for manual correction.

D. Real-Time Dashboard Integration

- **Shared Data Spine:**
  Both the **KPI Dashboard** and the **FCCL Register UI** pull from the same PostgreSQL backend fed by the FCCL API, ensuring consistency between performance metrics and liability figures.

- **Traffic-Light Risk Flags:**

  o EV-CL-to-Capex ratios > 25% trigger "Amber" or "Red" flags automatically in the **Finance & Risk dashboard**.

  o Performance "Red" statuses push automatic alerts to the DG's notification feed.

- **Audit Trail:**
  Every API interaction is logged in the **immutable audit ledger**—creating a verifiable timeline of when liability entries were added or updated.

E. Governance & Roles

Role	Responsibility
Portal Admin	Maintains webhook secrets, monitors sync logs
FCCL API Team	Ensures endpoint uptime and data integrity
Finance & Risk Lead	Reviews and approves risk thresholds
DG Office	Monitors overall sync health via portal UI

F. Take-Away

"By wiring disclosure events directly into the FCCL Register via secure API handshakes, Oyo State eliminates manual entry errors, ensures up-to-the-minute liability tracking, and embeds transparency at the heart of fiscal-risk management."

8.2 Bi-Directional Data Handshake — API Calls, Payload Schemas & Error-Handling for Portal ↔ FCCL Sync

Seamless, reliable exchange between the Disclosure Portal and the FCCL Register is essential to maintain **up-to-the-second fiscal-risk visibility**. Section 8.2 specifies the **API contract**, **payload schemas**, **security provisions**, and **error-handling protocols** that underpin this bi-directional data handshake.

A. Integration Architecture

- **Portal CMS**

  o Acts as the **event source**, firing secure webhooks on every approved disclosure publish or update.

- **FCCL Microservice**

  o A dedicated REST API that ingests disclosure events, updates the Excel-backed liability register, and returns acknowledgment.

- **Data Spine**

  o A shared **PostgreSQL** database holds both disclosure metadata and FCCL entries; ensures atomic transactions for consistency.

B. API Endpoints & Methods

Endpoint	Method	Description
POST /fccl/estimates	POST	Ingests initial ROM capex estimates (G-0).
PUT /fccl/projects/{project_id}	PUT	Updates EV-CL & probability percentages (G-1).
POST /fccl/final_capex	POST	Records final capex values post-seal (G-3).
PATCH /fccl/cp_status	PATCH	Updates Conditions Precedent risk exposure (G-3).
POST /fccl/performance	POST	Appends quarterly performance flags (G-4).
GET /fccl/projects/{project_id}	GET	Retrieves current FCCL entry and status.
GET /fccl/events/{event_id}/status	GET	Returns ingestion status of a specific event.

Key characteristics:

- **Idempotency:** All POST/PUT/PATCH operations require a unique event_id in the payload to prevent duplicate entries.

- **Synchronous Acknowledgment:** Successful requests return 200 OK with { "received": true, "processed_at": "<timestamp>" }.

- **Audit Status:** Clients can poll the status endpoint to verify ingestion and transformation.

C. Payload Schemas

1. **Initial Estimate (G-0)**

    {

      "event_id": "uuid-v4",

      "project_id": "2025-014",

      "estimated_capex_ngn": 15000000000,

      "publish_date": "2025-08-01T12:00:00Z"

    }

2. **Exposure Update (G-1)**

    {

      "event_id": "uuid-v4",

      "project_id": "2025-014",

      "ev_cl_ngn": 4500000000,

      "probability_percent": 0.65,

      "publish_date": "2025-08-15T09:30:00Z"

```
    }
```

3. **Final Capex & CP (G-3)**

```
{
    "event_id": "uuid-v4",
    "project_id": "2025-014",
    "final_capex_ngn": 14500000000,
    "cp_risk_exposure_ngn": 2000000000,
    "publish_date": "2025-09-01T14:45:00Z"
}
```

4. **Performance Flag (G-4)**

```
{
    "event_id": "uuid-v4",
    "project_id": "2025-014",
    "performance_metric": "availability",
    "status": "RED",
    "period_end": "2025-09-30",
    "publish_date": "2025-10-07T08:00:00Z"
}
```

Validation rules:

- event_id, project_id, publish_date are **mandatory**.
- Numeric fields must be **non-negative integers**.
- probability_percent and status fields adhere to predefined enumerations.

D. Security & Authentication

1. **Transport Security:**
   - **TLS 1.3** mandatory for all API calls; only **strong cipher suites** allowed.

2. **HMAC Verification:**
   - Each webhook includes an X-Hub-Signature header: HMAC-SHA256 of the payload using the portal's shared secret. FCCL service rejects mismatches (HTTP 401).

3. **API Keys & Tokens:**

   o Portal uses a **rotating API key** in Authorization: Bearer <token> header; keys rotate every 90 days.

4. **IP Whitelisting:**

   o FCCL API only accepts traffic from the portal's fixed IP ranges; requests from other sources are blocked at the firewall.

E. Error-Handling & Retries

Scenario	Behavior
Schema validation error	FCCL API returns 400 Bad Request with detailed field errors; portal logs error and spikes a remediation ticket.
Authentication failure	Returns 401 Unauthorized; portal stops retries and alerts Portal Admin.
Server error (5xx)	Portal retries up to **5 times** with **exponential backoff** (intervals: 30s, 1m, 2m, 4m, 8m). Persistent failures generate an **Alert** to IT and pause workflow until manual clearance.
Duplicate event (idempotency)	Returns 200 OK with { "duplicate": true }; portal logs and does not reprocess.

- **Monitoring:**

   o **API Gateway metrics** track success/failure rates, latency percentiles, and error codes.

   o **Alerting rules** trigger Slack/pagerduty notifications on > 2% error rate or any "duplicate" spikes.

F. Governance & Operational Roles

Role	Responsibility
Portal Admin	Manages webhook secrets, monitors outbound queues, fixes misconfigurations.
FCCL API Team	Maintains API uptime, implements schema changes, publishes API docs.
Finance & Risk Lead	Validates payload data consistency and threshold logic.
DG's Office	Oversees SLA adherence for sync success and troubleshooting.

"A robust API handshake, underpinned by strong security, idempotency and clear error protocols, is the glue that binds transparency to fiscal stewardship—ensuring that every public disclosure immediately and accurately recalibrates Oyo State's liability ledger."

8.3 Real-Time Fiscal-Risk Flags — driving alerts, escalations & board reporting

By linking disclosure events to the FCCL Register and KPI Dashboard, Oyo State triggers **instant fiscal-risk flags** that surface emerging exposures and performance deviations—enabling proactive governance and board-level oversight. Section 8.3 defines the **flagging logic**, **alert channels**, and **escalation protocols**, and shows how these feed into **Board reporting** and **Governor directives**.

A. Flagging Logic & Thresholds

Flag Level	Condition	Trigger Source
Green	EV-CL ≤ 20 % of approved capex; KPI status = "GREEN"; no new variations > 5 % of capex	FCCL API; KPI Webhook
Amber	EV-CL > 20 % but ≤ 25 %; KPI "AMBER"; variation cost > 5 % but ≤ 10 %	FCCL API; KPI Webhook; Variation API
Red	EV-CL > 25 % of capex; KPI "RED"; cumulative variation cost > 10 %; any SLA breach	FCCL API; KPI Webhook; SLA Logs

- **EV-CL Ratio** – Calculated by the FCCL service on each capex update; automatically compared to thresholds configured per Regulation.

- **Performance KPIs** – Dashboard webhook fires on every scorecard upload, evaluating against contract thresholds.

- **Variation Impact** – Variation Register API tracks cumulative cost and duration impacts.

B. Alert Channels & Recipients

1. **Automated Notifications**

   - **Slack**: Cluster-specific channels receive real-time pings on "Amber" and "Red" flags, with project links and summary details.

   - **SMS & Email**: "Red" flags also SMS the DG's office and Finance & Risk Lead.

2. **Dashboard Indicators**

   - **Project Tiles** on the KPI Dashboard turn color-coded (🟢 🟡 🔴) instantly.

   - **Executive Summary View** highlights any projects in "Amber" or "Red" status at the top.

3. **Mobile App Push**

   - A lightweight mobile companion app for Board members sends push alerts for "Red" flags with one-click drill-down.

C. Escalation Protocol

Delay/Duration	Action
T+0	"Green" → no action
Flag Occurrence	**Amber** → Automated email to Cluster Lead; SLA for acknowledgement = 1 business day
After 2 days	**Amber** still open → Auto-escalate to DG; banner on public portal signals "Risk Under Review"
Flag Occurrence	**Red** → Immediate Slack/SMS/Email to DG, Board Secretary, Governor's Office
After 1 day	**Red** unaddressed → Agenda item for Emergency Board Meeting; automatic "Governor's Directive" memo

- All escalations are **logged** in the audit ledger and published in the "Risk Events" feed on the portal.

D. Board Reporting & Governance Integration

1. **Monthly Board Pack**

   - Automated inclusion of a **"Risk Heat-Map"** slide showing count and severity of active flags across projects.

   - **Trend charts** for EV-CL ratios and KPI statuses over the past 12 months.

2. **Quarterly Compliance Review**

   - Section 7.1's Board Compliance meeting includes a **deep-dive** on any sustained "Amber/Red" flags, with root-cause analyses and remediation plans.

3. **Governor's Dashboard**

   - A **custom view** surfaces at the SSG's office: high-level risk tiles and direct links to underlying evidence, ensuring executive oversight.

E. Continuous Improvement & Calibration

- **Threshold Tuning**

   - Annual review (Section 8.3) of flag thresholds to align with evolving project risk profiles and macro-fiscal conditions.

- **Feedback Loop**

   - Post-escalation debriefs capture lessons learned in the **KPI backlog**, driving updates to thresholds, workflow SLAs, and template guidance.

"Real-time fiscal-risk flags turn disclosures into a living early-warning system—empowering clusters, executives, and the Board to catch emerging issues before they become crises."

Section 9: Risk Management & Redaction Protocols

9.0 Introduction — Balancing transparency with commercial sensitivity

Full transparency is a powerful tool—but unfettered data release can inadvertently expose commercially sensitive details, jeopardize competitive bidding, or violate confidentiality agreements. Section 9 establishes the **guardrails** that let Oyo State be "open by default" while protecting legitimately proprietary information. This involves:

1. **Defining Sensitivity Criteria**
   A clear taxonomy of what constitutes "commercially sensitive" data—ranging from financial model line items and lender identities to early-stage technical designs and IP-protected processes. Section 9.1 will spell out the categories, thresholds, and decision-rules that determine whether a field must be redacted.

2. **Automated Redaction Bots**
   Leveraging RedactBot's pattern-matching and template tags (Section 4.3), the portal can strip sensitive content programmatically, ensuring consistency and speed. Section 9.2 will detail the bot's capabilities, its integration points, and handling of edge cases.

3. **Human Oversight & Appeals**
   Automated redaction is augmented by a Legal Adviser sign-off, but stakeholders must also have recourse. Section 9.3 will outline a **Redaction Appeal Process**, enabling bidders or investors to request review of contested redactions within specified SLAs.

4. **Metadata Transparency**
   Even when details are redacted, manifests will list which fields were withheld and why, preserving an **audit-ready record** of the redaction decision without revealing the underlying data.

5. **Governance & Continuous Calibration**
   Redaction rules can evolve. Section 9.4 will cover how usage data, stakeholder feedback, and mock-audit findings feed into regular updates of sensitivity criteria—keeping the balance between openness and confidentiality finely tuned.

By codifying a structured, automated-plus-human redaction regime—backed by clear appeals pathways and transparent metadata—Oyo State ensures that its Disclosure Framework remains both **maximally informative** and **commercially responsible**.

9.1 Defining "Commercially Sensitive" Data: Taxonomy & Decision Rules

To protect genuinely proprietary information while maximising public value, Oyo State's Disclosure Framework adopts a clear **taxonomy** of commercially sensitive data paired with **decision rules** that trigger redaction. This ensures that only narrowly defined fields are withheld—everything else is published "open by default."

A. Sensitivity Taxonomy

1. **Financial Model Line Items**

   o **Detailed Cash Flow Projections**: Year-by-year revenue, O&M cost breakdowns, debt-service schedules.

   o **Discount Rates & Assumptions**: Internal cost of capital, WACC components, inflation forecasts.

   o **Tranche-specific Lender Terms**: Margins, covenants, grace periods per financing tranche.

2. **Counterparty & Beneficial Ownership**

   o **Lender & Sponsor Identities**: Names of commercial banks, export-credit agencies, private equity sponsors, beyond the "sponsor entity" level.

   o **Equity Holders**: Ultimate beneficial owners, shareholding percentages when not required under EITI-level disclosure (unless part of BO register).

3. **Commercially Negotiated Clauses**

   o **Tariff/Price Adjustment Formulas**: Exact indexation formulas, floor/ceiling spreads.

   o **Step-In Rights & Exit Fees**: Detailed mechanics, percentages, and timing triggers.

   o **Liquidated Damages Schedules**: Per-event fee tables and calculation basis.

4. **Technical & IP-Protected Designs**

   o **Detailed Engineering Drawings**: System layouts, proprietary design specifications.

   o **Software Algorithms & Control Logic**: SCADA control code, IP-protected processing flows.

5. **Personal & Security Data**

   o **Personnel Records**: Individual performance or salary data of project staff.

   o **Security Protocols**: Emergency response plans, site-security measures, access control lists.

B. Decision Rules & Redaction Triggers

1. **Template Tagging**

   o Fields deemed sensitive are wrapped in commercial_sensitive tags within Word/PDF templates.

   o The tag name indicates the sensitivity category (e.g., financial_model, lender_names, design_drawings).

2. **Threshold-Based Redaction**

   o **Financial Amounts:** Any line-item projecting capex or opex beyond **NGN 500 million** per year is tagged for redaction.

   o **Ownership Shares:** Beneficial ownership data is redacted unless aggregate foreign equity is ≤ 10% and no individual shareholder holds > 5%.

3. **Contextual Sensitivity**

   o **Early-Stage Documents:** Concept notes and screening memos redact detailed cost assumptions, but allow high-level cost ranges.

   o **Operational Reports:** KPI scorecards redact exact flow-meter timestamps or geolocations if deemed security-sensitive, replaced with aggregate statistics.

4. **Contractual Carve-Outs**

   o If a confidentiality clause exists in a Concession Agreement, only the fields *required* by law (§ 15 Regulation) are published; all other contractual annexes remain in the Auditor-Pane.

C. Redaction Workflow Integration

1. **Automated Identification**

   o **RedactBot** scans PDFs for template tags and data patterns (e.g., numbers matching cash-flow cells) to apply initial masking.

2. **Human Vetting**

   o Legal Adviser reviews masked output against the **"Sensitivity Decision Matrix"** (see Guidelines Annex B), confirming each redaction.

3. **Metadata Recording**

   o The manifest's redacted_fields array lists the tag IDs and page numbers for every redaction, ensuring transparency about *what* was withheld and *why*.

D. Exceptions & Appeals

1. **Transparency Overrides**

   o If redaction would undermine SABER evidence (e.g., hiding capex magnitude entirely), the framework defaults to **aggregated disclosure** (e.g., publishing ranges or summary tables).

2. **Redaction Appeals**

   o Bidders, sponsors or IVAs may challenge redactions via the **Redaction Appeal Process** (Section 9.3), submitting a **"Redaction Appeal Form"** within 7 days of publication.

   o A **Tri-Party Review Panel** (Legal Adviser, DG delegate, independent observer) rules on appeals within 10 days, with decisions and rationales published alongside the dataset.

E. Continuous Calibration

- **Usage Metrics**: Monitor frequency of each sensitivity tag to identify over- or under-application.

- **Stakeholder Feedback**: Solicited via the portal's feedback form on redactions; aggregated annually.

- **Mock-Audit Insights**: Redaction errors and appeals feed into the **Annual Sensitivity Review** (Section 8.3), adjusting taxonomy or thresholds as needed.

"By codifying a clear sensitivity taxonomy and embedding decision rules into both automated and human workflows, Oyo State ensures its disclosures remain as open as possible, as closed as necessary—striking the optimal balance between transparency and commercial confidentiality."

9.2 Automated Redaction Bots — capabilities, integration & edge-case handling

To enforce sensitivity rules at scale and speed, Oyo State's Disclosure Portal employs **RedactBot**, an automated redaction engine that pre-processes documents before human QA. Section 9.2 describes RedactBot's architecture, integration points, pattern-recognition methods, and protocols for handling edge cases.

A. RedactBot Architecture & Workflow

1. **Plugin in DMS Conversion Pipeline**

   o Integrated as a **microservice** in the DMS ingestion flow: after PDF/A conversion and OCR layering, RedactBot is invoked to scan and mask sensitive fields.

2. **Pattern Recognition Modules**

   o **Template Tag Scanner**: Reads hidden XML tags (e.g., <span class="commercial_sensitive">) inserted during template creation.

   o **Regex-Based Detector**: Identifies numeric patterns (e.g., NGN currency formats, large decimals) and key phrases (e.g., "Project Finance Agreement," "Step-In Notice") flagged as sensitive.

   o **ML-Assisted Classifier**: Uses a lightweight trained model to flag non-tagged but contextually sensitive passages—particularly in narrative sections such as "Financial Assumptions" or "Lender Covenants."

3. **Masking & Placeholder Insertion**

   o **Black-Box Redaction**: Completely hides content under opaque black rectangles in the PDF.

   o **Placeholder Text**: Inserts [REDACTED] in the OCR layer and updates the "Redaction Log" with coordinates, page numbers, and tag IDs.

4. **Parallel Archival**

   o Simultaneously stores the **original** unredacted PDF to the Auditor-Pane repository, ensuring full records remain accessible under credential controls.

B. Integration Points & Automation Triggers

- **Upload Event**: When a user publishes a document via the portal, the DMS conversion service automatically calls RedactBot with the submitted PDF and associated manifest.

- **Scheduled Re-Scans**: Periodic batch jobs re-run RedactBot on legacy documents to ensure ongoing compliance as taxonomy or thresholds evolve (e.g., after the Annual Sensitivity Review).

C. Edge-Case Handling & Human Escalation

1. **Unrecognized Tags or Patterns**

   o **Auto-Fail**: If RedactBot detects mismatches between tagged fields and regex matches (e.g., a number that looks like a capex but lacks a tag), it flags the document as status: "error_unrecognized_pattern".

   o **Ticket Creation**: A Quality Ticket is opened in the DMS, assigned to the Legal Adviser for review and manual tag insertion or pattern refinement.

2. **Over-Redaction Detection**

   o **Contextual Loss Check**: RedactBot runs a diff between the redacted and original OCR layers; if more than **20%** of text is removed from a page, it marks status: "error_over_redaction".

   o **Legal Adviser Review**: The Legal Adviser examines the diff report to restore non-sensitive text, adjusting tags or excluding sections from automated masking.

3. **ML Classifier False Positives/Negatives**

   o **Feedback Loop**: Every flagged and corrected event feeds back into the ML training set—annotating correct redactions vs. mistakes—so the classifier improves over time.

   o **Threshold Tuning**: Confidence thresholds for ML flags are adjusted quarterly to balance precision and recall.

D. Monitoring & Metrics

Metric	Target
% documents successfully redacted automatically	≥ 95%
ML classifier precision	≥ 90%
ML classifier recall	≥ 85%
Average time per redaction	≤ 5 seconds/document

Real-time dashboards track these metrics, triggering alerts if RedactBot's efficacy drops below set thresholds—prompting immediate human intervention.

E. Change Management & Versioning

- **Bot Versioning**: RedactBot's code and pattern/rule sets follow semantic versioning (major.minor.patch), published in the portal's **Bot-Info** API (GET /api/info/redactbot).

- **Rule Updates**: New regex patterns or template tag definitions are deployed as **minor releases**, with release notes logged in the DMS.

- **Rollback Protocol**: In case of widespread failures, operators can roll back to a previous RedactBot version via a single-click admin control.

"Automated redaction via RedactBot dramatically reduces manual effort and speeds publication, while built-in QA checks and escalation pathways ensure that no sensitive detail slips through or swathes of text are hidden by mistake—striking the critical balance between efficiency and accuracy."

Section 10: Implementation Road-map & Capacity Building

10.0 Introduction — from blueprint to reality: rolling out and sustaining disclosure

A world-class PPP disclosure regime demands not just a robust design but a **well-orchestrated launch** and ongoing **capacity-building** to embed practices into everyday workflows. Section 10 outlines the **12-month phased roll-out**, the **training and LMS modules** that equip staff and stakeholders, and the **continuous-improvement protocol** to keep disclosure assets current and effective.

Key pillars of the implementation plan:

1. **Phased Roll-Out**

   o **Phase 1 (Months 0–3):** Core portal and DMS configurations; publish framework and regulations; initial API integrations.

   o **Phase 2 (Months 4–6):** Pilot disclosures across two flagship PPPs; train early adopters; validate end-to-end workflows.

   o **Phase 3 (Months 7–9):** Scale to all live PPPs; refine automated pipelines; launch stakeholder engagement channels.

   o **Phase 4 (Months 10–12):** Full production; conduct mock audits; embed into civil-service SOPs; hand over to permanent teams.

2. **Training & LMS Modules**

   o **Role-Based Curricula:** Custom tracks for data owners, portal admins, Legal Advisers, and IVA users.

   o **Micro-Learning:** Bite-sized video modules on key tasks—manifest creation, API diagnostics, RedactBot oversight.

   o **Certification & Badges:** Formal accreditation integrated with civil-service performance reviews.

3. **Continuous-Improvement Protocol**

   o **Version-Control & Changelogs:** Every template, regulation, and API schema follows semantic versioning with public release notes.

   o **Feedback Loops:** Quarterly review of portal analytics, grievance logs, and mock-audit findings to drive iterative updates.

   o **Governance Forums:** Biannual Disclosure Steering Committee meetings to approve major enhancements and resolve systemic issues.

By structuring implementation into clear phases, aligning training to real tasks, and institutionalising a relentless cycle of review and update, Oyo State will ensure its PPP Disclosure Framework transcends a one-off project to become a **sustainable, evolving asset**—delivering transparency, accountability, and investor confidence for years to come.

10.1 12-Month Phased Roll-Out Plan — milestones, owners & dependencies

A structured, four-phase roll-out over 12 months transforms the Framework from design into live operations. Each phase has clear deliverables, owners, and dependencies—ensuring no step is skipped and every stakeholder knows their role.

A. High-Level Phase Breakdown

Phase	Months	Focus	Key Deliverables
Phase 1	0–3	Core enablement & regulatory launch	Framework & Regulations gazetted; DMS & Portal MVP live; API test harness deployed
Phase 2	4–6	Pilot execution & feedback	Two pilot PPP disclosures processed end-to-end; early-adopter training completed
Phase 3	7–9	Scale-up & stakeholder activation	All active PPPs live on portal; consultation & grievance modules active
Phase 4	10–12	Optimization & hand-over	Mock audit cycle complete; SOPs embedded; permanent support structures in place

B. Detailed Milestone Table

Month	Milestone & Deliverable	Owner (A/R)	Dependencies & Notes
0	**Gazette Framework & Regulations**Publish Gazette notices and upload to portal	Board Chair (A) / Legal Adviser (R)	Requires final draft of Regulations (§2.2) and Governor's assent
1	**MVP DMS & Portal Go-Live**Core CMS, public/auditor panes, basic manifest ingestion	IT Lead (A/R)	DMS config per Sections 4.1–4.2; API keys provisioned
2	**API Test Harness Deployed**Mock webhook calls to FCCL endpoints; logs visible	IT Lead (A) / FCCL API Team (R)	FCCL endpoints available; sample payloads defined (§8.2)
3	**Phase 1 Review**Board convenes to assess go-live health & approve pilot plan	Board Chair (A) / DG (R)	Dashboard usage metrics; initial issue log from helpdesk
4	**Pilot #1 & #2 Launch**Process two live PPPs through G-0–G-4 end-to-end	Project Dev. Cluster (A/R)	Project teams nominated; training modules for pilots ready (§10.2)
5	**Pilot Feedback & Iteration**Consolidated findings, tool refinements, process updates	Strategy & Compliance (A/R)	Feedback from pilots logged; minor Regulation tweaks drafted; Portal bug-fix release
6	**Early-Adopter Training Complete**All pilot participants certified via LMS	HR & Training Lead (A/R)	Training modules published; e-learning platform live

7	**Scale-Up Kick-Off**All active PPP projects onboarded; API sync fully operational	DG (A) / All Cluster Leads (R)	Pilot lessons incorporated; helpdesk staffed; stakeholder registry updated
8	**Consultation & Grievance Modules Live**Stakeholder windows open for G-1 & G-3	Disclosure Unit Lead (A/R)	Consultation workflows (§5.1) and grievance portal (§5.2) configured
9	**Full Dataset & API Coverage**All 16 mandatory datasets publishing; API throttling tuned	IT Lead (A) / DMS Admin (R)	Schema validation complete; performance tuning done
10	**Mock Audit Cycle Start**Audit Squad begins first round of mock audits	Audit Squad Lead (A/R)	Evidence packs prepared; audit checklist finalised (§7.3)
11	**Mock Audit Report & Remediation Plan**Publish gap-analysis and assign fixes	Audit Squad Lead (A) / DG (R)	Mock audit findings; remediation tracker live (§7.3)
12	**SOP Embedding & Hand-Over**Handover package to SSG's office; civil-service SOPs ratified	DG (A) / Board Secretary (R)	Final mock audit closed; SOPs published and training-of-trainers certified

C. Visual Roll-Out Gantt Suggestion

D. Dependencies & Risk Mitigation

- **Regulatory Delay:** Mitigated by parallel drafting of subsidiary guidelines during Phase 1.

- **Tech Integration:** Early API test harness ensures portal → FCCL sync issues surface before pilots.

- **Adoption Resistance:** Phased training with micro-learning reduces overwhelm; champions in each MDA.

- **Audit Findings:** Immediate remediation tickets in Phase 4 ensure close-out before formal DLI verification.

E. Success Metrics by Month 12

Metric	Target
% of active PPPs live on portal	100 %
Training completion rate	≥ 95 % across all roles
Mock audit compliance (Green ratings)	≥ 90 %
SLA compliance for disclosures	≥ 98 % on-time
API sync success rate	≥ 99.5 %

This 12-month phased plan, anchored by clear milestones, ownership, and dependencies, ensures the PPP Disclosure Framework moves swiftly from blueprint to **sustainable reality**—embedding transparency into Oyo State's PPP processes for the long term.

10.2 Training & LMS Modules — equipping teams for seamless adoption

A robust rollout depends on **people** mastering new tools and processes. Section 10.2 details the **role-based curricula**, **micro-learning modules**, **coaching pods**, and **LMS architecture** that together ensure every user—from data owner to IVA—gains the skills needed for efficient, compliant disclosure.

A. Role-Based Curricula

Role	Core Topics	Duration (hrs)
Project Development	PPP lifecycle overview; concept-note & screening workflows; manifest creation	8
Finance & Risk	FCCL register integration; stress-test tools; API troubleshooting	6
Procurement & Contracts	RFQ/RFP template editing; deviation-matrix generation; concession agreement redaction	8
Strategy & Compliance	KPI dashboard configuration; metadata schemas; portal-audit navigation	6

Legal Adviser	Redaction rules & appeals; regulation interpretation; mock-audit QA checks	6
Portal Admin & IT	DMS configuration; API key management; RedactBot tuning; webhook monitoring	8
IVA Users	Auditor-Pane onboarding; Evidence Pack building; audit-log exports	4

B. Micro-Learning Modules

1. **Quick Shorts (5–7 min videos)**

   o *"Creating a JSON Manifest"*

   o *"Running RedactBot Tests"*

   o *"Submitting a Grievance Response"*

2. **Interactive Tutorials**

   o **Simulated Uploads**: Practice manifest and file ingestion with instant feedback.

   o **API Playground**: Sandbox to craft webhook payloads and inspect FCCL sync responses.

3. **Knowledge Checks**

   o **Quiz** after each module (5–10 questions).

   o **Instant scoring** and remedial pointers for < 80 % scores.

C. Coaching Pods & Office Hours

- **Bi-Weekly Cohorts**

  o Cross-cluster groups of 4–6 staff meet virtually to solve case studies (e.g., handling a late KPI upload).

  o Moderated by a **Subject-Matter Expert** who shares best practices and common pitfalls.

- **Monthly Office Hours**

  o Open Zoom sessions staffed by the **Disclosure Unit Lead**, **IT Lead**, and **Legal Adviser**.

  o Agenda-driven slots for live Q&A, troubleshooting, and mini-demos.

D. Train-the-Trainer & Community of Practice

- **Trainer Certification**

    o Select 12 super-users (2 per cluster) undergo a **Train-the-Trainer** program (16 hrs).

    o Modules include adult-learning techniques, facilitation skills, and LMS management.

- **Community Platform**

    o Private **Teams channel** or **Slack workspace** where trainers share new tips, update requests, and curate FAQs.

    o Quarterly "Brown-Bag" sessions to diffuse lessons learned and surface fresh training needs.

E. LMS Architecture & Analytics

1. **Platform Features**

    o **Modular course structure**: easily update individual modules without republishing entire programs.

    o **Tracking dashboards** for completion rates, quiz performance, and time-on-task metrics.

2. **Data-Driven Insights**

    o **Heat-map** of module engagement: identifies under-utilized topics.

    o **Skill GAP reports**: cross-reference quiz scores with roles to target remediation.

3. **Mobile Access**

    o Responsive design and offline downloads enable field officers to learn on the go.

F. Certification & Accreditation

- **Digital Badges**

    o Awarded on successful completion of core modules per role.

    o Stored in a **blockchain-backed credential registry** to prevent forgery.

- **Annual Recertification**

    o Short refresher (2 hrs) and updated quiz ensure staff retain core competencies.

    o Mandatory for continued access to critical portal features.

G. Performance Metrics & Continuous Learning

Metric	Target by Month 6
Training completion rate	≥ 95 %
Average quiz score	≥ 90 %
Coaching-pod attendance	≥ 80 % of cohorts
Office-hours participation	≥ 50 % of users
Trainer-led sessions delivered	≥ 12 (quarterly)

- **Feedback Surveys** after each training track rating clarity, usefulness, and trainer effectiveness—feeding into Section 8.3's continuous-improvement cycle.

- **Annual Curriculum Review** uses mock-audit and grievance findings to update training content, ensuring skills stay aligned with evolving processes and regulations.

By blending **structured curricula**, **bite-sized learning**, **peer coaching**, and **data-driven LMS analytics**, Oyo State builds a training ecosystem that scales expertise, embeds best practices, and sustains the PPP Disclosure Framework's long-term success.

10.3 Continuous-Improvement Protocol — version control, feedback loops & governance

Embedding transparency into Oyo State's PPP ecosystem requires a relentless cycle of review, update, and refinement. Section 10.3 codifies the **continuous-improvement protocol** that ensures disclosure assets—regulations, templates, APIs, workflows—remain fit for purpose as the landscape evolves.

A. Semantic Versioning & Change Management

1. **Version Schema**

   o **Major.Minor.Patch** format:

      ▪ **Major** for policy overhauls or new gateway additions.

      ▪ **Minor** for template tweaks, new datasets, or Regulation amendments.

      ▪ **Patch** for bug fixes, typo corrections, or non-breaking API changes.

2. **Changelog Requirements**

   o Every release must include:

      ▪ **Date**, **author**, **summary of changes**, **impacted sections or artifacts**, and **migration notes**.

   o Changelogs are published via /data/open/changelog.json and displayed in the portal's **"Release Notes"** section.

3. **Release Cadence**

Type	Frequency	Governance Pathway
Patch	On-demand	Legal Adviser sign-off; auto-deploy by DMS
Minor	Quarterly	Change Advisory Board (CAB) review & DG approval
Major	Every 3 years	Board resolution & Governor assent

B. Feedback Loops & Issue Tracking

1. **User Feedback Channels**

   o **In-Portal Comments**: Inline commenting on documents and API docs.

   o **Post-Session Surveys**: After each training or mock audit, participants rate clarity and suggest improvements.

   o **Dedicated "Improvement Request" Form**: Stakeholders can log enhancement requests or report pain points.

2. **Issue Triage & Prioritization**

   o **Continuous Improvement Board (CIB)** meets monthly, with representation from:

      ▪ Strategy & Compliance, IT, Legal, Finance & Risk, Project Dev., and an external IVA delegate.

   o Uses **RICE scoring** (Reach, Impact, Confidence, Effort) to prioritize incoming issues.

3. **Backlog & Roadmap**

   o The CIB maintains a **Public Backlog**—visible in the portal—categorised by:

      ▪ **Urgent Fixes** (e.g., broken API endpoints, SLA errors)

      ▪ **Enhancements** (e.g., new dataset requests, UX tweaks)

      ▪ **Future Features** (e.g., mobile app improvements, new best-practice integrations)

C. Continuous Monitoring & Analytics

1. **Portal & API Metrics**

   o **Uptime**, **latency**, **error rates**, **webhook success rates** tracked in real time.

   o **Threshold alerts** automatically open improvement tickets when metrics degrade (e.g., API error > 1 % over 1 hour).

2. **Usage Analytics**

   o **Page views**, **download counts**, **API call volumes** inform which features see highest demand and require scaling or UI improvements.

   o **Heatmaps** on portal pages identify navigation bottlenecks.

3. **Governance Dashboards**

   o **CIB Dashboard** shows backlog health, ticket age, SLA compliance on fixes, and release velocity.

   o **Board Pack Slides** summarise continuous-improvement highlights quarterly.

D. Governance & Decision Rights

Forum	Frequency	Scope
Change Advisory Board	Monthly	Reviews backlog, approves Minor/Patch releases
Steering Committee	Bi-annual	Sets major priorities, approves Major releases
Board of Directors	Annual	Ratifies policy overhauls and 3-year reviews

- **Escalation Path:** Critical system issues or governance disputes escalate from CIB → Steering → Board.

E. Documentation & Knowledge Management

1. **Central Repository**

   o All artifacts—templates, regulations, API specs, training materials—reside in version-controlled Git, mirrored to the portal.

2. **Living Wiki**

   o A user-editable **Confluence** space (or equivalent) hosts process guides, FAQs, and integration how-tos.

3. **Archive & Audit**

   o Each release snapshot is archived, ensuring historical states are recoverable for audit or legal reference.

F. External Verification & Transparency

- **Public Release Notes**

   o Every Minor or Major update triggers a public announcement and a **"What's Changed?"** summary, reinforcing Oyo's commitment to openness.

- **Independent Reviews**

  - Biennially, an external evaluator (could be a development partner or trusted NGO) audits the improvement process, publishing an **Independent Improvement Report**.

"By institutionalising a rigorous, data-driven, and participatory improvement cycle—with clear version control, stakeholder feedback, and multi-tier governance—Oyo State ensures its PPP Disclosure Framework doesn't stagnate but continuously evolves to meet emerging challenges and opportunities."