VOLUME I · TECHNICAL PROPOSAL

KERALA STATE CO-OPERATIVE BANK LTD · C/O KERALA STARTUP MISSION

Accumo

Audit Management Solution for Risk-Based Internal Audit

A configurable platform that encodes Kerala Bank's own risk philosophy — not a generic GRC toolkit with the Bank's forms pasted on. One platform. Three instruments. Two rating engines. One certification track. The Bank owns the rules.

▶ View the live, interactive proposal — kb.accumo.co

Try the risk engine yourself, in the browser. Best viewed on a laptop.

RFP / Reference	KB/IT/AMS/KSUM/07/2026 · Dated 22 June 2026
Legal bidder	ALTIORA CAPITAL SOULTION PRIVATE LIMITED
CIN	U63120KL2025PTC095578
KSUM registration	DIPP230717/2025/KSUM4750 · Active
Solution brand	Accumo
Registered office	Suite No. 133B, Basement Floor, Pallath Square, FACT-Kalamassery Road, Kalamassery PO, Ernakulam, Kerala — 683104
Contact	Al Ameen R (Co-founder & CEO) · ameen.r3995@gmail.com · +91 90379 79978
Corporate website	https://altioracapitalsolution.com/
Document	Volume I — Technical Proposal (this document). Volume II — Financial Proposal is submitted separately, as per the RFP.
Classification	Private and Confidential — for Kerala Bank / KSUM evaluation

This Volume follows the KSUM technical-proposal section titles (Organisation, Experience, Introduction, Objectives, Scope, Proposed Solution, Implementation, Annexure). Numbering is sequential 1–8 for navigability. Domain scoring follows the 4 August 2026 clarification: checklist marks measure how well a unit is run. A higher Annexure-1 or Annexure-2 score is a better result, therefore lower control / society risk. The 5×5 axis labels (L = best audit, EH = failed audit) are unchanged; only the mapping from marks onto those labels is corrected.

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How to read this Volume

§3 and §6.4 carry the argument; everything else is the evidence that it can be built, integrated, and operated across 823 branches and more than a thousand affiliated societies.

Accumo, in one page

Kerala Bank is not buying audit software. It is buying one honest, shared version of the truth about risk across 823 branches that were, until recently, fourteen banks with fourteen ways of working — trusted at once by a rural auditor in Malayalam, by Head Office, and by a regulator who may ask, two years later, exactly how a rating was reached.

The proposal in one line: one platform · three instruments · two rating engines · one certification track · the Bank owns the rules · Head Office owns every published rating.

Three instruments, not one engine. Branch RBIA (Annexure-1) is a control-compliance assessment that meets Business Risk in a 5×5 and produces L–EH. Affiliated-society inspection (Annexure-2) is a financial-health grade A–E of a separate legal entity — it does not sit in the branch matrix. ROM (Annexure-3) is a signed monthly certification with no marks that feeds the next branch audit. A proposal that treats these as one scoring engine has not read the annexures.

Built to be demonstrated. The Bank published its own acceptance test — six things that must work live — and we treat them as the definition of done: three role logins, live 426-mark scoring, the risk engine through the 5×5, the Head-Office heat map, the full cycle to FACC, and persistent carry-forward. On top we add three moments a generic product will not show: first-class Malayalam on screen and on the printed certificate, live offsite alerts, and a policy the Bank changes on stage.

Staffed on both sides of the sentence. Engineers who have already put a Kerala cooperative bank into production (MRCB, live since May 2026); a 15-plus engineering team behind a 300-person ISO 27001 delivery bench with Finacle experience; a panel of 10-plus Chartered Accountants and a retired State Bank of India RBIA Chief Manager on the domain. Founder focus and enterprise depth, not one or the other.

Delivered in eight weeks, honestly. Altiora commits to a full go-live within eight weeks of order; the estate is then onboarded in agreed waves, with Bank-side dependencies attributed in writing. Where the supplied workbooks carry defects, we raise them as clarifications (CQ-01 to CQ-03) rather than shipping the Bank’s typos into 823 branches.

Read §3 and §6.4 for the argument; everything else is the evidence.

SECTION 1

Organisation / Company Profile

1.1 Company identity

Field	Value
Legal entity (bidder)	ALTIORA CAPITAL SOULTION PRIVATE LIMITED — the "SOULTION" spelling is the registered legal name
Trade / product brand	Accumo (this RFP) · AiBanker (lending platform, separate product)
Entity type	Private Limited Company
KSUM registration	DIPP230717/2025/KSUM4750 · Active
Incubation	Kerala Startup Mission · Innovation Incubator
National recognition	Startup India recognised · DPIIT
Technology partner	IIT Madras Pravartak
Geographic roots	Kerala-rooted. Founders and core engineering based in Kerala / India
Reference live banking deployment	Mayyanad Regional Co-operative Bank (MRCB), Kollam — production since 2 May 2026
Corporate website	https://altioracapitalsolution.com/

1.2 What Altiora does

Altiora builds regulated software for Indian cooperative banking. The company is small where focus matters — product and the domain — and deliberately deep where a startup is usually thin: a 15-plus engineering team, a panel of 10-plus Chartered Accountants available to the engagement, a career bank-inspection officer, and a 300-person ISO 27001 engineering organisation with Finacle delivery experience standing behind the founders.

Three current activities define the firm. None of them is this RFP, and that honesty is part of why the bid is credible.

1. **Operating paisaonclick.com** — the founders' AI-powered lending marketplace, featured in Manorama Elevate Season 1 (May 2025).
2. **Building and running MRCB's digital platform** — four production applications (bilingual customer PWA, staff CRM, admin console, marketing site) live on India-region infrastructure since 2 May 2026.
3. **Building Accumo** — the Audit Management Solution offered under this RFP. Accumo is not a rebadge of the lending products. It is a purpose-built AMS whose first customer is intended to be Kerala Bank.

The other company AI platforms evidence engineering capacity only. They are not the audit solution. Primary banking credibility for this tender is cooperative-bank production delivery at MRCB, plus the RBIA domain team named in §1.4.

1.3 Capabilities against the four skill domains this kind of KSUM tender examines

Domain	Evidence
API aggregation and orchestration	Production integrations at MRCB (payments, SMS, credit bureau, OTP, document storage). Accumo uses the same discipline: open-spec adapters, no modification of Finacle core, LOS and EWS hooks, mock contracts that match production.
AI / ML and NLP	Production AI product engineering. Indian Patent Application No. 202641000710 (filed 4 January 2026, published 16 January 2026 — a published application under examination, *not* a granted patent). Accumo AI is limited to assistive multi-report insight with mandatory human override, aligned to RBI FREE-AI (13 August 2025).
Cybersecurity and compliance	Audit-logged sensitive-document access at MRCB. Accumo designed for DPDP Act 2023, granular trails, SIEM hooks, SBOM, VAPT remediation, CISO gate. ISO 27001 programme in progress at the company; delivery partner Innovation Incubator is ISO 27001 certified; independent third-party VAPT and hardening run to banking standard.
UX for Malayalam and field users	MRCB bilingual English + Malayalam production interfaces for elderly and Malayalam-speaking customers — the same demographic as Kerala Bank's staff and members. Accumo treats Malayalam as first-class on screens *and* on printable FACC / reports.

1.4 Programme team — technology and domain as equal owners

A bank does not hand its internal-audit system to whoever writes the best proposal. It hands it to whoever it believes can understand the audit, build the software, integrate with Finacle, and still be standing in year five. This programme is staffed on both sides of that sentence.

1.4.1 Founders and technology leadership

Person	Role on this bid	What they own
Al Ameen R	Co-founder & CEO · Engagement lead	Kerala Bank / KSUM relationship, product direction, the audit–engineering bridge. TKM College of Engineering.
Bijin B James	Co-founder & CTO · Technical lead	Application architecture, AI boundary, delivery quality. Formerly Colnect. UKF College of Engineering.
Anshad Ameenza	Co-founder & Enterprise Delivery Lead (Director, Innovation Incubator)	Programme architecture at enterprise scale, and the Innovation Incubator delivery bench. ~25 years across HP, Nokia, Intuit, Dell/EMC and EY. Founded Cyber Sapient. Founder involvement in 15-plus ventures. On this bid he is not an advisor in the wings — he is on the programme.
Sreehari Vinoba	Co-founder · Core engineering	Data model, Finacle adapter, deployment topology. IIT Dhanbad.

ANSHAD'S PLACE ON THIS BID

Anshad Ameenza is a Co-founder of Altiora and Director of Innovation Incubator, a 300-person ISO 27001-certified engineering organisation with hands-on Finacle experience. Kerala Bank is not being asked to choose between "a promising startup" and "an established vendor." The bid is the founder team's focus *and* an enterprise delivery bench. He will be present in the evaluation and in delivery.

1.4.2 Domain and RBIA leadership

Person	Standing	Owns
Arjun Manu	RBIA domain co-lead	Risk rules, Annexure fidelity, process design, scoring polarity
CA Ajith Sam	Practising CA · domain co-lead	Audit methodology, checklist semantics, reporting standards — equal senior ownership with Arjun
Janardhanan	Retired Chief Manager, State Bank of India — Risk-Based Internal Audit	Commercial-bank RBIA culture; HO / RO inspection reality
CA Vani · **CA Sayanth** · **Aravind**	Practising / corporate CAs	Control testing, compliance mapping, checklist review

Most bidders field a software team and read the audit manual. This bid fields practising Chartered Accountants and a retired SBI inspection officer alongside the engineers. The difference is between building what an RFP says and building what an audit department does.

1.4.3 Engineering bench

Nandu Shaji, Abel, and Krishna Prasad anchor a 15-plus engineering team (application, frontend/workflow, data and integration). The 300-person Innovation Incubator bench scales quality assurance, Finacle integration, and facility-management cover for an 823-branch estate.

1.4.4 Work allocation — who owns truth

Workstream	Domain	Technology
Risk policy meaning, 5×5, scoring polarity	Own	Implement as versioned policy
Annexure-1 / 2 / 3 fidelity	Own	Checklist engine and import
FACC, compliance, persistent items, ROM→branch feed	Own	Workflow engine
Malayalam audit vocabulary	Approve	i18n and PDF fonts
Finacle adapter, security, architecture	Review	Own
Demonstration narrative	Lead	Environment reliability

1.5 Investors, partners, advisors

Category	Names

Investors	Navas Meeran / Group Meeran (diversified group operating since 1968; former Chairman, CII Southern Region). Tom M Joseph / Jain (Deemed-to-be) University — Director of New Initiatives; Executive Director, ISDC Global.
Technology / innovation	IIT Madras Pravartak · Innovation Incubator · HubTree Ventures · µLearn talent network
Security	Independent third-party VAPT & hardening to banking standard, alongside Innovation Incubator's ISO 27001 practices
Advisors	Ajeesh Achuthan — Co-founder, Open Financial Technologies (open.money). Ankit Dhadda — Chief Digital Officer, Godrej Capital; formerly Meta and BloombergQuint. Rahul Dandamudi — Senior Software Engineer, Meta. Deepu S Nath — Founder, µLearn and FAYA. Jinu Mathew.

1.6 Public recognition and intellectual property

- Manorama Elevate Season 1 (May 2025) — paisaonclick.com. YouTube: https://www.youtube.com/watch?v=ynpTJ_UfQ2w
- Indian Patent Application No. 202641000710 — filed 4 Jan 2026, published 16 Jan 2026, under examination. Cited only as documented R&D, not as a granted patent.

1.7 Eligibility summary

Criterion	Status
KSUM-registered startup	Yes — DIPP230717/2025/KSUM4750
Incubated / partner ecosystem	Yes — Innovation Incubator + IITM Pravartak
Fintech / API / AI experience	Yes — live platforms + published patent application
Cooperative banking delivery	Yes — MRCB production
RBIA / audit domain bench	Yes — domain co-leads + multi-CA + SBI RBIA CM
Malayalam / field UX	Yes — MRCB bilingual production
Enterprise delivery capacity	Yes — Anshad + Innovation Incubator bench

1.8 Cross-references and bid enclosures

Full curricula vitae: Annexure E. Compliance against RFP items: Annexure A. Demonstration outline: Annexure D. Architecture decision records: §6.15.

Bid enclosure index. The documents below accompany this Volume; each is referenced by its tab where it is claimed in the body, and against its clause in the Annexure-A compliance register.

Tab	Enclosure
1	Certificate of Incorporation — CIN U63120KL2025PTC095578
2	KSUM startup registration · DPIIT recognition
3	Founder and domain-bench CVs, with certificates

4	MRCB production reference
5	Partner confirmation letters — Innovation Incubator (ISO 27001)
6	Machine-readable SBOM (preliminary; final at SRS)
7	NDA and integrity certificate
8	Source-code escrow commitment
9	Data-flow diagram and interface architecture
10	DR and SLA schedules (Annexure G)
11	Signed declarations (Annexure H)

SECTION 2

Previous Experience in Similar Projects

2.1 Headline

We have not previously delivered an Audit Management System to an apex cooperative bank. We say that in the first sentence so the rest of this section can be read without suspicion. What we *have* delivered is the nearest neighbour that matters: a live, bilingual, multi-role, audit-logged platform inside a Kerala cooperative bank, plus a domain bench that has filled the very performas this RFP digitises.

#	Engagement	Status	What it proves for this RFP
1	Mayyanad Regional Co-operative Bank (MRCB)	Live production since 2 May 2026	Cooperative operations, EN+ML, multi-role staff workflows, India-resident hosting, document ACL
2	paisaonclick.com	Live	AI product engineering; not an AMS claim
3	Patent Application 202641000710	Published, under examination	Documented R&D in workflow + conversational systems
4	Adimali / Nilamel / Paravur SNV and other Kerala coops	Discussions only	Disclosed for transparency — *not* production claims

2.2 MRCB — the primary cooperative reference

Mayyanad Regional Co-operative Bank, Kollam, was established in 1954. It serves the same kind of member Kerala Bank serves: Malayalam-first, often older, often rural. Altiora is the technology partner that designed, built and operates four production applications.

2.2.1 The four applications

Application	Users	What it does
Customer Progressive Web App	Members	Bilingual English / Malayalam journeys designed for elderly users
Staff CRM	Branch and HO staff	Desktop-first processing, structured checklists, maker-checker habits
Admin console	Altiora-operated for the Bank	Operations analytics, controlled document access, configuration
Marketing landing	Public	Acquisition property, same brand system

All four have been live on India-region infrastructure (AWS Mumbai, ap-south-1) since 2 May 2026. Patterns already in production: multi-role access, structured verification checklists, bilingual interface, audit-logged access to sensitive documents, SMS and bureau integrations.

2.2.2 Honest note — what MRCB is not

> **HONESTY DOCTRINE**
>
> MRCB is not an Audit Management System. It is not Finacle. It is not 823 branches. It does not implement Annexure-1. Citing it as "we have already built an AMS" would be inaccurate, and easily disproven on inspection. We cite it for the transferrable engineering: bilingual field UX, role separation, India-resident operations, integration discipline, and the simple fact that this team has already shipped inside a Kerala cooperative bank and is still there.

2.2.3 Direct precedent for Accumo

MRCB pattern	Accumo use
Bilingual EN / ML as a delivery constraint, not a toggle	UI + printable FACC / reports
Staff roles that must not see each other's work	Six RFP roles; confidential document ACL
Structured checklists that must not drift	Versioned annexure templates, frozen at engagement start
Audit-logged document access	Workpapers, special reports, income-leakage dual sign
India-region hosting, Bank-acceptable residency	Bank DC/DR or MeitY cloud — same binary
Adapter integrations, no host-core modification	Finacle / LOS / EWS adapters

2.3 Domain experience — the other half of "similar"

Software experience is half the word "similar." The other half is having filled these forms. Arjun and the CA bench have worked the Bank's Annexure-1 / 2 / 3 performas as documents, not as screenshots. That is how this Volume knows, before a line of code, that:

- Annexure-1 marks are a compliance score (higher = better run), while Business Risk is a size score (higher = more exposure);
- Annexure-1 itself is a three-band instrument (70 / 50) that must be mapped onto the RFP's five final levels;
- Annexure-2 is a financial-health rating of a separate legal entity, not a second copy of the branch 5×5;
- Annexure-3 has no marks at all, and its "No" answers already feed an 8-mark block inside Annexure-1;
- the Bank's own workbooks contain defects (duplicate SARFAESI row, #REF! columns) that a faithful system must normalise, not transcribe.

That last item is not a cheap shot at the Bank. It is why templates are data, not hardcoded rows. A vendor who copies Excel row 32 twice will ship the Bank's typo into 823 branches.

2.4 paisaonclick.com and the patent — what they are allowed to prove

paisaonclick.com is "India's First AI-Powered Lending Marketplace," founder-owned, featured by Manorama News. It proves the company ships AI-assisted financial workflows to real users. Indian Patent Application 202641000710 covers a distributed system for real-time lending origination with workflow orchestration and conversational AI. It is a published application under examination. We will not say "patented technology" on a slide.

Neither artefact is Accumo. They are evidence that the AI chapter of this proposal is written by people who have already put models behind a product boundary, not by people who discovered FREE-AI last week.

2.5 Lessons we are applying, not reciting

1. **Malayalam is a layout problem as much as a language problem.** MRCB taught us that a translated string that overflows a PDF footer is not bilingual support. Domain owns vocabulary; engineering owns fonts and print integrity.
2. **Rural connectivity is a data-model problem.** Offline capture with conflict rules is cheaper to design now than to retrofit after the first hill-branch visit.
3. **The Bank will change the form.** Configuration over hard-coding is not a slogan. It is how we survive the first circular after go-live.
4. **Do not invent a customer.** Pipeline conversations with other Kerala cooperatives are listed in §2.1 as discussions. They will not appear in a slide as "clients."

2.6 Reference contact

MRCB operational contacts and live URLs are available to the evaluation committee under the Bank's / KSUM's usual reference protocol. We do not print member-facing credentials in a circulated proposal.

SECTION 3

Introduction

3.1 The requirement underneath the requirement

Kerala Bank is not asking for audit software. It is asking for one honest, shared version of the truth about risk across 823 branches that were, until recently, fourteen different banks with fourteen different ways of working — and it needs that truth to be trusted at the same time by a junior auditor in a rural branch working in Malayalam, by a Head Office reviewer in Thiruvananthapuram, and by a regulator who may ask, two years later, exactly how a rating was reached.

That is the requirement underneath the RFP. Everything in the 12 July specification, and everything in Annexures 1, 2 and 3, serves it. A proposal that treats those annexures as three skins on one scoring engine has not read them.

3.2 The Bank, in the Bank's own words

Kerala State Co-operative Bank Ltd is the apex cooperative bank of the State. Fourteen District Co-operative Banks merged into a single entity of 823 branches under the brand Kerala Bank. Internal audit at this scale is not a department with a spreadsheet. It is a governance system: risk-based planning, onsite and offsite assurance, maker-checker, auditee compliance, closure certification, memory of persistent irregularities, and a Head Office picture that can be shown to an Audit Committee without assembling fourteen formats.

The 12 July note the Bank handed every vendor lists ten pain points. Read together they are three failures wearing ten faces.

#	Pain	What happens today	What "solved" means
1	Paper disappears	20-page forms lost, torn, stained	Digital checklist, auto-saved
2	Excel breaks	426-mark checklist, multi-tab, formulas often wrong	Questions from a database, not from a row number
3	Weeks to HO	Visit day 1 → paper day 7 → review day 14	HO sees the file when it is submitted
4	No maker-checker	Supervisor "approves" with no record	Two-person rule enforced, every decision logged
5	Letters take 3–7 days	Can be "lost in transit"	Branch replies online, with photos
6	Same problems repeat	KYC gap three years running; new auditor arrives blind	Unresolved items auto-appear next cycle
7	HO has no risk picture	Telephone each RO; different formats	5×5 of every branch in one second
8	English friction	Rural staff mark Yes without understanding	Malayalam on screen and on paper
9	Post-merger chaos	Fourteen processes	One platform, one language of risk

3.3 What the RFP is actually buying

RFP KB/IT/AMS/KSUM/07/2026 dated 22 June 2026 asks for an end-to-end Audit Management Solution layered *above* Core Banking — not a Finacle module, not a standalone GRC product that the Bank must walk to. Attributes the RFP names in its own voice: API-driven, event-driven, configurable; integrated with Finacle, LOS and EWS; covering RBIA in three phases plus the option of concurrent, compliance, inspection and related types; with Offsite Monitoring as a parallel system; Malayalam; DPDP; SBOM; FREE-AI-aware AI; 8-week go-live from letter of intent under a staged definition we set out in §7.

QCBS 70:30, startup-reserved, demonstration-decided. We write this Volume as if the demonstration is the real examination and the paper is the examiner's notes.

3.4 The argument of this proposal, in one page

> *One platform. Three instruments. Two rating engines. One certification track. The Bank owns the rules. Head Office owns every published rating. History is loaded or the features that need history stay honest.*

Three instruments, not one scoring engine. Phase I (branch) is a control-compliance assessment that meets Business Risk in a 5×5 and produces L through EH. Phase II (affiliated society) is a financial-health rating of a separate legal entity, 100 marks, grades A to E — it does not sit in the branch matrix. Phase III (ROM) is a monthly signed certification with no marks at all. They share users, workflow, observations, documents, trail, language and dashboards. They do not share a rating model. A proposal that says "same engine, different template" has not opened Annexure-2 or Annexure-3.

Control Risk polarity. Business Risk measures size. Checklist marks measure how well the place is run. A 90% Annexure-1 score is a well-run branch and therefore *Low* control risk. A 22% score is a failed audit and therefore *Extremely High* control risk. The Bank's own Annexure-1 only prints three bands (70 / 50). The RFP wants five final levels. We map the three onto the five in §6.5, and we put that mapping in the policy file for the Risk Committee to confirm. We do not silently invert a table and hope nobody notices.

Legacy is a product feature, not a go-live chore. Trend analysis and persistent irregularities — two claims every bidder will make — are false on day one if the database is empty. RFP §§40–41 put the load on the bidder, by go-live, subject to the Bank having the data. §5.4 is a real migration design, not a compliance-matrix row.

ROM findings feed the next branch audit. Annexure-1 already awards 8 marks on whether ROM defects were cleared. Phase III is therefore an input to Phase I. Building them as silos would be a design error dressed up as modularity.

The Bank owns the rules. Weights, bands, the 25-cell matrix, frequencies, man-days, override reason codes — all live in a versioned policy file the Risk Committee signs. If no version is active, the engine refuses to produce a rating. Every engine rating is provisional until Head Office confirms or overrides with a reason. AI does not publish ratings.

3.5 Regulatory frame we designed against

Instrument	What it does to Accumo
RBI RBIA framework (incl. 3 Feb 2021 line of 5 risk levels)	Five final ratings; risk-based frequency; HO picture
NABARD supervisory role / E-CAMELSC	Society financial-health rating is a cousin, not a clone; we keep the grade A–E native and mappable
RBI FREE-AI (13 August 2025)	Enable AI, do not theatre-kill-switch it; human override; inventory; incident path
DPDP Act 2023	Processor on documented instructions; India-resident; demo data masked
IT Act, CERT-In, SBOM, quarterly VAPT	Trails usable as evidence; machine-readable SBOM; fix findings at no extra cost
Bank RBIA policy and the three annexures	The actual product specification

3.6 Document map

If you need…	Go to
Who is bidding, and whether they can deliver	§1, §2, Annexure E
What we think the Bank is buying	§3, §4
Phase I / II / III designed, not named	§5.1–5.3
Legacy, OMS, FR catalogue, honest out-of-scope	§5.4–5.8
How the machine actually works	§6, especially §6.4–6.7 and AD-1–AD-12
How 8 weeks can be true	§7
Item-by-item RFP cover, 25-cell table, demo script	Annexures A–D

SECTION 4

Project Objectives

The RFP's stated objective is an end-to-end AMS for Risk-Based Internal Audit, onsite and offsite, with historical data loaded, Finacle-integrated, Malayalam-capable, and live on a Bank-defined go-live. We translate that into objectives a committee can score and a team can fail against.

#	Objective (Bank language)	Accumo outcome	How we will know
1	Enable RBIA, not just digitise the old form	Dual-axis branch rating; society A–E; ROM certification; frequencies from policy	A published rating is reconstructable to policy version + inputs
2	Replace paper and broken Excel	Versioned templates; live roll-up; freeze on submit	No engagement runs on an unfrozen template
3	Give Head Office a picture	5×5 heat map, drill-down, aging, pending FACC	823 branches placeable without telephoning ROs
4	Enforce maker-checker and closure	State machine through FACC; same person cannot do both sides	Trail shows two actors on every material transition
5	Remember last year	Persistent carry-forward + legacy load of open items	Day-one either shows history or says "insufficient history"
6	Integrate, do not replace, CBS	Adapter-only Finacle / LOS / EWS	No Finacle code change in the interface pack
7	Work in Malayalam	UI and printable reports	Same engagement printable in EN and ML
8	Watch between visits	OMS rule catalogue, H/M/L, distribution matrix	Phased; near-RT only with feeds
9	Use AI without surrendering judgment	Assistive clustering; no auto-publish	Product law: AI output cannot become the HO rating
10	Be inspectable	DPDP, SBOM, VAPT, India-resident, CISO gate	Go-live blocked without CISO sign-off
11	Load history by go-live	§5.4 six-object migration, subject to Bank data	Cut-over checklist signed
12	Let the Bank change the rules	Policy file + template admin, no vendor ticket for a weight change	Demo: change a band, see Tuesday's ratings move

Key benefits to Kerala Bank

- **One truth about risk** across 823 branches — a single 5×5 Head-Office picture instead of fourteen formats and phone calls.
- **Days, not weeks** — findings reach Head Office the moment they are submitted; branches reply online; closure is certified, not chased.
- **Institutional memory** — persistent irregularities and trend, so the same KYC gap cannot hide for a fourth year.
- **The Bank owns the rules** — weights, bands, matrix and cadence change without a vendor ticket, and every rating is reconstructable for the regulator.
- **Works where the Bank works** — Malayalam on screen and on paper, offline capture in low-signal branches, India-resident and DPDP-compliant.

- **Ready to run** — enforced maker-checker, an immutable audit trail, and RBIA/NABARD-shaped reporting from day one.

The Bank already published its own acceptance test: the six things that must work live in the demonstration (three roles, live 426-mark checklist scoring, risk engine, HO 5×5, full cycle to FACC, persistent carry-forward). We treat those six as the definition of Phase I done, not as a show. Annexure D is the script.

SECTION 5

Scope of the Project

Scope is where most AMS proposals become a list. This one is a design. The RFP names three RBIA phases, an Offsite Monitoring System, historical data management, Finacle / LOS / EWS integration, training, facility management, and a five-year run. We take each instrument on its own terms.

5.0 How the estate is covered

Unit	Instrument	Approx. volume	On Finacle?
Branches, CPCs, ROs, CBO, PMU, HO departments	Phase I Branch RBIA + other audit types as templates	823 branches plus controlling offices	Yes — Bank CBS
PACS and other affiliated societies (employees', industrial, miscellaneous)	Phase II inspection	~1,687 PACS (Kerala Economic Review 2025) plus other types — Bank to confirm its affiliated count	Mostly no
Regional operations, per branch per month (design assumption)	Phase III ROM certification	Up to ~9,900 filings / year if per-branch	Partial — some items auto-checkable

Modules 1–3 share a platform. They do not share a rating engine. That sentence is the difference between this Volume and a brochure.

5.1 Phase I — Branch Risk-Based Internal Audit (Annexure-1)

Phase I is the focus module and the demonstration spine. The inspector examines a Bank branch (or CPC / comparable unit) using the Branch Risk Rating Performa. Control assessment is Operational Risk Management plus Credit Risk Management.

5.1.1 The 426-mark spine

Grand total = 426 marks. Every sub-question is 1 mark. Group maximum equals the sub-question count. The engine rolls sub-question → parameter → ORM/CRM subtotal → percentage.

ORM — 246 marks, 22 parameters

#	Parameter	Marks	#	Parameter	Marks
1	Display of certificates / premises	29	12	Fraud prevention / deceased claims	11
2	Books & registers	29	13	Clearing	4
3	Cash	5	14	Report checking	8
4	Joint custody of cash	3	15	Signature capture	2
5	Cash holding excess / shortage	3	16	Voucher scrutiny	14
6	Cash limits	2	17	Housekeeping	23
7	Cash remittance & CDP	2	18	Income leakage	9

8	Deposit accounts: KYC / TDS	38	19	Safe deposit lockers	29
9	ATM	2	20	Customer service / complaints	7
10	Security stationery	4	21	Compliance of inspection observations	8
11	Deliverables / stop payment	4	22	HR related	10

CRM — 180 marks, 10 parameters

#	Parameter	Marks	#	Parameter	Marks
23	Loans & advances	67	28	Recovery and collection	28
24	Appraisal process	5	29	KCC advances	5
25	Delegation of power	4	30	Other advances	6
26	Credit rating process	21	31	PACS / other societies related	16
27	Cash credit (stock / book debts)	12	32	Books & registers (credit)	16

Heaviest weights, for anyone sizing the UX: Loans & Advances 67, Deposit KYC/TDS 38, Display 29, Books 29, Lockers 29, Recovery 28, Housekeeping 23, Credit rating 21. The Bank refers to this instrument as a 459-question checklist; it resolves to **426 scored marks** (ORM 246 + CRM 180), and we use 426 as the scoring denominator throughout this Volume. The interface is sectioned — it is not a long single scroll.

> **NORMALISE, DO NOT TRANSCRIBE**
>
> The Bank's Annexure-1 workbook has known defects (SARFAESI register appears twice; mixed-sum formulas that break if a row moves; a stray reviewer comment). Accumo imports by template identity, not by Excel row number. We will raise the defects discreetly at SRS so the Bank can decide whether to keep, merge or drop the duplicate mark — we will not silently double-count 2 of CRM's 180 marks across 823 branches.

5.1.2 Two axes, then a matrix

Business Risk is size and complexity. It says nothing about how well the branch is run. Inputs are deposits and advances from Finacle, default weights 50 / 50, bands:

Rating	Deposits (₹ Cr)	Advances (₹ Cr)
L	0–10	0–15
M	10–30	15–45
H	30–60	45–90
VH	60–120	90–180
EH	120+	180+

Control Risk is how well the branch is run. Score % = (marks obtained ÷ 426) × 100. *Higher marks = lower control risk.* This is the polarity lock of 4 August 2026.

Control Risk (5-level, for the matrix)	Score % of 426	Meaning

L — best audit	> 85%	Well run
M	70–85%	Acceptable, not excellent
H	50–70%	Needs watching
VH	30–50%	Poor audit
EH — failed audit	< 30%	Failed

5.1.3 Mapping the Bank's three bands onto the RFP's five

Annexure-1 itself only prints three indicative bands: ≥70% Low · 50–70% Medium · <50% High. The RFP body wants five final ratings. Both are right — they answer different questions. Three is the native checklist language. Five is the planning language. The map, for Risk Committee confirmation:

Annexure-1 (3-band)	Cut-off	Accumo Control Risk (5-band)	What we added
Low	≥ 70%	L if >85% · M if 70–85%	Resolution at the top: "good" vs "excellent"
Medium	50–70%	H (50–70%)	One-to-one
High	< 50%	VH if 30–50% · EH if <30%	Resolution at the bottom: "poor" vs "failed"

The extra cut-offs at 85% and 30% are ours, designed so the 5×5 has a real L row and a real EH row. They are not in Annexure-1. They will not be compiled into code. They live in the policy file. If the Risk Committee wants 80 / 25 instead, Tuesday's ratings move and Monday's stay bound to Monday's version.

Score 1 (ORM) and Score 2 (CRM) summing to 426 is the documented identity. Exact treatment of partial marks, not-applicable, and any question the Bank wants excluded from the denominator is locked at SRS — we will not invent a denominator.

5.1.4 What the final rating is for

The 5×5 (Annexure B) produces a Final rating that drives frequency, team, man-days, inspector type and HO reviewer — from a single junior every twelve months at Low, to a three-person team every two months with CRO and sanction-committee escalation at Extremely High. The (EH, L) cell — largest branch, spotless audit — is Medium, not Low. The engine is allowed to be suspicious of good news in the wrong place.

5.1.5 Lifecycle in scope for Phase I

Pre-audit pack · CBS pull and sampling · checklist execution (online / offline) · three observation types · daily irregularities for spot rectification · income leakage with dual sign · HO/RO release · auditee online reply · accept/reject · reminders · FACC at 100% or committee path · persistent carry-forward · letters of rating · the 16 MIS reports in RFP §43.

Six roles: Super User (HO), Administrator (HO), Audit Controller (HO), Audit Supervisor (RO), Branch Head, Internal Auditor.

5.2 Phase II — Affiliated societies (Annexure-2)

This is our internal auditor inspecting a Primary Agricultural Credit Society or other affiliated society. These are *not* our branches. They are separately registered cooperative societies with their own boards, their own staff and their own statutory audit. Kerala Bank inspects them because it is affiliated to them.

On volume this phase is larger than Phase I. Kerala has roughly 1,687 PACS. Annexure-2 also covers employees', industrial and miscellaneous societies. We will ask the Bank for its own affiliated count at SRS. Designing Phase II as an afterthought is how a vendor fails the second year of a five-year contract.

5.2.1 A different assessment

The society is rated using Annexure-2 Part C — a 100-mark financial-health rating on nine weighted parameters, producing a grade from A to E. It is not a control-compliance rating. It does not sit inside the branch Business-Risk-by-Control-Risk matrix. It needs its own engine.

Parameter	Marks
Own Fund to Working Fund	15
Growth of Deposit	15
Earnings	10
Maintenance of Fluid Resources	15
Low-cost (CASA) Deposit to Total Deposit	15
Loan Overdue to Demand — Principal	15
Loan Overdue to Demand — Interest	10
Inspector's evaluation of systems and controls	10
Compliance on previous audit report	5
Total (as itemised in Annexure-2)	**110**

Clarification raised with the Bank. The nine parameter weights as itemised in Annexure-2 sum to **110**, while the Part C total and the A–E grade bands are stated on **100**. This is a defect in the supplied workbook. Altiora has flagged it for written Bank direction — either a re-weighting to 100 or a confirmed 110-point scale with revised grade thresholds — and no society grade is published until the Risk Committee confirms the scale. The engine reads the confirmed weights from the society policy version; it does not silently normalise 110 into 100.

Grade	Marks	Reading
A	≥ 75	Strong
B	65–74	Satisfactory
C	55–64	Fair
D	40–54	Weak
E	< 40	Poor / watch

Higher marks = sounder society = better grade. Same polarity as Control Risk, opposite polarity to Business Risk. Ideal-position benchmarks living beside Part C (CASA >25%, CD ~75%, net margin ~1.5%, and the rest of the NABARD-flavoured set) are captured as reference flags, not silently mixed into the 100.

5.2.2 The rest of Annexure-2 is not optional colour

- **Part A** — the society's financial profile over three years.
- **Part B** — physical verification of cash, gold, lockers and loan files.
- **Part D** — verification of the loans Kerala Bank itself has given the society (this is Bank-side data and *can* come from Finacle).
- Statutory classification as Audit class or Appendix III across three years.
- Disclosure of borrowings by directors and their family members.
- Registration number, date, board, election date, general body, computerisation status (item 59).

The masters for a society therefore include legal identity, not just an org-tree node. Merger identity matters here too: which former district bank the affiliation historically sat with.

5.2.3 Why a Finacle adapter will not save Phase II

Phase I can assume CBS. Phase II cannot. Societies are separate legal entities. Their computerisation varies:

Where a society may stand	What it means for Accumo
Fully computerised and on a CBS	Some data could arrive as a file, if formats allow
Partly computerised, local or vendor software	Data exists in a form we cannot read directly
Manual registers and ledgers only	Nothing can be pulled — everything is keyed in

The Bank already knows this. Annexure-2 item 59 asks the inspector to record whether the society is fully or partly computerised, whether it is on CBS, whether it gets the reports it needs, and how backup is kept. The form is built on the expectation that many are not on a system we can call.

5.2.4 Three data groups — only the first is automatable

Group	Examples	Source	Automatable?
1. Kerala Bank's own records	Society borrowings from KSCB, deposits held with KSCB, shares in KSCB, all of Part D (loans issued by Kerala Bank)	Our Finacle	Yes — pull from CBS
2. Society records already at the branch	Latest audit report, stock and KCC statements, fluid-resources statement, registration certificate, bye-laws, committee resolutions, previous inspection reports	Branch files	Partly — scan and attach
3. Only obtainable at the society	Members and borrowing members, share capital, reserves, non-credit turnover, physical cash / gold / lockers, board, directors' family borrowings	On site	No — keyed in

Phase II UX is therefore an inspector's pack: pre-filled Group 1, an attachment rail for Group 2, and a structured on-site form for Group 3 that works offline. Designing it as "the branch checklist with a different template" produces a product that cannot be used in a village society that keeps ledgers.

5.2.5 Workflow still shared

Planning, assignment, maker-checker, observations, documents, closure, Malayalam, trail — same platform services as Phase I. Rating, data ingest, and masters — different. That is “one platform, two engines,” not “one engine, two skins.”

5.3 Phase III — ROM monthly certification (Annexure-3)

Different again. A monthly certification filed by the Regional Operations Manager using a 64-item Yes / No / Remarks checklist, signed each month. Items cover the region (conduct as required by RBI, NABARD and the Registrar; staffing and costs; complaints) and branch-level operational hygiene (reconciliations, KYC and re-KYC, suspense and sundry, interest subvention, TDS and Form 15G/H).

5.3.1 No scoring

There is no mark, no percentage, no rating and no risk band anywhere on the form. The output is a signed monthly confirmation. Phase III is a submission, review and escalation module. Building it as a rating module would be a category error.

5.3.2 Volume assumption

The header carries Region, CPC, Branch and Month. That suggests the return is filed per branch per month rather than once for the region. At 823 branches that is close to 9,900 submissions a year. We will confirm the filing unit at SRS. We design for the per-branch case, because it is the larger of the two and the cheaper one to slim down later.

5.3.3 A “No” has consequences, and they land in Phase I

A “No” is escalated to Head Office. The branch audit form itself scores the branch on whether ROM defects have been cleared — Annexure-1’s 8-mark section on compliance with inspection observations asks about the number of ROM visits, whether the ROM’s compliance report was closed, and whether defects pointed out in the ROM visit were complied with in full.

> **DESIGN CONTRIBUTION — ROM IS AN INPUT, NOT A SILO**
>
> ROM observations flow into the same observation and compliance tracking used everywhere else, and they are visible to the branch auditor in the pre-audit pack of the next Phase I engagement. The 8 marks are not a subjective impression. They can be suggested from system state: open ROM defects, closure dates, visit counts. The auditor still owns the mark; the system stops the auditor being blind.

5.3.4 What can be pre-answered from Finacle

Several Annexure-3 items are candidates for auto-check against CBS, offered to the ROM as a suggested Yes/No with the underlying figure visible: daily GL tally; DEAF items; closed-FD interest; sundries ageing; statutory suspense; inter-branch; reconciliation; cash retention; 15G/H, TDS codes, PAN, 194N;

trial balance and contra; drawing power versus stock. The ROM can override a suggestion. Nothing auto-signs the month.

5.4 Legacy data import — RFP §§40–41

The RFP is unusually blunt. Complete inspection-cycle and historical-data maintenance matching the Bank's process is in scope. The whole process of capturing legacy data shall be completed by go-live. File upload in a structured format shall be provided. Transfer into the solution-compatible structure is the bidder's responsibility.

Two of this solution's most valuable features — trend analysis and persistent irregularities — depend on the system already knowing each branch's history. Loading that history is therefore part of go-live, not an afterthought. The agreed legacy dataset is migrated before go-live so that trend and persistence are accurate from day one; where the Bank cannot yet produce a given source, that residual is loaded in the onboarding waves and labelled until it is.

5.4.1 Objects to import, subject to the Bank having the data

#	Object	Why it is needed	If missing on day one
1	Previous audit ratings, branch-wise and year-wise	Trend (increasing / decreasing / stable)	Trend = "insufficient history," never a fake Stable
2	Open and unrectified observations	Persistent irregularities carry forward correctly	Persistence starts from the first digital cycle; banner says so
3	Last inspection date per unit	Next-due and overdue reports	Overdue reports scoped to digital-era dates only
4	Closure status and FACC / closure-certificate history	Which reports are still open	Open/closed reports scoped to digital-era files
5	Branch and society masters, including former district bank	History attaches to the right unit after the merger	Blocker — we will not invent a hierarchy
6	Income-leakage records already identified	Required by the RFP report list	Leakage MIS starts digital-era, labelled as such

5.4.2 How we will take the data

Structured file upload (CSV / XLSX templates we publish at SRS). Scan-and-index for paper that cannot be typed in bulk, attaching the image to a stub observation so carry-forward at least has a document. Mapping workshop for the fourteen former district identities — this is the quiet hard problem. A KYC finding raised in 2024 under a Palakkad-DCB branch code must land on the 2026 Kerala Bank branch it became, or persistence is theatre.

We will not promise to OCR every faded 2019 paper file into a perfect structured finding. We will promise a complete load of whatever the Bank can produce in the templates, a documented residual, and a product that does not lie about the residual.

5.4.3 Cut-off

The agreed legacy dataset is on the go-live critical path; remaining estate-wide history follows the onboarding waves, subject to the Bank producing the source data in the published templates. The evaluation demonstration uses a synthetic but schema-true history pack so the six must-haves can be shown without the Bank's real back-file.

5.5 Offsite Monitoring System and exception management

OMS is a parallel system in the RFP, not a screen on the branch file. It reads Finacle and allied feeds, generates rule-based exceptions on a defined periodicity, classifies them High / Medium / Low, routes them by a distribution matrix to Branch / RO / HO, and lets the branch update status with evidence. Controlling office accepts or rejects. Age-wise, category-wise and unit-wise pendency reports exist for Audit Committee notes.

Objectives the RFP names, which we accept as written: better risk management between visits; timely rectification; reduced onsite workload; fraud indicators and trend; compliance monitoring; transaction analysis. Near-real-time is a function of feed quality, not of a slide. A minimum OMS rule pack is operational at go-live alongside the Branch core path, with the full rule catalogue expanded on the agreed schedule; we reuse the same observation / accept-reject / trail services so an OMS exception, a ROM "No," and an onsite adverse finding are the same kind of object in the database.

Candidate first rules (all reversible, all Bank-editable): drawing-power versus stock breach; DEAF pendency; unreconciled suspense ageing; KYC / re-KYC overdue; TDS / 15G-H exceptions. These overlap the Annexure-3 auto-check set on purpose — offsite and monthly certification should not disagree because they were coded by two vendors in two decades.

5.6 Functional requirements catalogue

The table is the RFP spoken back in buildable language. Status in Annexure A. Staging in §7.

Theme	What is in scope
Planning & scheduling	Risk-based annual plan from published ratings + policy frequency; assign teams with a leader; man-days allotted vs actual; reschedule with trail; inspector calendar
Templates	Hierarchy AuditTemplate → section → parameter → sub-question; Bank-editable; versioned; freeze at engagement start; additional types (LRM, concurrent, surprise, KYC, revenue, etc.) as templates
Rating	Engine A (branch 5×5); Engine B (society A–E); ROM no engine; trend; HO override with reason; no rating if no policy version
Execution	One-step CBS pull at start; auto sampling + manual add; offline; Malayalam; income leakage dual-sign; spot rectification; daily irregularity extract
Observations	Observation / Positive / Adverse; thread; evidence; accept/reject; SLA timers
Closure	FACC at 100% or committee path; rejection comments visible to auditee; persistence of unrectified items
Documents	Upload; confidential targeting; workpapers
Language	English and Malayalam, UI and print

OMS	Rules, H/M/L, matrix, accept/reject, age-wise MIS
AI	Multi-report clustering and draft themes; citations; human override; no auto-publish
Admin	Six roles; policy admin; template admin; audit trail; SIEM export
Reports	RFP §43 (a)–(p) plus rating communication letters
Integration	Finacle 10.x, LOS, EWS, Bank SMS/email, SIEM; EDMS-ready adapter later if the Bank's separate EDMS lands
Migration	§5.4
Training / FM	Up to 20 staff; one HO facility-management resource as specified

5.7 Non-functional requirements

ID	Requirement	Accumo posture
NFR-1	Scale: 823 branches + societies + ~10k ROM filings	Sized for audit-season concurrency; society count confirmed at SRS
NFR-2	Availability / DR	Bank DC/DR or MeitY; DR runbook before go-live
NFR-3	Security	TLS, encryption at rest, RBAC, quarterly VAPT findings fixed free, CISO gate
NFR-4	DPDP	Processor; India-resident; masked demo data; breach workflow
NFR-5	FREE-AI	Inventory, human-in-loop, 24-hour AI incident path when production-enabled
NFR-6	SBOM / escrow	Machine-readable SBOM on major releases; source-code escrow as contracted
NFR-7	Usability	Tablet-first field; large targets; bilingual; Bank-standard browsers
NFR-8	Auditability	Every rating bound to policy version + inputs + actor
NFR-9	Offline	Field capture; conflict rules; no silent discard
NFR-10	Replicability	Single-tenant; policy-as-data so a second bank is configuration, not a fork

5.8 Scope boundaries

Explicitly included — the items other bidders often mis-scope are firmly inside ours:

- All server, hosting and network infrastructure the solution requires — on the Bank's DC/DR, or, where the Bank does not provision it, by Altiora on MeitY-empanelled cloud, within the commercial scope.
- DR setup and drills; quarterly VAPT and IS-audit remediation at no extra cost for the contract term.
- Legacy migration of the agreed dataset by go-live (subject to the Bank producing the source data).
- The onsite facility-management resource, and onsite L2 support through the warranty period.

Excluded:

- Replacing Finacle, LOS, EWS, or the Bank's email / SMS gateways.

- Modifying Finacle core code.
- Statutory audit of societies (that remains the society's own auditor); Phase II is Kerala Bank's inspection.
- Inventing ratings where the Bank cannot produce history — we load what exists and label what does not.
- Unsupervised AI ratings.
- End-user PCs at branches (Bank discretion, per RFP §1.22).
- A second State's cooperative bank, unless separately contracted (the platform is built so this is configuration).

Clarifications on the supplied workbooks (CQ register)

Reading Annexures 1 and 2 closely surfaced three defects in the Bank's own workbooks. We record them as formal clarifications rather than silent corrections, and hold the affected outputs until the Bank rules.

Ref	Clarification sought	Held until resolved
CQ-01	Annexure-1 lists the SARFAESI register twice in the credit books/registers section — a 2-mark duplication within CRM's 180.	The duplicate mark: kept, merged or dropped per Bank direction; source-to-normalised mapping preserved.
CQ-02	Annexure-2 Part C parameter weights sum to 110, while the total and A–E bands are stated on 100.	No society grade is published until the scale is confirmed — re-weight to 100, or a confirmed 110 with revised bands.
CQ-03	The workbook does not conclusively define N/A treatment, partial marks, or exact boundary inclusivity for the 426 denominator.	Final control-risk computation, pending the Risk Policy Approval Schedule at SRS.

The RFP spoken back, clause by clause

KSUM evaluators score coverage. This chapter is the RFP's own numbering, answered in the voice of the design — not "complied" / "noted." Where we phase, we say so. Where we disagree with a naïve reading, we say so.

5.9 Scope of work items (RFP §1.0–1.5)

RFP	What it asks	What Accumo does
§1.0	Configurable platform layered above CBS; API- and event-driven; unified GRA layer on CBS / LOS / EWS	AD-1, AD-11. Adapters. No CBS module.
§1.1	Perpetual licence, implement, integrate, maintain; historical data; UAT; training; KT	§5.4, §7. Licence commercials in Volume II.
§1.2 A	RBIA Phase I / II / III	§5.1–5.3 as three instruments, not one engine
§1.2.2	Branches, CPCs, ROs, CBO, PMU, HO, PACS / societies	OrgUnit model; Society is not a Branch subtype
§1.2.3	Full lifecycle workflow	§6.18 state machine
§1.2.4	Track all auditable units	Register + risk profile; merger identity
§1.2.5	Pre-audit, grouping, H/M/L, plan from risk	Pack + policy frequency. Final is five-level; H/M/L remains a view.
§1.2.6	Bank-editable templates for BR, CR, ORM, CRM	TemplateVersion + PolicyVersion. Bank changes without us.
§1.2.7–8	Secured users; branch profile	Six roles; profile includes last rating and trend
§1.2.10–12	Five levels + trend; matrix; auto rating + frequency; BR from data, CR from onsite; HO change + log	Engine A as specified in §6.5. Polarity locked.
§1.2.14–18	HO plan; inspector calendar; multi-auditor + leader; one auditor on many files; man-days	Planner. Concurrent engagements allowed. Actual vs allotted recorded.
§1.2.19	Report status vocabulary Bank-definable	Policy-file states on top of the canonical machine
§1.2.20	One-step pull at start from CBS / LOS / MIS / manual	Adapter. Phase II Group 1 only for societies.
§1.2.21	Auto sample + manual add	§6.19. Gold floor of 10.
§1.2.22	Any new inspection type	New TemplateVersion, not a new product
§1.2.23	Three observation types	Observation / Positive / Adverse
§1.2.24	Daily irregularities for spot rectification	Daily extract during In execution
§1.2.25–30	HO/RO release; online reply; SMS/email; timers; accept/reject; comments visible	Lifecycle + Bank gateway
§1.2.31–32	FACC at 100% or committee; persist unrectified	§6.7. Legacy object 2 makes this true on day one.
§1.2.33–35	Income leakage dual sign; confidential docs; offline	Own objects. Two offlines in §6.8.
§1.2.36	Malayalam	UI and print
§1.2.37–39	Instant matrix and trend; historical ratings; letters	After publish. History after load.

§1.2.40–41	Legacy by go-live, bidder's job	§5.4. Not a matrix row.
§1.2.42	Alerts; LRM, concurrent, surprise, KYC, revenue…	Templates, phased after Phase I core
§1.2.43	Sixteen reports	Annexure C, plus FACC, 5×5, ROM register, society grades
§1.4 roles	Six named logins	§6.17 verbs
FACC edit note	HO edits FACC; branch complies until done; rejection comments visible	Encoded as guards on the FACC object

5.10 OMS and exception items (RFP §1.6–1.9)

Accepted as written. Implementation notes that change how a naïve vendor would build it:

- An OMS exception is the same family of object as an Adverse observation and a ROM "No." One compliance verb set. One trail. One MIS.
- Near-real-time is a property of the feed. We will say "nightly" if the Bank gives a nightly file, and "near-RT" if the Bank gives events. We will not print the more impressive word over the less impressive interface.
- Distribution matrix is policy data: severity × fact type → Branch / RO / HO.
- Concurrent / internal auditors get a read-and-verify path, not a second OMS product.

First rule pack we will put on the SRS table

Rule	Predicate (illustrative)	Sev.	Route	Why first
DP vs stock	Drawing power > last stock statement + tolerance	H	Branch + RO	Credit hygiene; also Annexure-3 item 63
DEAF pendency	Inoperative past threshold not transferred / refund SLA broken	H	Branch + HO	Regulatory; Annexure-3 16–24
Suspense ageing	Sundry / suspense past policy days	M	Branch	Tables 20–21; Annexure-3 sundries
Re-KYC overdue	Risk-category review past 6 months / re-KYC due	M	Branch + RO	Feeds Phase I persistence
TDS / 15G-H	Code mismatch or missing form on interest credit	M	Branch	Annexure-3 43–49
Cash retention	Cash above limit overnight	H	RO	ORM cash marks
Evergreening hint	New sanctioned to a recently-NPA related party (heuristic)	H	HO	Said as heuristic; human must confirm

The last rule is labelled a heuristic on the screen. Accumo will not call a heuristic a finding. That is FREE-AI in a sentence.

5.11 General, AI, DPDP, SBOM (RFP §1.10–1.34, compressed)

RFP	Answer
Forensic logs; fool-proof access	Append-only AuditEvent; six-role verbs; no shared branch login

1 year warranty from go-live + 4 years ATS	Accepted. Clock starts on §7.2 go-live, not on first login in UAT
VAPT / IS findings fixed free for the term	Accepted. Innovation Incubator + engineering bench
Install on existing or new setup; upgrades	Same binary, Bank DC or MeitY
5 years, Bank exit on 90 days	Accepted. Architecture survives the exit because the Bank owns policy and templates
New reports for 5 years as RBI/Bank instruct	Configurable first; coded reports if the instruction is new facts
§1.32 AI	§6.12. Assist. Cite. Do not publish.
§1.33 DPDP	Processor. India-resident. Masked non-prod.
§1.34 SBOM	Machine-readable on major releases
Training ≤20; FM 1 at HO	§7.6
8-week go-live	Accepted in full. §7.2: solution live and operational in 8 weeks; estate onboarded in agreed waves.

Phase II, closer in — what the inspector actually fills

Annexure-2 is a long performa. Summarising it as “100 marks” is how Phase II stays a skeleton. This chapter names the parts so engineering cannot “reuse the branch form.”

5.12 Part A — identity and three-year profile

The inspector records, in ₹ lakh: name and registration number; type (PACS / MISC / EMPLOYEES / INDUSTRIAL); date of registration; inspection period; statutory audit up to; date of this Bank inspection; Audit class and Appendix III status across three years; members and borrowing members and the ratio; last three years’ audited profit or loss; deposits, loans and total business across four year-ends with a progress column; staff count; branches of the society; average deposit and average loan; accounts per employee. Several of these cells in the Bank’s own sheet are currently `#DIV/0!`. Accumo will compute the ratios from the inputs and will not import a broken formula as a feature.

Red cells on the Bank sheet are “need not be entered.” We honour that as computed fields, not as hidden fields an inspector must hunt.

5.13 Part B — physical verification

Cash, gold, lockers, loan files — counted, not estimated. This is Group 3. There is no adapter. The tablet must work in a room with no signal and produce a signed physical-verification note that attaches to the engagement. Ideal-position flags (CASA >25%, CD ~75%, yield / cost / margins vs working fund) sit beside the numbers as a conversation with NABARD language, not as a second scoring engine.

5.14 Part C — the 100 marks, with slabs

Illustrative slabs, from the workbook parse, for Risk Committee confirmation. They live in the society policy object, not in code.

Head (marks)	How the marks typically fall
Own fund / working fund (15)	Stronger own-fund ratio, more marks. Weak leverage is not a “control” miss; it is a solvency miss.
Deposit growth (15)	≥20% → 15; then 15–20, 10–15, 5–10, 1–5, none → 0. Growth, not size. A tiny society that grew is not punished for being tiny.
Earnings (10)	Net profit / inadequate / loss. A loss-making society cannot earn an A grade.
Fluid resources (15)	Against the Bank’s fluid-resource instruction, not against a startup’s guess.
CASA / total deposit (15)	Low-cost mix. Ideal flag >25% sits beside, and may coincide with, the marks.
Overdue to demand — principal (15)	Worse overdue, fewer marks. Opposite of Business Risk polarity, same as Control Risk polarity.
Overdue to demand — interest (10)	Same direction, smaller weight.

Systems and controls (10)	The only Part C head that is an inspector’s judgement, not a ratio. Still not a 5×5.
Compliance on previous report (5)	This is persistence, society-flavoured. Last year’s open items, if loaded, make the mark honest.

Worked file. Own-fund 12/15, growth 9/15, earnings 6/10, fluid 10/15, CASA 12/15, overdue P 8/15, overdue I 5/10, systems 7/10, compliance 3/5. Total 72 → grade **B**. Published only after HO confirm. No cell on the branch heat map changes, because this society is not a branch.

5.15 Part D — the Bank’s own money

Part D is Kerala Bank looking at the loans it has itself given the society. That money lives in Finacle. It is Group 1. Pre-fill it. Let the inspector confirm, not retype, the outstanding. Related-party borrowings by directors and family are Group 3 and are not “optional culture.” They are on the form because that is how cooperative capture works. Accumo will not bury them on page 40 of a scroll.

5.16 Item 59 — computerisation, as a master field

Fully / partially / not; on CBS or not; reports reaching the society or not; backup method. Stored on the Society master, not only on one year’s form, so next year’s inspector does not ask the same question from zero — and so we never again design a feed to a society whose master says “ledgers only.”

SECTION 6

Proposed Solution

This section is the machine. If §5 said what is in scope, this says how a mark becomes a rating, how a rating becomes a visit, how a "No" in a ROM return becomes an 8-mark question on the next branch file, and how none of that can happen without a trail.

6.1 Solution identity

Field	Value
Brand	Accumo
Class	Enterprise Audit Management Solution for Risk-Based Internal Audit
Placement	Application layer above Core Banking. Does not replace Finacle.
Organising idea	One platform · three instruments · two rating engines · one certification track
Rule ownership	Versioned policy file, Risk Committee
Rating ownership	Head Office. Engine output is always provisional.

6.2 Design principles

Seven principles governed every decision that follows. Where we rejected an alternative, we say so — the rejected road usually explains the choice better than the chosen one.

1. The Bank owns the rules. We build the engine that runs them. Weights, bands, the 3-to-5 map, the 25-cell matrix, frequencies, man-days, override codes — all live in a versioned policy file. A policy change is an authorised edit with a reason and an effective date, not a support ticket. We rejected hard-wired scoring because it makes the Bank a tenant in its own audit system.

2. Checklist marks measure quality. Business Risk measures size. They move in opposite directions. We rejected the naïve inversion (high marks = high risk) because it would place a clean 90% branch in Extremely High and would not survive scrutiny by a qualified auditor. ADR-004 records the polarity as product law.

3. Three instruments, not one scoring engine. Shared workflow is a gift. Shared rating logic is a mistake. We rejected "one engine, swap the template" the moment Annexure-2 and Annexure-3 were read as documents rather than as filenames.

4. AI is judged by whether it can explain itself. FREE-AI asks the sector to enable AI responsibly, not to fence it off. Our AI does labour a human should not have to — reading every report, clustering the same KYC gap said twelve ways — and then shows its work. It never publishes a rating. We rejected both the black box and the theatrical kill-switch.

5. An audit system must itself be auditable. Every mark, override, closure, and policy edit is written to an append-only trail with actor, time, and before/after. Nothing of consequence happens without a record, and no record can be quietly altered.

6. Built for the branch as it is. Intermittent connectivity. Malayalam. Offline capture that never silently discards an inspector's entry. Societies that keep ledgers. We rejected "online-only, English-only, CBS-only" because it fails exactly where this Bank most needs the system to work.

7. Risk is watched between visits. Periodic audit says where a branch stood on the day someone looked. OMS and the ROM return say what happened in the months nobody looked. RBIA is supposed to be forward-looking. The architecture treats it that way.

6.3 Architecture plates

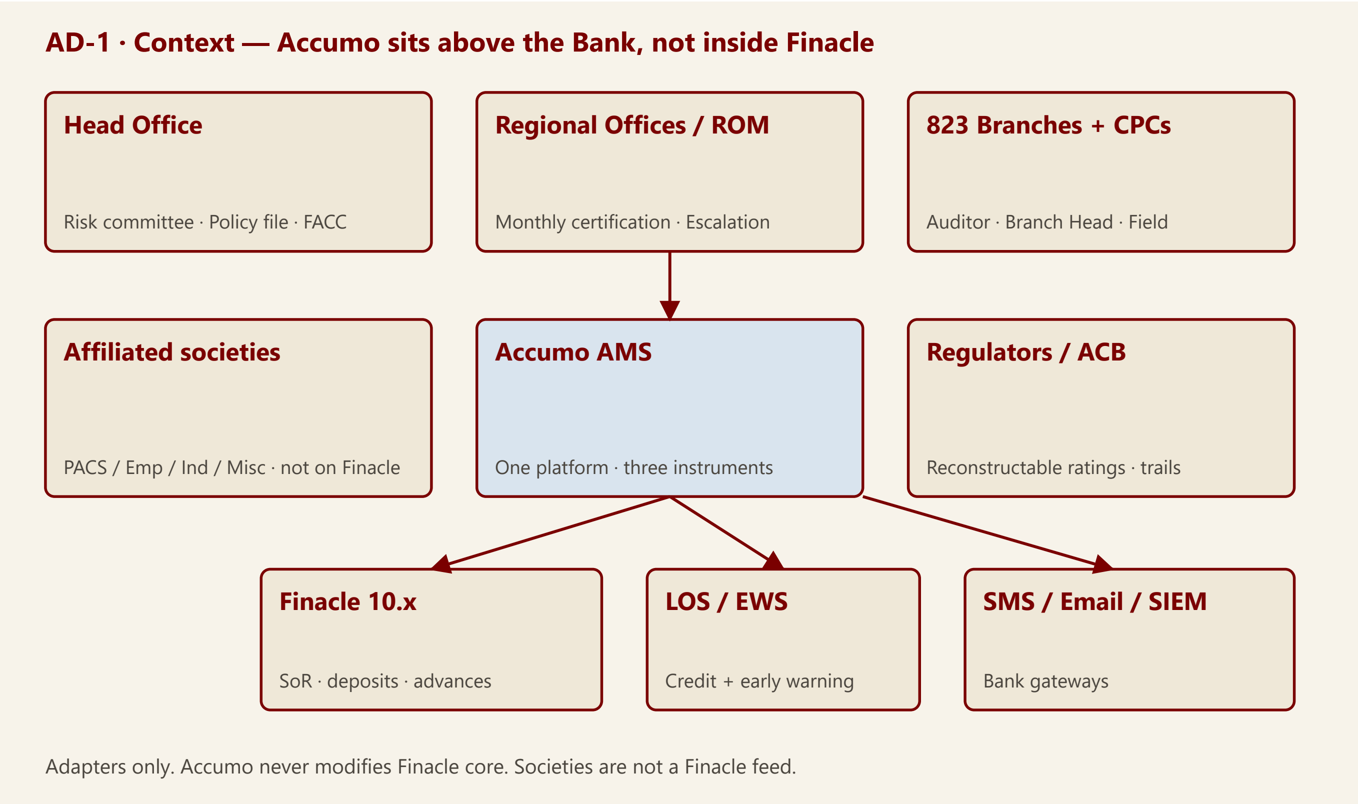

Figure AD-1. Accumo is a layer above the Bank's systems. Societies are drawn as their own estate because they are.

AD-2 · Logical layers

Presentation
Auditor tablet · Supervisor · Branch portal · HO 5×5 · bilingual PDFs

API & workflow
OpenAPI · state machine · maker-checker · notifications

Domain services
Checklist · two rating engines · ROM certification · observations · FACC · OMS

Policy & identity
Versioned policy file · RBAC (6 roles) · template freeze

Integration
Finacle / LOS / EWS adapters · file ingest · mock contracts for evaluation

Data & trail
PostgreSQL · object store · append-only audit ledger · India-resident

Figure AD-2. Domain services and the policy file are first-class layers, not features of a form renderer.

AD-3 · One platform, three instruments — not one rating engine

Shared platform
Users · workflow · observations · documents · trail · Malayalam · dashboards

Phase I Branch

Engine A
Business Risk × Control Risk
5×5 → L / M / H / VH / EH

Data: Finacle + onsite checklist

Higher marks = lower CR
Annexure-1 · 426 marks

Phase II Society

Engine B (own engine)
Financial-health grade A–E
Does not sit in the 5×5

Data: 3 groups (CBS / files / site)

Most societies not on Finacle
Annexure-2 · 100 marks

Phase III ROM

No rating engine
Signed monthly certification
“No” escalates to HO

Feeds Phase I compliance (8 marks)

~9,900 filings / year if per-branch
Annexure-3 · 64 Yes/No

ROM defects are an input to the next branch audit — not a silo

Figure AD-3. The organising diagram of this bid. Shared platform; two engines; one certification track; ROM feeds Phase I.

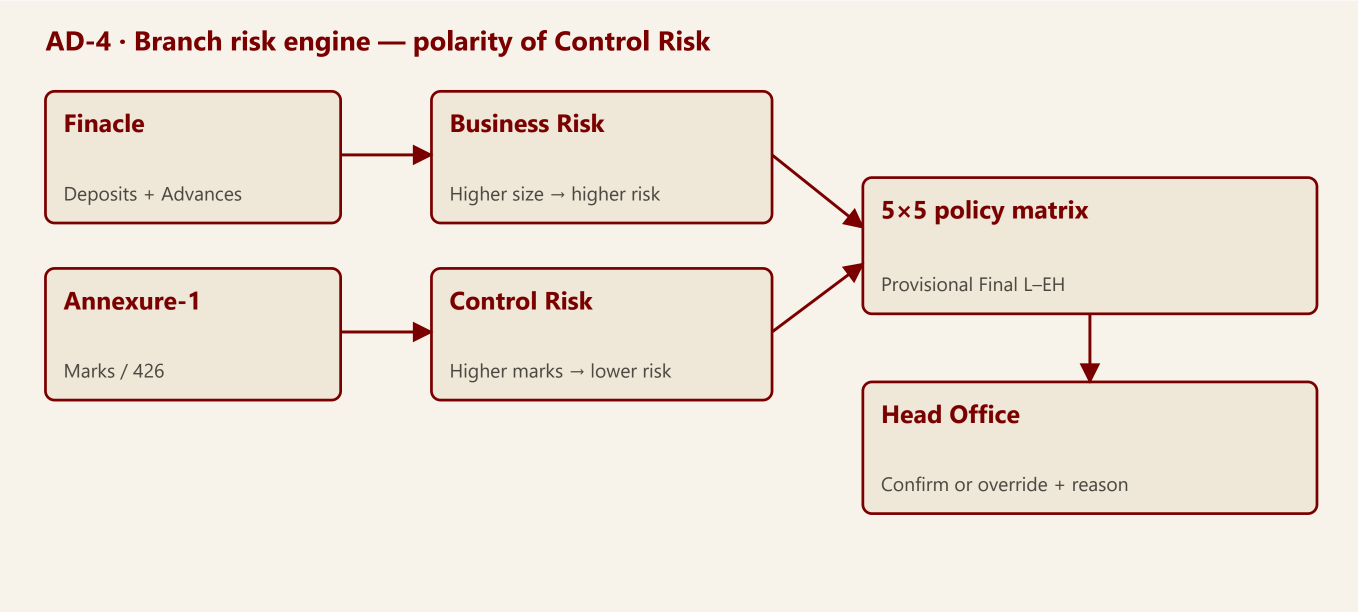

Figure AD-4. Branch engine only, with polarity drawn on the arrows so it cannot be missed. 90% on the checklist is a well-run branch (Low control risk); 22% is a failed audit (Extremely High). The 5×5 matrix then applies judgment — a perfect score on a top-tier branch resolves to Medium, not Low.

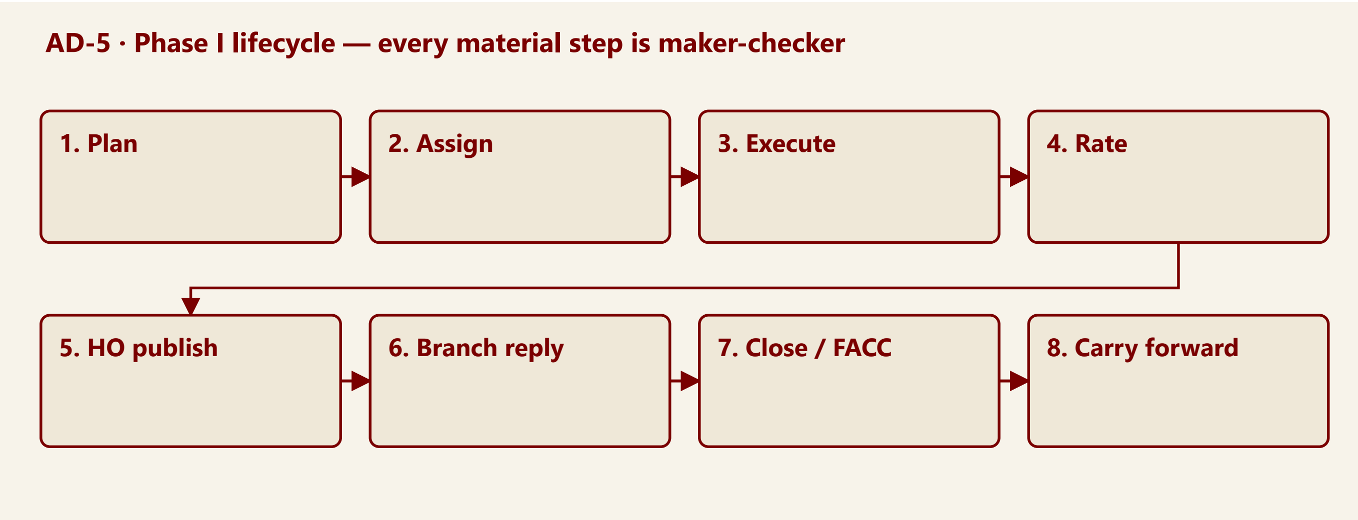

Figure AD-5. Phase I lifecycle. Material transitions are dual-control.

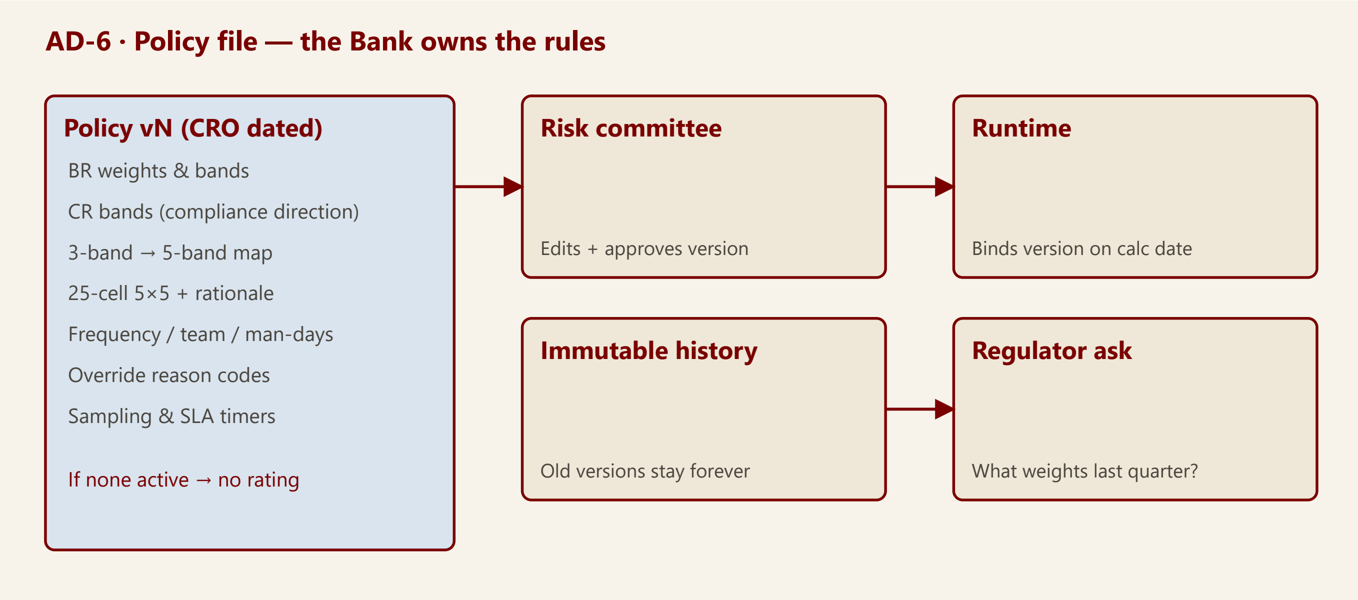

Figure AD-6. If no policy version is active, the engine produces nothing. That is a feature.

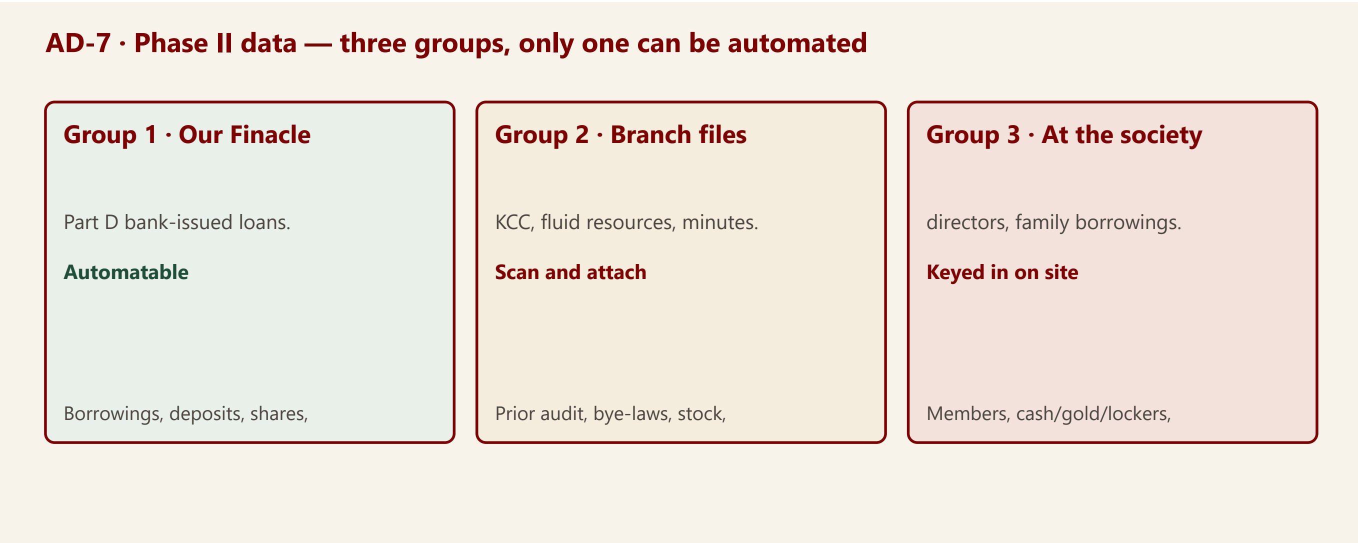

Figure AD-7. Phase II data reality — only Group 1 is a Finacle conversation. Annexure-2 item 59 asks whether the society is computerised and on CBS; the form already assumes many are not. Phase II is not a Finacle clone of Phase I.

AD-8 · Deployment — Bank choice, India-resident either way

Path A · Bank DC / DR

DR pair · Bank network · CISO gate

Same application binary as Path B

App + DB in Bank data centre

Path B · MeitY cloud

MeitY-empanelled · residency controls

Same application binary as Path A

India region only

Figure AD-8. Same binary on Bank DC/DR or MeitY cloud — India-resident either way. No data leaves India, and the evaluation can run from an offline pack so the demonstration does not depend on the Bank network that day.

AD-9 · Security topology

Edge

TLS · WAF · SSO option

App

RBAC · 6 roles · ACL

Data

Encrypt rest + transit

Trail

Append-only ledger

Identity

Least privilege · session policy

Supply chain

SBOM · VAPT · escrow

Privacy

DPDP processor · India only

Figure AD-9. Security is a topology, not a closing chapter.

AD-10 · Legacy load — otherwise day-one features lie

1 Ratings

2 Open items

3 Last date

4 FACC / close

5 Masters

6 Leakage

If present

Trend + persistence work on day one

If absent

Show “insufficient history” — never fake green

Figure AD-10. Features that need history either get history or they confess.

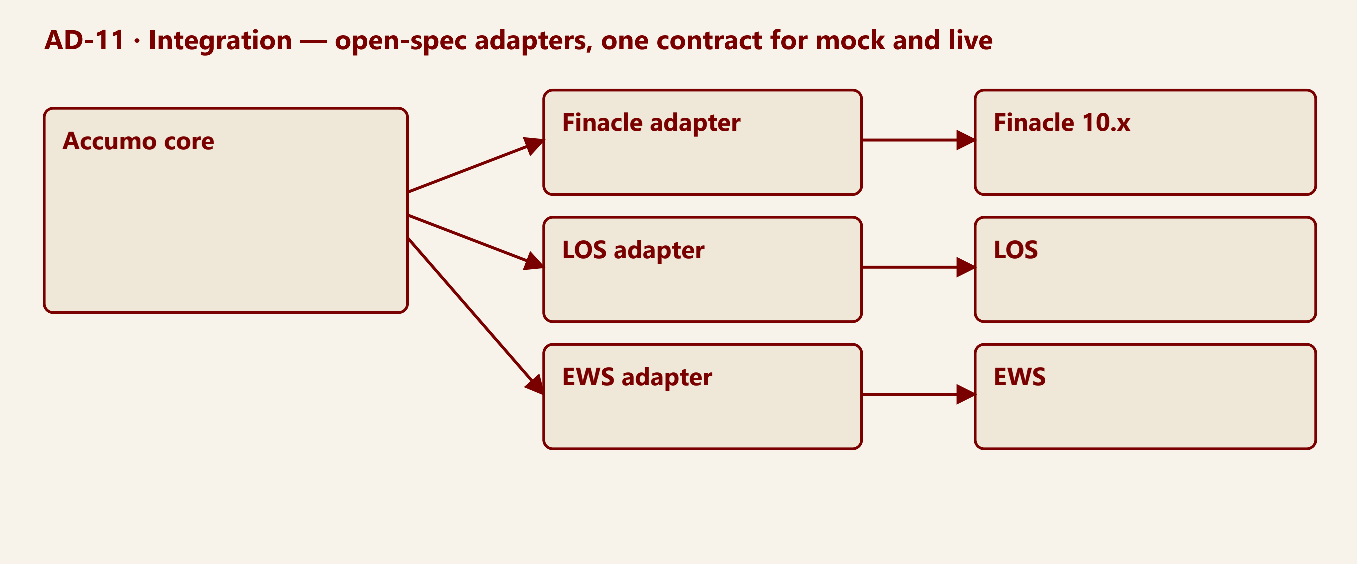

Figure AD-11. One adapter contract — mock in evaluation, live in production. Evaluation uses schema-compatible mocks against the same adapter contracts; production swaps the transport, not the product.

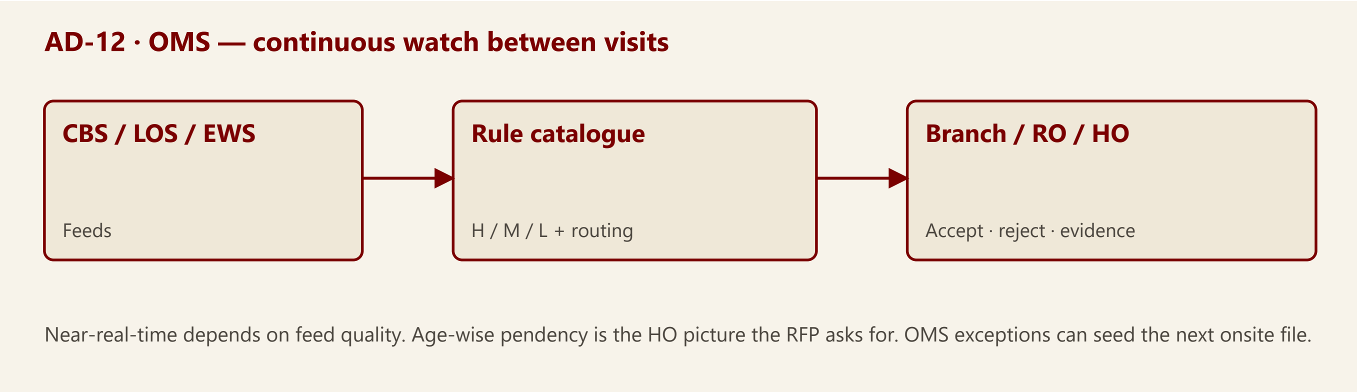

Figure AD-12. OMS is a parallel watch that writes the same kind of object as an onsite finding.

6.4 The two rating engines and the certification track

Software people collapse different assessments into one "score service" because it is less code. Audit people do not, because the assessments mean different things. Accumo follows the audit people.

	Engine A — Branch	Engine B — Society	Track C — ROM
Question it answers	How big is this branch, and how well is it run?	How healthy is this affiliated society?	Did the ROM certify this month's hygiene?
Inputs	Finacle size + Annexure-1 marks	Nine financial-health parameters + Parts A/B/D	64 Yes / No / Remarks
Output	Final L–EH via 5×5	Grade A–E	Signed return + escalations
Drives	Frequency, team, man-days, HO attention	Society supervision intensity, affiliation watch	Escalation, and the next Phase I's 8-mark block
Polarity	BR up = worse; marks up = better	Marks up = better	None

A single `RatingService` with a `type` switch is how this goes wrong in year two. Accumo has two explicit engines and a certification service. They share a policy-file reader and a publication workflow (provisional → HO) where a rating exists. ROM has no publication of a grade because there is no grade.

6.5 Branch risk mechanism — worked examples

Business Risk first. Deposits and advances are read from Finacle (or from the mock contract in evaluation). Each is banded by the table in §5.1.2. Default composite is 50 / 50. The composite lands on a Business Risk band L–EH. Nothing in this paragraph looks at the checklist.

Control Risk second. The auditor works the sectioned Annexure-1. Each sub-question is 1 mark. Live roll-up is visible. On submit, inputs freeze against the template version. Score % = obtained / 426 × 100, after whatever N/A rule the Bank confirms at SRS. The 5-band Control Risk table in §5.1.2 is applied. A 90% file is Low control risk. A 22% file is Extremely High control risk.

The 5×5 then applies judgment. The full 25 cells with rationale are Annexure B. Two worked files:

Worked file 1 — large, well run

Deposits ₹48 Cr → H. Advances ₹52 Cr → H. Business Risk = **H**.

Checklist 362 / 426 = 85.0% → Control Risk = **M** (70–85).

Cell (H, M) → Final **M**. Frequency 9 months. One junior. 1.5 days. Branch-head review.

Reading: an active urban branch that is acceptably run. Size keeps it off Low; the audit keeps it off High.

Worked file 2 — small, failed

Deposits ₹7 Cr → L. Advances ₹9 Cr → L. Business Risk = **L**.

Checklist 98 / 426 = 23.0% → Control Risk = **EH**.

Cell (L, EH) → Final **M**. Not Low. The 12 July rationale calls this an audit-quality watch cell: a tiny branch with a failed audit is suspect; the auditor may not have known the place.

A third file, the one generic vendors get wrong: deposits ₹190 Cr (EH), checklist 410 / 426 = 96.2% (L). Cell (EH, L) = **M**. A perfect score on the largest branch is statistically suspicious. The Risk Committee may install a faster-cadence backstop in the policy file without calling us.

Trend is the sign of movement against the last *published* rating, not against last year's rumour. No last published rating → "insufficient history." After legacy load, trend works on day one.

Publication: the engine rating is provisional. Head Office confirms or overrides. Override requires a reason from a short list (recovery failure, concentration, special MD direction, bank-specific event, restructuring, other-with-note) plus a written justification. Save is impossible without both. Both numbers remain visible. A 90-day reminder sits on an override; the history sits forever.

6.6 Policy file, template freeze, HO authority

The policy file is a versioned document, not a `constants.py`. Each version has an identifier, a CRO (or nominated) approver, an effective date, and an immutable predecessor. Runtime binds the version that was active on the calculation date. Historical ratings never silently recompute under new weights. If a regulator asks "what 5×5 did Palakkad Main use in September?", the answer is a document, not a guess.

Contents of a version: BR weights and bands; CR 5-band table; 3-to-5 map; 25-cell matrix; frequency / team / man-day / reviewer table; override reason codes; sampling defaults; SLA timers; OMS distribution matrix. What is *not* in the policy file: the annexure questions themselves. Those live in template versions, frozen when an engagement starts, so a mid-audit circular does not rewrite a file already in the field.

Bank administrators change templates and policy under controlled change. That is the RFP's "Bank should be able to change formats without the vendor." We took it literally.

6.7 Lifecycle, observations, FACC, persistence

Canonical Phase I states: Planned → Assigned → In execution → Submitted → Supervisor decision (approve / reject / more info) → Issued to auditee → Branch reply → Supervisor accept / send back → Closure test → FACC issued → Persistent items written onto the next engagement → Closed. The 12 July flowchart is the source; the state machine is the implementation.

Maker-checker is not a flag. It is a refusal. The same user id cannot occupy both sides of a material transition. Supervisors who try will see a reason, not a silent skip.

Three observation types, because the RFP named three: Observation (a note), Positive (a confirmation worth keeping), Adverse (an irregularity that demands compliance). Only Adverse items enter the closure denominator and the persistence set. Daily extracts of open irregularities go to the auditee during the visit so spot rectification is possible before the file leaves the branch.

Income leakage is its own object: area, account, amount, dual sign (inspecting officer and branch head). It feeds the MIS the RFP listed, and it is one of the six legacy objects.

FACC is issued when every Adverse item is closed, or when the Audit Committee of Executives path is taken. HO can edit FACC under rules the Bank sets. Rejection comments are visible to the branch. Unrectified items at closure are copied, with age, onto the next engagement for that auditee — and, after legacy load, onto the first digital engagement as well.

Confidential documents (special reports, investigation reports) are addressed to named users or roles. They do not appear in the ordinary branch file.

6.8 Offline

Two offline problems, often confused.

Evaluation offline. The demonstration can run from a preloaded pack so product truth does not depend on Bank network that morning. Mocks honour production adapter contracts.

Field offline. An inspector in a hill branch captures checklist answers and observations without a link. On reconnect, the device replays a signed operation log. Conflicts (two edits to the same sub-question) never silently discard the inspector's entry; they surface to the supervisor. Engagement freeze still holds: you cannot pick up a new template version while disconnected and call it the same file.

6.9 Malayalam as first-class

A language toggle on a marketing screen is not Malayalam support. Accumo ships two locales for chrome and for printable artefacts: summary, rating letter, FACC, major-observations list. Domain leadership approves audit vocabulary (a "finding" is not a "bug"). Engineering owns Unicode fonts and PDF layout so conjuncts do not become tofu in a footer. MRCB already taught us this is a print problem.

6.10 Integration mechanism

Every external system meets Accumo at an adapter. The adapter's job is to translate a Bank interface — API, view, or file — into a stable internal contract: branch balances, sampling universe, Part D society exposures, OMS facts, notification send, SIEM export. Finacle remains system of record for deposits, advances and the other CBS facts. Accumo never writes back into Finacle as part of rating. If a future circular wants a finding pushed into another system, that is a new adapter operation, not a new core.

Until Bank interfaces are available, evaluation and early build use schema-compatible mocks. The mock is not a second product. It is the adapter's test double. When Wipro (or whichever SI owns Finacle) publishes the live contract, we change the transport behind the same interface.

Phase II Group 1 (Bank-side society balances and Part D) uses the Finacle adapter. Groups 2 and 3 do not. That is a one-line architectural sentence that saves a year of false integration promises.

6.11 OMS mechanism

A rule is a named predicate over a fact (from a feed or a file), a severity, a route, and an explanation template. Rules are data. The Bank adds them. The first five we will bring to SRS are listed in §5.5. When a rule fires it creates an Exception, which is the same family of object as an Adverse observation: evidence, accept/reject, SLA, trail, optional promotion into the next onsite file. Dashboards for age-wise and category-wise pendency are the Audit Committee artefact the RFP asked for.

Near-real-time is a property of the feed. A nightly file produces a nightly watch. An event stream produces a faster watch. We will not print "real-time" on a slide over a batch interface.

6.12 AI boundary

Where AI is used, it is assistive and phased. The pipeline the RFP's §1.32 language points at: ingest reports (digital and migrated) → normalise the many wordings of the same finding → cluster themes across units and time → draft a consolidated view for a human. Every output carries citations back to source files. A controller correction is stored. Nothing the model writes can become the published HO rating. Product law, not a setting.

India-region inference for any personal data. Inventory of models and prompts when production-enabled. 24-hour incident path under FREE-AI. Every AI output is reconstructable by a NABARD inspector; Phase I is complete and fully functional on its own, and AI is added as governed, explainable assistance.

6.13 Technology stack

Exact versions are pinned at SRS and will follow Bank standards where they exist. The shape below is what we will defend.

Layer	Choice	Why
Web / tablet client	React, TypeScript, bilingual i18n	MRCB continuity; large-target field UI
API	Modular services, OpenAPI, typed contracts	Adapter boundary is a contract, not a hope
Workflow	Explicit state machine per instrument	Maker-checker is refusal, not a flag
Primary database	PostgreSQL	Transactional integrity for ratings and closure
Objects	S3-compatible, India-resident	Workpapers, scans, report archive
Auth	Application RBAC for six roles; Bank SSO later if offered	Least privilege on day one
Reports	Server-side PDF, Malayalam-capable fonts	Print is a product, not a browser "Save as"
Jobs	Workers + optional Redis	Notifications, OMS evaluation, report bursts
Offline	Encrypted local store + signed operation log	No silent discard
AI (phased)	India-region model API + orchestration	FREE-AI; no auto-publish
Observability	Structured logs, metrics, SIEM export	Bank SOC
Hosting	Bank DC/DR or MeitY cloud, India region	Same binary, Bank choice

6.14 Security, privacy, supply chain

Encryption in transit and at rest. Session policy. Confidential-document ACL. Trails designed to be usable as forensic evidence, which is the RFP's own phrase. Quarterly VAPT and IS-audit findings remediated at no extra cost for the contract term. CISO sign-off is a go-live gate, not a courtesy. SBOM on major releases. Source-code escrow as the contract will state. Independent third-party specialists run VAPT and hardening; Innovation Incubator's ISO 27001 practices cover the delivery organisation; Altiora's own ISO 27001 programme is in progress and will not be described as certified until it is.

DPDP: Altiora is a Data Processor on the Bank's documented instructions. Purpose limitation. Access logs. Breach workflow. Demo and development use masked or synthetic branch data. No production personal data resides on developer machines or in non-production stores — a common failure mode we explicitly design against.

6.15 Architecture decision records

ADR	Decision	Rejected alternative
001	Adapter boundary. Never modify Finacle core.	Stored procedures inside CBS
002	Policy as data. No silent default weights.	Hard-coded scoring
003	Provisional then published. Dual history.	Engine rating is the rating
004	Higher checklist marks = lower Control Risk. Higher society marks = better grade.	The inverted "high marks = high risk" reading
005	Bilingual printables, not only UI chrome.	English PDFs + a toggle
006	AI assists; it does not judge.	Auto-rating; theatrical kill-switch as a substitute for design
007	Phase I core before full OMS / AI / estate rollout.	Eight-week everything
008	India-region hosting, Bank DC or MeitY.	Offshore or multi-region "for latency"
009	Offline evaluation pack + field offline as distinct problems.	One "offline" checkbox
010	One platform, two rating engines, one certification track.	One engine, three templates
011	ROM findings are first-class inputs to the next Phase I file.	Three siloed modules
012	Legacy load is a product feature. Missing history is labelled, never faked.	One-line "file import" in a matrix
013	Phase II has three data groups. Only Group 1 is CBS.	Assume societies are on Finacle
014	Templates identified by id, not Excel row, so Bank defects are not shipped.	Faithful transcription of a broken sheet

Mechanisms in working order

Architecture plates tell you where the pieces sit. This chapter tells you what happens when a person sits down to do the job. If a CA or a retired inspector cannot recognise themselves in these pages, the architecture is still a drawing.

6.16 The 21 quantitative tables and the 15 sub-annexures

Annexure-1 is not only 426 marks. The same workbook carries 21 quantitative tables that describe the branch as a business, and 15 sub-annexures that hold the named irregularities the marks refer to. A system that scores the checklist and ignores the tables has digitised the grade and thrown away the file. Accumo models both as first-class forms, versioned with the template.

Tables 1–21 — the branch as numbers

#	Table	What the inspector is looking at	Typical source
1	Operating expenses	Electricity, miscellaneous, postage, printing, rent, staff	GL / CBS
2	Previous inspection status	Last rating, period covered, dates, man-days, special report, first and final compliance, non-complied critical items	Legacy + Accumo history
3	Gold loan statement	GL balance and count, packets, physical verification, net weight tally	CBS + on-site
4	Other deliverables	ATM cards, cheque books, DD, pay order; stock register	On-site
5	Balances with other banks	Dr / Cr as on year-end vs GL	CBS / recon
6	Deposits — individuals / institutions except societies	CASA vs others, two year-ends	CBS
7	Deposits — counterpart set	Same shape; society / other cut as the performa specifies	CBS
8	Inoperative / unclaimed	Counts, KYC on reactivation	CBS + Annexure-11
9	Staff deposits	Name, type, amount — related-party hygiene	CBS
10	Loans — individuals and society	Outstanding by cut, two dates	CBS
11	Loans by type	Product-wise book	CBS
12	Complaint / suggestion box	Whether the branch actually runs one	On-site
13	Government schemes	Participation and leakage of subsidy	CBS / files
14	Recovery / NPA position	NPA as on dates	CBS
15	Movement of NPA	How the book walked	CBS
16	Recovery status	What was actually recovered	CBS / recovery cell
17	RM / OTS settlements	Loans settled under RM policy	CBS / HO
18	Interest subvention	Claim vs pass-through (₹ lakh)	CBS / claims
19	Fraud reporting	Whether the branch has a fraud story it has not told	On-site + HO
20	Sundry assets, age-wise	Pendency buckets	CBS

21	Sundry liabilities, age-wise	Pendency buckets	CBS

Where a figure can be pulled from Finacle, Accumo pre-fills and stamps the source timestamp. The auditor may overwrite with a reason (CBS stale, recon pending). Overwrites are trail events. Tables 2, 12, 19 and parts of 3 and 4 are not CBS conversations; they are the file remembering itself and the inspector looking.

Sub-annexures 1–15 — where a mark becomes a name

#	Sub-annexure	Constraint we honour
1	Gold loans where amount is not covered by ornament value	₹ lakh; account-level
2	Purity irregularities on pledged ornaments	Account-level
3	Gold verification	Minimum 10 accounts — sampling engine refuses to close below the floor unless HO waives with reason
4	KYC irregularities	Feeds persistence
5	Risk-categorisation irregularities	PMU list attachable
6	SHG account irregularities	Account-level
7	Complaints on term-deposit renewals	Customer-level
8	Irregularities in TD / OD against term deposit	Account-level
9	TD loans existing after deposit maturity	Account-level
10	Documentation of term loans to minors	Account-level
11	Inoperative → operative transfers	PMU list
12	Security property inspected by inspecting officer	Random sample
13	Defective appraisal and documentation	Account-level
14	Post-sanction inspection by Branch Manager (auditor verifies)	BM evidence + auditor tick
15	Physical stock verification on OD / CC / MSME by BM (auditor verifies)	BM evidence + auditor tick

A mark on “gold verification” that is not backed by at least ten named accounts in sub-annexure 3 is an incomplete file. The state machine will not let the auditor submit. That is how we stop the Excel habit of writing “verified” and attaching nothing.

6.17 Roles and what they are allowed to do

Six RFP roles. Permissions are not “screens they can open.” They are verbs the state machine will or will not accept.

Verb	Super User	HO Admin	HO Controller	RO Supervisor	Branch Head	Internal Auditor
Edit policy file / templates	•	•				
Plan / assign / reschedule	•	•	•			

Execute checklist / raise observations						•
Submit file						•
Approve / reject / request info			•	•		
Publish or override rating			•			
Reply to observations / attach evidence					•	
Accept / send back compliance			•	•		
Issue FACC			•			
See confidential special reports	•	if addressed	if addressed	if addressed		if addressed
File ROM monthly				ROM as role or mapped user		
Read-only regulator view	A seventh read-only persona, not a seventh writer. Issued on request.					

The same person cannot occupy both sides of a material verb on the same object. If the only supervisor in a small RO is also the auditor on a file, the system demands an HO controller on the checker side. We would rather raise a staffing exception than silently collapse maker-checker.

6.18 State machine — Phase I

From	To	Who	Guard
Planned	Assigned	Controller / Admin	Team with a leader; man-days allotted
Assigned	In execution	Auditor	Template version frozen; pre-audit pack generated
In execution	In execution	Auditor	Saves; offline sync; daily irregularity extract optional
In execution	Submitted	Auditor	426-mark spine complete; sub-annexure floors met; no empty required table
Submitted	More info	Supervisor	Comment mandatory
More info	Submitted	Auditor	Responds; freeze still holds
Submitted	Rejected to auditor	Supervisor	Comment mandatory
Submitted	Issued to auditee	Supervisor + HO path as policy	Provisional rating computed; HO may hold publication
Issued	Branch replied	Branch Head	Every Adverse item has a reply or a dispute note
Branch replied	Sent back	Supervisor	Comment visible to branch
Branch replied	Compliance accepted	Supervisor	Per item
All Adverse closed OR committee path	FACC issued	HO Controller	Closure rule in policy

FACC issued	Closed	System	Open items copied to next engagement as persistent

6.19 Sampling

RFP §21 asks for automatic sampling of loan accounts per Bank policy, plus the right of the auditor to add an account by hand. Policy is "updated from time to time," which is another way of saying it does not belong in code.

Accumo's sampler is a named rule set in the policy file: product, overdue flag, sanction vintage, amount band, NPA status, related-party, gold, government-scheme. Each rule has a floor (sub-annexure 3: minimum ten gold accounts). The CBS pull at engagement start materialises the universe; the sampler proposes; the auditor may add. Manual adds require a one-line reason ("smell-tested on the day"). The sample list is frozen with the template so a late CBS refresh cannot swap the accounts under an inspector who is already in the strong room.

6.20 Data model, in one sitting

The words a developer will type, so there is no second translation.

- **OrgUnit** — HO, RO, CPC, Branch, Society, Department. A Society is not a Branch subtype. It has registration number, board, statutory class, computerisation status, former-DCB identity.
- **User / RoleBinding** — six roles; a user may hold different roles on different units, never both sides of a verb on one object.
- **PolicyVersion** — the rulebook. Immutable once approved.
- **TemplateVersion** — Annexure-1, 2, 3 and later types. Questions, marks, floors.
- **Engagement** — a visit or a ROM month or a society inspection. Pins PolicyVersion + TemplateVersion at start.
- **Response** — an answer to a sub-question, with author and time.
- **ScoreRollup** — computed, never typed. Engine A or Engine B or none.
- **Rating** — provisional and published pair, for Engine A and Engine B. ROM has none.
- **Observation** — Observation / Positive / Adverse. Optional link to a sub-annexure row.
- **Exception** — OMS or ROM "No." Same compliance verbs as Observation.
- **Evidence** — file, ACL, hash.
- **IncomeLeakage** — area, account, amount, dual sign.
- **FACC** — bilingual artefact + state.
- **AuditEvent** — append-only, hash-chained, before/after.
- **LegacyStub** — a historical object that may be thinner than a digital one, labelled as such.

ROM defects are Exception rows whose `feedsEngagementType` is Phase I. When a branch engagement opens, the pre-audit pack queries open Exceptions of that kind. The 8-mark compliance section can be suggested from that query. Suggested is not scored. The auditor still types the mark.

6.21 Three days in the life

A Tuesday in a hill branch — Phase I

The auditor downloaded the pack on Monday night at the RO, when the link still worked: last published rating, three persistent items (one of them a 2024 KYC gap loaded from legacy), two open ROM "No"s from March, a gold sample of twelve accounts, balances for Business Risk already banded H. Tuesday there is no link. She works the ORM sections on the tablet. She verifies ten gold packets against sub-annexure 3 and adds two more by hand because the appraiser's book looked optimistic. She photographs a locker register. She raises one Adverse, one Positive (the branch actually runs the complaint box). At 4 p.m. a bar of signal appears. The operation log replays. Nothing is lost. She submits. The file freezes. Control Risk computes at 71.2% → M. With Business Risk H, Final provisional is M. She does not publish it. That is not her verb.

A Thursday at an affiliated PACS — Phase II

The inspector is not walking into a Finacle branch. Group 1 is already on the tablet: the society's borrowings from Kerala Bank, its deposits with Kerala Bank, its shares, the Part D loan list. Group 2 is a set of scans the branch manager handed over in a faded folder the day before — last statutory audit, bye-laws, last inspection. Group 3 is why he came. He counts cash. He opens lockers. He writes the board names. He records that the society is partly computerised, not on CBS, backups on a single USB (item 59). He scores Part C. Own-fund ratio is weak, CASA is surprisingly fine, overdues are not. The engine returns grade C. There is no 5×5. There is no Business Risk. Head Office will still confirm the grade before it is a published fact about this society.

A month-end Friday — Phase III

The ROM opens 40 branch returns, not one regional essay. Twelve items are pre-suggested from CBS: DEAF clean, two branches with suspense ageing, one drawing-power breach. He accepts the suggestions he trusts, overrides one (the CBS figure is a known timing difference; he attaches the recon). He marks "No" on re-KYC for a coastal branch. That "No" becomes an Exception routed to HO and, next time an auditor opens that branch, a line in the pre-audit pack and a prompt on the 8-mark block. He signs the month. There is no score. There is a signature and a set of open Exceptions. That is the product.

6.22 Offline conflict, written as a rule

Two devices, one engagement, same sub-question, two different answers, both signed. The merge does not pick the later clock. Clocks lie. The merge opens a conflict observation addressed to the leader of the audit team. The leader picks, with a reason. Both original values remain in the trail. If the team is a single auditor, the conflict escalates to the supervisor. We have never seen a bank thank a vendor for a silent last-write-wins on an audit file.

6.23 Why this architecture wins for Kerala Bank

1. **It is suspicious of the right things.** A perfect score on a top-tier branch is Medium. A failed audit on a tiny branch is Medium, not Low. Those two cells are how you can tell the author has sat in an inspection debrief.
2. **It does not pretend societies are branches.** One thousand six hundred villages will not be saved by a Finacle adapter. They will be saved by a form that expects a ledger.
3. **It remembers, or it admits it cannot.** Trend and persistence are the two easiest lies in an AMS demo. We made them dependent on a real load, and we made the empty state a sentence instead of a green tick.
4. **It lets the Bank change its mind without calling us.** The 3-to-5 map, the 85% cut-off, the (EH, L) backstop — all policy. The first circular after go-live will prove this or kill it.
5. **It is bilingual where paper is bilingual.** A Malayalam FACC that a branch head can pin on the notice board is the product. A Malayalam menu is the brochure.
6. **It is staffed on both sides of the sentence.** CAs and a retired SBI inspection officer own the meaning. Founders own the build. Anshad and Innovation Incubator own the fact that year three still has a bench.
7. **It can be demonstrated on Tuesday without the Bank's network.** SOUL taught us, expensively, that a product which cannot speak in the room does not win the room. Accumo is built to speak.

Security, testing, and the long five years

6.24 Control catalogue

Control	How it is real
Identification	Named users; no shared "branch" login. Bank SSO later if offered, same roles.
Authorisation	Verb matrix in §6.17. Same-person refusal.
Confidentiality	Document ACL; special reports addressed, not filed in the open branch pack.
Integrity of ratings	Computed roll-ups; template freeze; policy bind-by-date; dual history.
Integrity of trail	Append-only AuditEvent, hash-chained; no update, no delete.
Availability	Bank DC/DR or MeitY; DR drill before go-live; offline pack for field.
Privacy	Processor; India-resident; masked non-prod; purpose-limited extracts.
Supply chain	SBOM; dependency pin at SRS; escrow as contracted.
Vulnerability	Quarterly VAPT + IS audit; findings fixed free for the term; independent specialists on the hardening.
AI	No write-path to published rating; citations; inventory when enabled.
Operations	SIEM export; structured logs; FM resource at HO.

6.25 Testing strategy

UAT is not "the Bank clicks around." Scripts follow the six must-haves plus three hostile cases: (1) inverted-scoring regression — a 90% file must not land EH; (2) empty-history honesty — a brand-new unit must say "insufficient history," not Stable; (3) same-person maker-checker — the system must refuse. We will fail our own UAT if any of those three pass the wrong way.

Adapter tests run against the mock and, when live, against a recon of deposits and advances on a sample of branches. Phase II tests include a society with no CBS and a society with a file drop. Phase III tests include a "No" that appears in the next Phase I pack.

6.26 Five-year posture

The RFP is a five-year relationship with a 90-day exit. The architecture's job across five years is to survive circulars. Templates will change. Bands will change. A new inspection type will be invented on a Friday. If any of those require a release, we have already failed principle 1. Releases remain for defects, integrations, OMS rules that need new facts, and the AI chapter when the Bank wants it on. Facility management is the human interface to that posture: one person at HO who can add a user, reset a lock, and raise a real defect without a founder WhatsApp group.

Capacity, FREE-AI, and what “configurable” is not allowed to mean

6.27 Capacity plan

The estate we size for, not the estate we hope for.

Load	Planning number	Note
Branches and offices	823 + controlling offices	Known
Societies	1,700–2,200 until Bank count	Confirm week 1
ROM filings / year	~9,900 if per-branch	Design for this; slim if region-level
Concurrent Phase I files in season	Low hundreds	Audit season is the peak, not year-average
Named users	Low thousands over five years	Inspectors, branch heads, HO, ROM, read-only
Workpapers / scans	Tens of GB in year one, more with legacy scans	Object store, not the transactional database
Trail events	High; every mark is an event	Append-only table, partitioned by month

We do not need a hyperscale story. We need a system that does not fall over in March when half the ROs are in the field and HO is reading the 5×5. PostgreSQL on Bank iron or MeitY, with the object store taking the scans, is the honest size.

6.28 FREE-AI, recommendation by recommendation (the ones that touch us)

We do not claim to implement all 26 recommendations of the 13 August 2025 framework. We claim the ones that a bank AMS actually touches, and we leave the rest to the Bank’s wider AI governance.

FREE-AI idea	Accumo expression
Enable, do not merely restrict	AI is allowed to draft themes. It is not allowed to hide.
Human accountability	No published rating without a named HO actor. Product law, not a toggle.
Explainability	Citations back to source files. No orphan paragraph.
Inventory	When production-enabled: model, prompt family, date, owner.
Incident path	24-hour notice to the Bank if an AI component misbehaves in production.
Data minimisation / residency	India-region inference for personal data. No training on Bank files without written instruction.
Customer (here: auditee) fairness	A heuristic evergreening rule is labelled a heuristic. It cannot close a career.
Board / ACB visibility	If AI is on, the ACB pack says so, and shows override counts.

6.29 What "the Bank can configure it" is not allowed to mean

Configurable is the most abused word in this category. A screen with 400 checkboxes is not Bank ownership. Accumo's rule is narrower and stricter:

- A weight, a band, a cell, a frequency, a reason code, a sample floor, a SLA day-count — *yes*, in the policy file, versioned, CRO-dated.
- A new annexure question, a new inspection type, a new report column on existing facts — *yes*, in the template admin, versioned, frozen onto open files.
- A new fact that does not exist in CBS or in the form (a new feed, a new model, a new legal meaning of FACC) — *no*, that is a change request, and we will say so rather than hide it under "configuration."
- A silent default when no policy version is active — *never*. The engine stops.

If a vendor shows you a demo in which they type a weight into a text box that is not versioned, not approved, and retroactively rewrites last year's 5×5, they have built a demonstration prop, not a governed engine. Ask to open last September; if the published numbers have moved, the configurability is cosmetic.

6.30 The demonstration is the architecture, speaking

Annexure D is the script. This paragraph is why the script is in that order. Three roles first, because maker-checker that cannot be seen is a claim. Live marks second, because a frozen Excel imported as a PDF is the usual cheat. Engine A third, with the 90% file and the (EH, L) cell, because polarity and judgment are the whole product. HO 5×5 fourth, because that is pain point 7. FACC fifth, because a rating that cannot close is a dashboard. Persistence sixth, because that is pain point 6. Policy change seventh, because principle 1 is otherwise a slogan. ROM feed and society file last, labelled skeletons, because honesty in the room is how you are allowed to win the years after the room.

How a 29-mark group becomes software

Abstract engines convince other software people. Inspectors are convinced when they recognise Tuesday morning. Here is ORM-1, the first 29 marks of Annexure-1, treated as a product specification.

6.31 ORM-1 — Display, notices, premises

Twenty-nine sub-questions, one mark each. None of them is a ratio. Most of them are a pair of eyes and, often, a photograph. The interface is a walk around the branch, not a spreadsheet.

ID	Question (Bank wording, tightened)	Typical evidence
1.1	Copy of RBI licence displayed	Photo of the wall
1.2	Abridged audited P&L / balance sheet displayed	Photo
1.3–1.4	Working hours and weekly holidays, inside and outside	Two photos
1.5	Comprehensive notice board, 2 ft × 2 ft	Photo + a tape if the auditor is thorough
1.6	Cheque drop box and complaint box	Photo
1.7–1.9	Deposit schemes, loan and deposit rates, controlling-officer contact	Photo of the board
1.10–1.14	Ombudsman, vigilance / CGO, charges, grievance cell, DICGC	Photo; missing DICGC is an Adverse, not a shrug
1.15	KYC documents as per RBI	Photo of the list
1.16–1.18	Note exchange, locker notice, May I Help You	Photo
1.19	Separate counter for differently abled and senior citizens	Photo / N/A with reason if the unit is a CPC
1.20	Clean Note Policy	Observation + soiled-note handling
1.21–1.24	Security systems, alarms, CCTV working, **90-day CCTV backup**	The 90-day question is a fact, not a vibe. Auditor records the oldest clip date.
1.25–1.26	Premises neat; water, power, toilet	Eyes
1.27–1.28	Location conducive; rent agreement current	Agreement photo / date
1.29	Strong room / locker room per RBI	Photo + observation; this one often becomes Adverse

Software consequences. (a) Each row is Yes / No / N/A + optional photo. (b) N/A on 1.19 at a CPC does not shrink the 426 unless the Bank's SRS rule says it does — we will not invent that. (c) 1.24 stores a date, not only a tick; a clip store of 11 days is a No, not a debate. (d) A No on 1.14 DICGC or 1.29 strong room offers, does not force, an Adverse observation. The auditor still owns the finding. The system refuses to let a No sit with zero comment.

6.32 ORM-2 — Books and registers, as a list the branch cannot hide

Another 29 marks, almost all of the form "is this register maintained, updated, attested?" Attendance, keys, casual leave, despatch, inward/outward, cash-in-transit, incumbency, OBC/LBC/treasury bills, cheque-book issue, visitors, movement — and the rest of the 29. Accumo renders them as a register walk with a last-updated date. A register whose last attestation is 2019 is a No with a date, which is a better finding than a checkbox.

6.33 ORM-8 — KYC / TDS, the 38-mark monster

The heaviest operational block after loans. This is where persistence lives. Accumo will not let an auditor mark the group 38/38 without opening sub-annexure 4 (KYC irregularities) and 5 (risk categorisation) if any row in the group is No. That coupling is the difference between a score and a file. The same group is where ROM "No"s on re-KYC should already be waiting in the pre-audit pack. If the ROM said No in March and the auditor says Yes in April with no evidence, the supervisor sees both on one screen. That is the ROM→Phase I feed, at the mark where it matters.

6.34 The pre-audit pack, itemised

When an engagement moves to In execution, Accumo builds a pack. If a line is missing, the pack says so. It does not omit the line.

1. Unit master, including former district bank.
2. Last published rating, policy version used, trend or "insufficient history."
3. Open persistent items, with age.
4. Open ROM Exceptions since the last Phase I.
5. Open OMS Exceptions.
6. Business Risk inputs and band (Finacle or file, timestamped).
7. Proposed sample list, with floors (gold ≥10).
8. Tables 1–21, pre-filled where CBS allows, blank where it does not.
9. Template version identifier, frozen.
10. Policy version identifier, bound.

6.35 What a FACC contains

Bilingual. Not a logo on a letterhead. The artefact the branch pins up, and the artefact a NABARD officer may ask to see.

- Unit name, code, former DCB identity.
- Engagement period, team, man-days allotted and actual.

- Published Final rating, provisional engine rating, override if any, with reason.
- Policy version and template version identifiers.
- Count of Adverse items raised, closed, persisted.
- Income leakage total, if any.
- Closure path: 100% or committee, with minute reference if committee.
- QR or URI to the digital file, for the officer who does not trust paper.
- Issuer name, role, timestamp.

SECTION 7

Implementation Strategy

7.1 Technical approach

We implement the way the architecture is drawn. Domain-first SRS with Arjun, CA Ajith and the Bank's process owners in the room, not after the screens exist. Configuration over hard-coding. Adapter-first Finacle. Phase I core before we decorate. Continuous security, not a week-seven scramble. Anshad's Innovation Incubator bench is on the programme for integration capacity and facility-management cover — this is how an 823-branch estate does not land on three founders.

Methodology is hybrid: short build iterations inside a gated sequence the Bank can audit — SRS sign-off, POC, UAT, integration pack, CISO gate, go-live. The solution is production-ready and live within eight weeks; the estate is then onboarded branch-by-branch on an agreed wave plan, which is how every large bank rollout is delivered. Altiora commits to the eight-week go-live in full.

7.2 The eight-week go-live

Altiora commits to a full go-live within eight weeks of LOI/PO. Within those eight weeks Accumo is in production and operational — policy version 1 active, all six roles, Annexure-1 execution, Engine A ratings, Head Office publication, branch reply, FACC, persistence, bilingual reports, the HO 5×5, the agreed Finacle objects live, the agreed legacy dataset loaded, and an operational OMS rule pack — with Head Office and the first Regional Offices and branches live and running the complete Phase I lifecycle end to end. The remaining branches are then onboarded across the estate on an agreed wave plan, and Phase II (societies), the full ROM volume, the full OMS catalogue and AI assist follow on their committed milestones. Where a Bank-side input (Finacle interface, policy sign-off, legacy files, CISO slot) is delivered late, the affected date is adjusted by written agreement; liquidated damages apply to Altiora-owned dates.

7.3 Deliverables and milestones

Milestone	When (from LOI)	Deliverable	Acceptance
M0 Alignment	Week 1–2	SRS, policy v1 draft, role-responsibility, environment decision, legacy templates issued to Bank	Signed SRS; Risk Committee calendar for policy v1
M1 POC / core	Week 2–5	Phase I hero path on pilot data; 5×5; FACC; persistence; bilingual screens	Bank walks the six demo must-haves on pilot data
M2 UAT	Week 5–7	UAT pack, scripts, defect closure, training batch 1 (up to 20)	UAT sign-off on agreed scripts
M3 Integration	Week 5–7, parallel	Finacle adapter on agreed objects, or file extract if API is late (attribution recorded)	Interface pack; recon of balances on a sample

M4 Pilot go-live	Week 7–8	Production pilot as defined in §7.2; CISO gate; legacy load for pilot set	Acceptance certificate
M5 Hypercare	Week 8–12	Warranty clock; FM resource at HO; first rollout wave plan	Severity response per SLA
M6 Estate waves	Post go-live	Remaining branches; Phase II inspector pack; Phase III per-branch ROM; OMS rules; AI assist	Wave certificates

Warranty of one year from go-live, then four years ATS, as the RFP states. Five-year TCO lives in Volume II.

7.4 Indicative schedule

Wave	Work
Evaluation (now)	This Volume; working demonstration of Phase I path; synthetic history pack
W1–2	SRS workshops (scoring polarity, 3-to-5 map, N/A rules, ROM filing unit, society count, Finacle objects, legacy formats). Environments. Policy v1. Template import of Annexure-1 / 2 / 3.
W2–5	Phase I build and configuration. HO 5×5. FACC. Offline pack. Malayalam print. Training content.
W5–7	UAT. Adapter hardening. Legacy load rehearsal on a copy. VAPT slot.
W7–8	CISO gate. Pilot cutover. First live inspections under supervision.
Post	District waves. Phase II (inspector pack + Engine B). Phase III (ROM + feed into Phase I). OMS. AI.

7.5 Support required from Kerala Bank

Need	Why	When
Named HO Audit / Risk Committee owners	SRS and policy v1 cannot be invented by a vendor	Week 1
Confirmation of Control Risk polarity and 3-to-5 map	Locks Engine A	Week 1
Affiliated-society count and ROM filing unit	Locks Phase II/III sizing	Week 1–2
Finacle interface spec, sandbox, or approved extracts	Integration; attribution if late	Week 2
Legacy files in the published templates, plus former-DCB map	§5.4	Week 2–5
Internal audit report format and FACC template; common-irregularities list	Promised in the 12 July note as “formats to be shared”	Week 2
SMS / email gateway or SMTP	Notifications	Week 4
UAT participants across six roles	Real testers, not only IT	Week 5
Infrastructure choice (DC/DR or MeitY)	Hosting	Week 1–2
CISO and VAPT coordination	Go-live gate	Week 6–8

Malayalam review of statutory templates	Language quality	Week 4–6
Pilot branch / RO selection	Staged go-live	Week 3

7.6 Training, facility management, knowledge transfer

Training up to 20 staff as specified: role-based (auditor, supervisor, branch head, HO controller, administrator), with a workbook that is the Bank's own annexure — not a generic GRC tutorial; the first batch is trained before go-live. Facility management: one onsite resource at Head Office, deployed from purchase-order execution through twelve months after go-live at no additional cost, providing L1 and onsite L2 support at the Bank site through the warranty period with the engineering bench behind it; the Bank retains the right to interview and, where necessary, require replacement of the resource. Knowledge transfer is the policy file, the template admin, the SRS, the runbooks, and the absence of a mystery — if the Bank cannot change a weight without us, we have failed principle 1.

7.7 Named risks and how they are owned

Risk	Owner	Mitigation
Scoring polarity disputed late	Domain + Bank Risk Committee	Written into this Volume; confirmed week 1; policy-file, not code
Finacle interface late	Bank / SI · attributed	File extract path; mock contract already exists; LD attribution recorded
Legacy is paper-only	Shared	Scan-and-stub; honest residual; do not fake trend
Society count much larger than 1,687	Shared	Confirm week 1; Phase II is a wave, not week 8
ROM is region-level, not branch-level	Bank	We designed for the larger case; slim down if told
Annexure defects shipped	Us	ADR-014; raise at SRS
Estate onboarding within 8 weeks	Shared	Solution live in 8 weeks; estate onboarded in agreed waves; Bank-dependency dates attributed in writing
Key-person on a startup	Us	Anshad + Innovation Incubator bench; FM resource

7.8 Attribution and penalty posture

Every milestone in the SRS will say whether it is Bank-dependent or Altiora-dependent. Finacle sandbox, legacy files, policy v1 sign-off, UAT attendance and CISO slot are Bank-dependent. If they move, the calendar moves in writing. We accept liquidated damages on Altiora-owned dates against the eight-week go-live commitment in §7.2. Dates that depend on a Bank-provided input not yet delivered — for example a Finacle interface — are adjusted by written agreement rather than absorbed as vendor delay.

7.9 Programme governance and escalation

The programme runs on a two-tier cadence: a weekly PMO call (Altiora delivery lead + Bank project coordinator) for progress, blockers and the dependency log, and a fortnightly steering review (founders + Bank programme owner / Risk Committee nominee) for scope, risk and sign-offs. Minutes and the open-dependency register are shared after each. Escalation has defined owners and response times so nothing waits on a corridor conversation.

Level	Altiora owner	Bank counterpart	Response target
L1 · Operational	HO facility-management resource / project coordinator	Bank project coordinator	Same business day
L2 · Delivery	Bijin (CTO) / Sreehari (core engineering)	Bank IT / audit-systems lead	1 business day
L3 · Programme	Al Ameen (CEO) + Anshad (Enterprise Delivery Lead)	Bank programme owner	2 business days
L4 · Steering	Founders + Innovation Incubator	Risk Committee / sponsoring GM	Next steering review

7.10 Resource deployment

Named where named, roled everywhere. The Innovation Incubator bench scales quality assurance, Finacle integration and the ongoing facility-management resource, so an 823-branch estate does not rest on the founders alone. (● full allocation · ◐ part allocation.)

Role	Named	W1–2	W3–5	W6–8	Post go-live
Programme / engagement	Al Ameen R	●	●	●	◐
CTO / architecture	Bijin B James	●	●	●	◐
Core engineering / Finacle adapter	Sreehari Vinoba	●	●	●	◐
Application / workflow / data	Nandu Shaji · Abel · Krishna Prasad	◐	●	●	◐
Audit domain (RBIA)	Arjun Manu · CA Ajith Sam · CA panel	●	●	◐	◐
Enterprise delivery / QA / FM	Innovation Incubator bench	◐	●	●	● (FM resource at HO)
Security / VAPT / hardening	Independent VAPT specialist + bench	—	◐	●	● (quarterly)

7.11 Environments, change management and adoption

Four environments — Development, SIT, UAT and Production — all India-resident. Production personal data never flows downward; UAT and below use masked or synthetic branch data, with a controlled promotion process and a CISO gate before anything reaches Production.

Paid training is capped at 20 staff as the RFP specifies, but 823 branches and the affiliated-society network mean thousands of end users will touch the system. We close that gap at no extra cost through a **train-the-trainer cascade** (the 20 become RO-level champions), a **Malayalam quick-reference card** for the branch counter, and **in-app guided first-run** so an auditor's first engagement is walked, not read. Adoption is designed, not assumed.

7.12 Exit and transition-out

A five-year contract with a 90-day exit needs an exit that works. Because the Bank owns its policy file and its templates, the system already survives a change of vendor. On transition-out Altiora provides: a **full data export** in open formats (CSV/XLSX for records, plus the versioned policy and template files); the **knowledge-transfer artefacts** (SRS, runbooks, ADRs, administrator and operator guides); **source-code escrow release** on the contracted triggers; and a **defined handover period** with named Altiora staffing to induct the incoming team. No data, and no decision logic, is trapped inside the vendor.

How the eight weeks are actually spent

SOUL Volume I published an eleven-track view of a heavy window. Accumo's heavy window is shorter and narrower — Phase I core, not a lending ecosystem — but it is still parallel, or it will miss week 8.

Track	W1	W2	W3	W4	W5	W6	W7	W8
1 SRS / policy v1	Workshops	Sign						
2 Template import A-1/2/3	Load	Normalise defects	Freeze v1					
3 Engine A + 5×5		Build	Build	Worked files	UAT			
4 Lifecycle / FACC		States	States	FACC print	UAT			
5 Roles / dashboards		Six roles	HO 5×5	ML chrome	UAT			
6 Offline + Malayalam PDF			Sync	Fonts	Print proofs			
7 Finacle adapter	Contract	Mock	Live or file	Recon	Recon	Harden	Harden	
8 Legacy load	Templates out	Bank fills	Map DCB	Rehearse	Rehearse	Pilot load	Residual note	
9 Security / VAPT / CISO		Threat model		SBOM	VAPT slot	Fix	Fix	Gate
10 Training / FM			Workbook	Workbook	Batch 1	Batch 1	HO FM in	Live support
11 Phase II/III skeleton		Masters	Engine B stub	ROM stub	Feed wire		Demo honesty	

Tracks 3–6 are Altiora-owned and cannot slip without eating the definition in §7.2. Tracks 7–8 and the CISO slot are shared; their delay is attributed. Track 11 is deliberately a skeleton in week 8. Shipping a fake society Finacle feed to look complete is how you lose year two.

Acceptance criteria, said so they can fail

Milestone	It is accepted when…
M0	SRS signed; polarity and 3-to-5 map written into policy v1 draft; legacy templates in the Bank's hands.
M1	A Bank user who is not us walks the six must-haves plus the 90%-is-not-EH test.
M2	Agreed UAT scripts closed or waived in writing; no Sev-1 open.
M3	Deposits and advances on a sample recon to the rupee, or a dated Bank waiver naming the file extract.
M4	Pilot set live; CISO signed; residual legacy labelled; first real inspection opened under supervision.

SECTION 8

Annexure

The annexures are part of Volume I, not a second book. They exist so an evaluator can score without hunting.

ID	Contents
A	Compliance matrix against the RFP
B	Risk policy tables, 3-to-5 map, 25-cell matrix with rationale, rating-use table
C	Report catalogue (RFP §43)
D	Evaluation demonstration outline
E	Team profiles
F	Assumptions, dependencies, glossary
G	Service levels and support model — uptime, RTO/RPO, severity and response/resolution
H	Declarations and statutory — authorised signatory, acceptance, non-blacklisting, registrations

Annexure A — Compliance matrix

This matrix summarises coverage by capability. The **clause-by-clause response in the Bank's own RFP numbering** (§1.0–§1.34, §21, §40–41, §43) is set out in **§5.9–§5.11**; the two are read together, and every mandatory document is cross-referenced to its enclosure tab in §1.8.

Legend: **RA** Readily available in Phase I core · **CA** Configurable / customisable · **PH** Delivered on the agreed wave plan, within contract. Horizons: H0 evaluation · H1 go-live · H2 estate / Phase II–III / OMS / AI.

#	Requirement	St.	Accumo response	H
A1	AMS layered above CBS, not a CBS module	RA	Adapter layer; no Finacle core change	H1
A2	RBIA + concurrent / compliance / inspection / vigilance	RA/PH	Shared platform; Branch first; other types as templates	H1–H2
A3	API-driven	RA	OpenAPI adapters	H1
A4	Event-driven / near-RT	RA/PH	Event hooks; near-RT OMS with feeds	H1–H2
A5	Configurable by Bank	RA	Policy file, templates, workflows	H0–H1
A6	Integrate CBS, LOS, EWS	CA	Open-spec adapters	H1–H2
B1	Branches, CPCs, ROs, CBO, PMU, HO	RA	Org master	H1
B2	PACS / other societies	PH	Own masters + Engine B; not the branch 5×5	H2
B3	Phase I Branch	RA	Primary path; Annexure-1	H0–H1
B4	Phase II societies	PH	§5.2 designed; three data groups	H2
B5	Phase III ROM	PH	§5.3 designed; no rating; feeds Phase I	H2
C1	Business risk + control risk	RA	Engine A; opposite polarities	H0
C2	Levels EH / VH / H / M / L	RA	Five-band final; 3-to-5 map in policy	H0

C3	Trend increasing / decreasing / stable	RA	Vs last published; else “insufficient history”	H0–H1
C4	Risk audit matrix	RA	25-cell policy table	H0
C5	Auto rating + suggested frequency	RA	Policy-driven; HO publishes	H0–H1
C6	BR from quantitative feed	CA	Finacle / file; mock in evaluation	H0–H1
C7	CR from onsite process	RA	Marks → % → CR band (compliance direction)	H0
C8	HO upgrade / downgrade + log	RA	Mandatory reason; dual store	H1
C9	Bank-editable templates	RA	Admin; version freeze	H1
C11	Pre-audit requisites	RA	Pack includes last rating, open items, ROM defects	H1
C12–C17	Plan, schedule, multi-auditor, man-days	RA	Planner + trail	H1
D1	Pull CBS / LOS / MIS at start	CA	Adapter / batch; Phase II Group 1 only for societies	H1
D2–D3	Auto sampling + manual add	RA/CA	Policy rules + auditor add	H1
D6	Three observation types	RA	Observation / Positive / Adverse	H0
D8	Offline upload / capture	RA/PH	Field offline + evaluation pack	H0–H1
D9	Income leakage dual sign	RA	Own object	H1
D11–D12	Freeze on submit; maker-checker	RA	State machine	H0
E3–E4	Online report + reply; accept/reject	RA	Branch portal	H0
E7	Persistent irregularities	RA	Carry-forward engine + legacy object 2	H0
E8–E9	FACC paths	RA	100% or committee; comments visible	H0
E13	Legacy load by go-live	CA	§5.4 six objects; subject to Bank data	H1
E14	Malayalam	RA	UI + PDF	H0
F1–F2	OMS exceptions H/M/L + matrix	PH	§5.5 / §6.11	H2
F3–F4	AI assist; no unsupervised final rating	PH/RA	Product law All horizons	All
F5–F12	Trail, DPDP, SBOM, VAPT, CISO, escrow, DR, hosting	RA	§6.14	H1 / contract
F13–F15	Training 20; FM 1; 8-week go-live	CA	§7.2 staged definition	Contract

Annexure B — Risk policy tables

Illustrative of policy version 1, for evaluation. Exact cells remain Bank-owned.

B.1 Business Risk bands (₹ crore)

Rating	Deposits	Advances
L	0–10	0–15
M	10–30	15–45
H	30–60	45–90

VH	60–120	90–180
EH	120+	180+

Default weights: Deposit 50% + Advances 50%. Bank-changeable.

B.2 Control Risk bands — compliance direction

CR	% of 426	Meaning
L	> 85%	Best audit
M	70–85%	Acceptable
H	50–70%	Needs watching
VH	30–50%	Poor audit
EH	< 30%	Failed audit

B.3 Three-band to five-band map

Annexure-1 native	Maps to CR
≥ 70% Low	L if >85%; M if 70–85%
50–70% Medium	H
< 50% High	VH if 30–50%; EH if <30%

B.4 5×5 heat map (CR rows = audit quality, L is best)

	BR L	BR M	BR H	BR VH	BR EH
CR L — best	L	L	M	M	M
CR M — acceptable	L	M	M	H	H
CR H — watch	M	M	H	H	VH
CR VH — poor	M	H	H	VH	VH
CR EH — failed	M	H	VH	VH	EH

B.5 Twenty-five cells with rationale

Source: Bank's 12 July note, preserved. Axis labels already treated L as best audit and EH as failed audit. After the polarity correction, a high mark lands on the L row, which is what those rationales assumed.

#	Cell (BR, CR)	Final	Why
1	(L, L)	L	Small + clean = routine cycle
2	(M, L)	L	Mid-size + clean still Low
3	(H, L)	M	Size alone warrants attention
4	(VH, L)	M	Large urban / DHQ + clean = at least Medium
5	(EH, L)	M	Too-clean on a top-tier branch is statistically suspicious; backstop candidate
6	(L, M)	L	Small + acceptable stays Low

7	(M, M)	M	Both axes at M
8	(H, M)	M	Acceptable audit holds an urban branch at M
9	(VH, M)	H	Size + mid-quality = High
10	(EH, M)	H	One grade worse than (EH, L)
11	(L, H)	M	Watch-quality audit lifts a small branch off Low
12	(M, H)	M	Mid + watch
13	(H, H)	H	Diagonal — both agree High
14	(VH, H)	H	Large + watch
15	(EH, H)	VH	Top tier + watch is pushed to VH
16	(L, VH)	M	Poor audit alone lifts a small branch to M
17	(M, VH)	H	Both contribute
18	(H, VH)	H	Active urban + poor
19	(VH, VH)	VH	Diagonal VH
20	(EH, VH)	VH	Capped at VH (no EH in this row)
21	(L, EH)	M	Audit-quality watch: tiny + failed is suspect
22	(M, EH)	H	Mid + failed
23	(H, EH)	VH	Size + failure
24	(VH, EH)	VH	Large + failed
25	(EH, EH)	EH	Worst cell; quarterly cadence; 3-person; CRO

B.6 How the Final rating is used (Phase I)

Final	Frequency	Team	Man-days	Inspector	HO reviewer
L	12 months	1 junior	1	Junior	None
M	9 months	1 junior	1.5	Junior	Branch-head review
H	6 months	Senior + junior	3	Senior + junior	Supervisor
VH	4 months	2 seniors	4	Senior	Senior supervisor + audit committee
EH	2 months	3-person + supervisor	5	Senior + juniors	CRO + sanction committee

B.7 Society grades (Engine B) — not a 5×5

Grade	Marks / 100
A	≥ 75
B	65–74
C	55–64
D	40–54
E	< 40

Annexure C — Report catalogue

RFP §43, accepted as written, plus the artefacts the lifecycle needs.

ID	Report
R1	Summary report of an engagement
R2	Region-wise branches under audit (date range)
R3	Region-wise completed audits
R4	Region-wise outstanding for closure
R5	Region-wise irregularities with risk rating
R6	CPC / area-wise open / closed, risk-wise
R7	Branches overdue for inspection
R8	Trend analysis for risk rating
R9	Region-wise, branch-wise persistent irregularities
R10	Region-wise High / Medium / Low lists
R11	Inspections by a named officer (date range)
R12	Inspections by HO officers (date range)
R13	Income leakage, branch-wise / region-wise
R14	Ad-hoc (configurable)
R15	Abnormality report
R16	Incident flash / special
R17	Rating communication letter (EN / ML)
R18	FACC (EN / ML)
R19	5×5 portfolio with drill-down
R20	OMS age-wise / category-wise pendency
R21	ROM "No" register feeding Phase I
R22	Society grade register (A–E) and Part D exposure

Annexure D — Evaluation demonstration outline

Offline pack. No dependency on Bank network that morning. Synthetic but schema-true Kerala Bank data, including a small legacy history so trend and persistence are not faked.

1. **Three roles, three dashboards.** Auditor, Supervisor, Branch Head. Different work, different screens.
2. **Checklist with live scoring.** Marks add. A high score moves Control Risk *down*, not up. We will say that out loud so the polarity is examined, not assumed.
3. **Engine A.** Business Risk from balances + Control Risk from marks → 5×5 → provisional Final. Show the (EH, L) cell landing on Medium and explain why.
4. **HO 5×5.** Five sample branches in coloured cells. Click through to a file.

5. **Maker-checker to FACC.** Submit → approve → branch reply with a photo → accept → FACC in English and Malayalam.
6. **Persistence.** Re-open the same branch for a new cycle; last year's open KYC item is already there, aged.
7. **Policy file, live.** Change the 85% cut-off to 80% on a copy of policy v1. Show Tuesday's provisional ratings move and Monday's published file stay put.
8. **ROM feed (skeleton, said as skeleton).** A "No" on KYC in last month's ROM appears in the Phase I pre-audit pack and lights the 8-mark compliance section.
9. **Phase II honesty (skeleton, said as skeleton).** Open a society file. Group 1 pre-filled from Bank-side balances. Group 3 empty, waiting for the inspector. Grade A–E, not L–EH. Say the sentence: this is not the branch engine.

Annexure E — Team profiles

Formal CVs with dates and certificates travel with the submission pack. This annexure is the evaluation narrative.

Al Ameen R — Co-founder & CEO. Engagement lead for Kerala Bank / KSUM. Owns product direction and the audit–engineering bridge. TKM College of Engineering. Built and runs the commercial side of Altiora's cooperative work including the MRCB relationship.

Bijin B James — Co-founder & CTO. Technical lead. Owns architecture decisions, AI boundary, delivery quality. Formerly Colnect. UKF College of Engineering.

Anshad Ameenza — Co-founder & Enterprise Delivery Lead; Director, Innovation Incubator. On this bid as enterprise delivery lead, present in evaluation and in delivery. ~25 years across HP, Nokia, Intuit, Dell/EMC and EY. Founded Cyber Sapient. Fifteen-plus ventures. He is the reason this startup can speak honestly about an 823-branch, five-year obligation: the 300-person ISO 27001 bench with Finacle experience sits behind him, not in a logo strip.

Sreehari Vinoba — Co-founder, core engineering. IIT Dhanbad. Owns the data model, Finacle adapter contracts, deployment topology.

Arjun Manu — Domain co-lead, RBIA. Owns scoring polarity, annexure fidelity and process design. The 4 August clarification that corrected the Control-Risk polarity and shaped Phase II/III is his work; this Volume is that work made into architecture. Full curriculum vitae enclosed.

CA Ajith Sam — Domain co-lead. Practising Chartered Accountant. Equal senior ownership of methodology, checklist semantics, reporting standards.

Janardhanan — Retired Chief Manager, State Bank of India, Risk-Based Internal Audit. Anchors commercial-bank inspection culture for HO and RO design.

CA Vani, CA Sayanth, Aravind — Audit and compliance bench. Checklist review, control-testing logic, compliance mapping.

Nandu Shaji, Abel, Krishna Prasad — Accumo engineering (application, workflow UI, data/integration).

Advisors (not billed as delivery staff): Ajeesh Achuthan (open.money); Ankit Dhadda (Godrej Capital); Rahul Dandamudi (Meta); Deepu S Nath; Jinu Mathew.

Annexure F — Assumptions, dependencies, glossary

Assumptions

1. Control Risk treats Annexure-1 marks as a compliance score (higher = lower risk). Subject to Risk Committee confirmation of the 30 / 85 cut-offs.
2. ROM filing unit is per branch per month until the Bank says otherwise.
3. Affiliated-society volume is of order 1,687 PACS plus other types; Bank will give its count.
4. Legacy load is subject to the Bank producing data. Residuals will be labelled.
5. Finacle 10.x is reachable by API, view, or scheduled extract. We support all three behind one adapter.
6. Demonstration schedule is set by Bank / KSUM. We do not invent institutional dates.
7. Score 1 + Score 2 = 426 is the identity; N/A and partial-mark rules are an SRS item.
8. MRCB is cited as cooperative delivery precedent, not as an AMS reference installation.

Dependencies

Listed as Bank-owned in §7.5. The programme will not silently absorb a missing policy sign-off or a missing Finacle extract into "vendor delay."

Glossary

Term	Meaning in this Volume
Business Risk	Size and complexity. Higher = more exposure.
Control Risk	How well the branch is run. Higher marks = lower CR.
Final rating	5×5 result, L–EH, published by HO.
Engine A / B	Branch 5×5 / society A–E.
FACC	Final Audit Closure (Compliance) Certificate.
Policy file	Versioned Bank-owned rulebook the engine reads.
Persistence	Unrectified items copied onto the next engagement, with age.
OMS	Offsite Monitoring System — rules between visits.
PACS	Primary Agricultural Credit Society — not a branch.
ROM	Regional Operations Manager — monthly certification, no score.

Annexure G — Service levels and support model

Proposed service levels for Kerala Bank's confirmation; the binding SLA is finalised jointly before the Purchase Order, as the RFP provides (§1.30 / §2.6). Values are commitments, not aspirations, and attach to the definitions in §7.2 and §7.8.

Parameter	Proposed target
Application availability	99.5% per month, measured on business hours, excluding scheduled maintenance windows agreed with the Bank
Recovery Time Objective (RTO)	≤ 4 hours
Recovery Point Objective (RPO)	≤ 15 minutes
DR drill	Tested before go-live; repeated at Bank-agreed frequency, with signed drill reports
Backup restore test	Quarterly, with signed restore-test reports (no loss of audit trail)
Support model	L1 + onsite L2 at Head Office through warranty (FM resource, PO → 12 months post go-live); L3 engineering bench behind it
Security remediation	Quarterly VAPT / IS-audit findings remediated at no extra cost for the contract term (independent VAPT specialists + engineering bench)
Liquidated damages	As per RFP — 5% of yearly order value per week of delay, capped at 20%, on Altiora-owned dates per §7.8, subject to Bank/force-majeure attribution

Severity	Definition	Response	Workaround / resolution
Sev-1 · Critical	System unavailable, or ratings/closure cannot be produced across the estate	30 minutes	Workaround ≤ 4 hours; resolution ≤ 1 business day
Sev-2 · Major	A major function (checklist, engine, dashboard, FACC) impaired for a unit or region; no workaround in use	2 hours	≤ 1 business day
Sev-3 · Minor	Limited-impact defect with an available workaround	1 business day	≤ 5 business days
Sev-4 · Cosmetic / query	Cosmetic issue, documentation, or how-to query	2 business days	Next scheduled release

Annexure H — Declarations and statutory

The signed declarations are submitted in the Bank's / KSUM's prescribed formats and enclosed at the relevant tabs; the schedule below records them for the evaluator's checklist.

Declaration / document	Status
Authorised signatory and Power of Attorney	Signed; enclosed (Tab __)
Bid validity — proposal valid for the period specified in the RFP	Confirmed on the bid form
Acceptance of all RFP terms and conditions (KB/IT/AMS/KSUM/07/2026)	Declared; read and accepted in full
Non-blacklisting / non-debarment declaration	Signed; enclosed (Tab __)
Statutory registrations — CIN, GST, PAN, PF/ESI as applicable	Enclosed (Tab __)

KSUM startup recognition · DPIIT recognition	Enclosed — DIPP230717/2025/KSUM4750
Tender fee / EMD, or startup exemption per KSUM category	As per RFP category (Tab __)
Integrity / no-conflict declaration	Signed; enclosed (Tab __)

Authorised signatory: ____________________ · Name & designation: ____________________ · For and on behalf of Altiora Capital Solution Private Limited · Date & company seal: ____________________

End of Volume I. Scoring polarity, Phase II/III design, and legacy migration follow the domain clarification dated 4 August 2026.