

RED BEAR ARTIFICIAL INTELLIGENCE

ABU DHABI, UNITED ARAB EMIRATES

Enterprise Architecture Roadmap Harmonisation

Roadmaps that agree: aligning entity roadmaps across a federation without merging them

Every entity has a roadmap. None of them agree, because none of them can see the others. This paper explains what a harmonised roadmap is, why it is not a single merged plan, and how Red Bear EOM lines up gaps, principles, work packages and dependencies across entities so that the federation moves together.

Empower. Trust. Verify.

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Summary

Harmonisation is not consolidation. It is a set of roadmaps that know about each other. A federation's entities plan their own change: each has a baseline, a target, gaps between them and work packages to close the gaps. The waste comes from planning in isolation: two entities building the same thing in the same year, one entity retiring a platform another still depends on, principles adopted at group level that no entity's roadmap reflects. This paper describes how TOGAF's transition architectures and gap analysis extend to a federation, how the Open Group's agile playbook keeps roadmaps living rather than annual, and how Red Bear EOM computes the cross-entity view: shared gaps, conflicting sequences, dependencies across boundaries, reference entities per capability, and a harmonised roadmap that each entity still owns.

WHO SHOULD READ THIS

- Heads of architecture and portfolio offices
- Entity architects who own a roadmap
- Transformation programme directors
- Finance and investment committees that fund change across entities

WHAT YOU WILL BE ABLE TO DO AFTERWARDS

- Distinguish harmonisation from consolidation and explain why the difference matters
- Read a cross-entity gap and roadmap view
- Recognise a sequencing conflict and a dependency across boundaries
- Describe how principle conformance and reference entities drive convergence

1 What it is

TOGAF handles time in an architecture through three states: the **baseline** (what exists), the **target** (what is intended) and the **transition architectures** between them (TOGAF Standard, Architecture Development Method §1.5.3). **Gap analysis** lists what must be created, changed or retired to move from one to the next, and the gaps are grouped into **work packages** that projects deliver (TOGAF Standard, Architecture Content §2.4–2.5). A **roadmap** is those work packages on a timeline with their dependencies. Every entity in a federation can and should have one.

A **harmonised roadmap** is what the federation sees when every entity's roadmap is laid on the same timeline, against the same shared essence, with the dependencies between them drawn. It is not a merged plan. Each entity keeps ownership of its work packages, its dates and its decisions. What harmonisation adds is knowledge: that two entities are closing the same gap, that one entity's retirement removes something another's target still depends on, that a group principle adopted this year appears in no roadmap, that a capability has a reference entity and the others are moving away from it rather than toward it.

Two sources shape how EOM does this. Greefhorst and Proper give principles their lifecycle and their conformance scale, and show how a cost-cutting objective traces through a standardisation principle to design instructions (Greefhorst and Proper, Ch 3, Ch 5). They also give the warning that convergence should standardise exchange, not storage (Greefhorst and Proper, Ch 6 §6.6.2.2). The Open Group's agile playbook replaces the annual roadmap with a living one: architecture guidance delivered just in time to teams, principles revised from project feedback, and the roadmap re-forecast as work lands (the Agile

Enterprise Architect Playbook). EOM takes the living roadmap as the default and treats the annual review as a checkpoint, not the plan.

The unit that makes cross-entity comparison possible is, again, the shared **transaction kind**. Two entities with work packages against the same transaction kind are working on the same thing, whatever their project names. That is how EOM finds shared gaps without anyone reconciling project lists by hand.

Key points

- Baseline, target, transitions, gaps and work packages per entity, from TOGAF
- Harmonisation lays them on one timeline against the shared essence and draws the dependencies
- Each entity keeps its roadmap; the federation gains the knowledge to align them

2 Why it matters

The cost of unharmonised roadmaps is paid in three currencies. **Money**: the same capability built in parallel by entities that could have shared it, or bought twice from the same vendor under different contracts. **Time**: a work package that waits on another entity's delivery that nobody knew about until the dependency failed. **Credibility**: group principles announced by the board and absent from every plan, so that the next principle is announced to an audience that has learned to wait it out.

TOGAF's answer at federation scale is an integration framework with publish-and-subscribe governance, compliance assessment and dispensation (TOGAF Standard, Architecture Development Method §1.5.1; Applying the ADM §4.3; EA Capability and Governance). The mechanism is right; what most groups lack is the data to run it. Compliance assessment needs a current landscape per entity. Dispensation needs the principle, the conflict and the time limit recorded. Publish-and-subscribe needs the dependency between the publisher's roadmap and the subscriber's to be visible. EOM supplies the data and the computation; the governance model is the customer's.

Symptom	Cause	What the harmonised view shows
Two entities delivering the same platform in the same year	Neither could see the other's gap	Shared gaps against the same transaction kind, with both work packages
A retirement breaks a downstream entity	The wait or access link across the boundary was not on either roadmap	Dependencies across boundaries drawn from the essence, flagged when a work package touches them
Principles adopted but not reflected	No roadmap item realises them	Principle conformance per entity, and work packages that move it
Convergence announced, divergence delivered	No reference entity chosen; each entity chose its own target	Reference entity per capability, and each entity's distance from it
Roadmaps that are stale by the time they are approved	Annual planning against a landscape that moved	Re-forecast on every change, with what moved and why

3 The challenges

Challenge	Why it is hard	What goes wrong without a method
Discovering the roadmaps	They live in project portfolios, PPM tools, slide decks and budgets, in different granularities	The group view is a manual reconciliation that is out of date on delivery
Capturing gaps against a shared essence	Entities describe targets in their own vocabulary; matching by name misses shared gaps and invents false ones	Duplicates funded; real overlaps missed
Maintaining as work lands	Every delivered work package changes the baseline; every slip changes the dependencies	The roadmap is a picture of intent, not a plan
Understanding the impact of change on other roadmaps	A change in one entity's sequence propagates along dependencies to others	Downstream entities find out in delivery
Driving standardisation	Principles need conformance evidence and a lifecycle; reference entities need choosing and defending; exceptions need time limits	Principles are posters; dispensations are permanent
Knowing who decides	A roadmap change that alters the essential model needs a different approver from one that re-sequences implementation	Boards re-sequence projects while essential changes pass unnoticed

4 How Red Bear EOM helps

Challenge	What EOM does	Module
Discovering	Roadmaps and initiatives read from Oracle Fusion PPM and from submitted plans; SWOT initiatives from maturity assessments flow in; each work package linked to the gaps it closes	CN Connectors, MA Maturity
Capturing	Baseline, transition and target states held with valid time; gaps computed between states per entity; gaps matched across entities by the transaction kind they realise, not by name	LO Ontology (FR-LO-08), AN Gap analysis
Maintaining	A living roadmap: delivered work packages update the baseline; slips re-forecast dependent packages; the annual review is a checkpoint	RM Roadmap (FR-RM-01 to 04)
Impact of change	Impact analysis over the landscape and the dependency trace over the essence show which other entities' work packages a change touches; the harmonised view highlights sequencing conflicts	AN Analysis, VZ Visualisation
Standardisation	Principles with the Greefhorst and Proper lifecycle and 1–5 conformance scoring per entity with evidence; reference entities chosen per capability with reasons; dispensations time-limited and reviewed; patterns recommended with their reasons	PL Principles, RP Recommendations
Who decides	Every roadmap change carries the two labels; approver per decision class; compliance reviews and dispensations recorded with their evidence	GV Governance

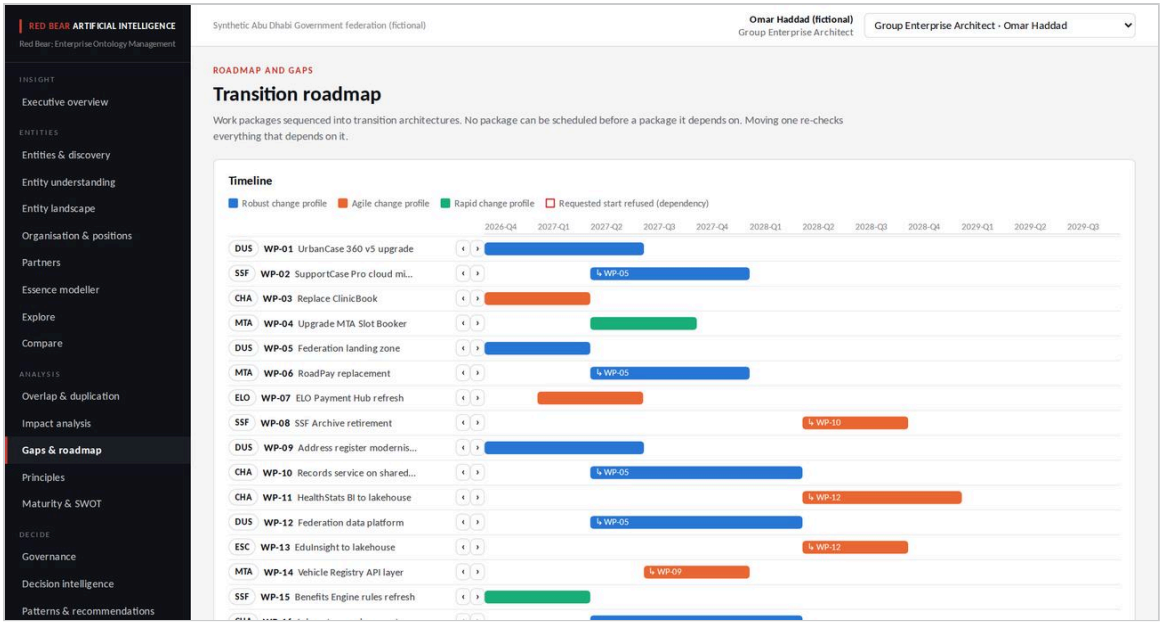
Design rule

Compute the group view; never store it. Each entity owns its roadmap. The harmonised roadmap, the shared gaps and the conflicts are recomputed from the entities' own facts whenever anyone opens them, so no central plan can drift from what the entities actually intend.

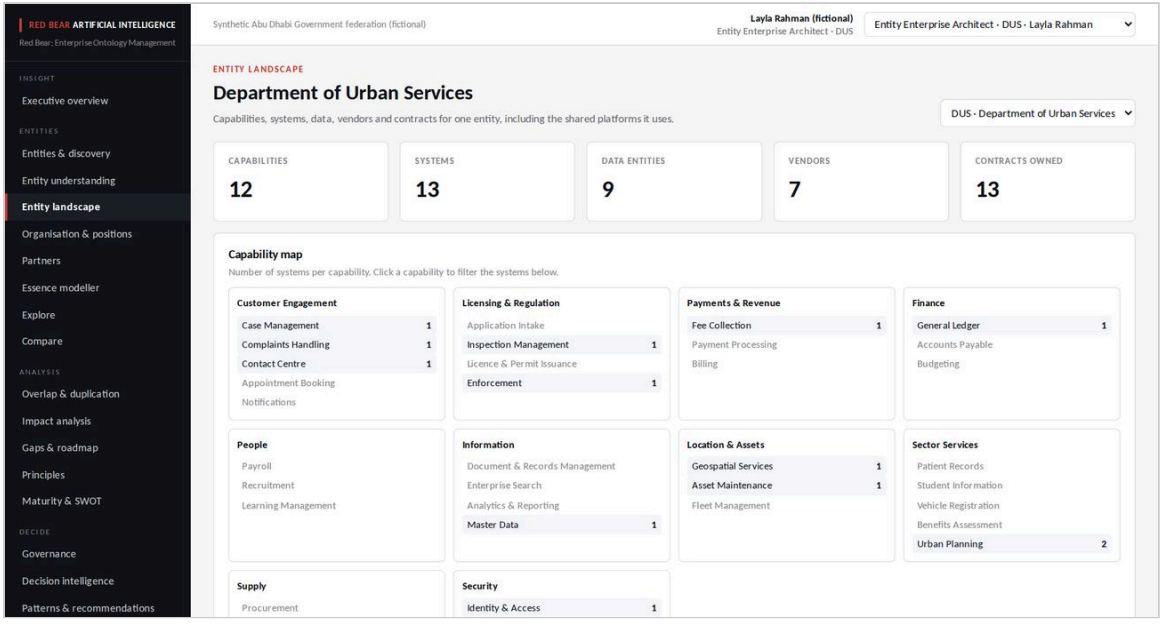
5 How it is used

Step	Who	What happens
1 Load the plans	EEA	Each entity's roadmap is read from PPM or submitted; work packages linked to gaps; gaps linked to the transaction kinds and capabilities they change
2 Set the direction	GEA, boards	Group principles recorded with their lifecycle stage; reference entities chosen per capability with reasons; the delegated-authority table confirmed
3 Open the harmonised view	GEA, GEM	Every roadmap on one timeline; shared gaps, sequencing conflicts and cross-boundary dependencies listed; conformance per entity shown
4 Resolve	GEA, EEAs	For each shared gap: share, sequence or accept the duplication with a reason; for each conflict: re-sequence in the owning entity's roadmap; for each principle gap: a work package or a dispensation
5 Route the decisions	Boards, GEA	Changes carry the two labels; governance-class changes go to the board named in the delegated-authority table; management-class changes to the entity
6 Deliver and re-forecast	EEA	Delivered packages update the baseline; slips re-forecast dependants; the harmonised view is always current
7 Review	All	Quarterly: conflicts and conformance; annually: principles reviewed from project feedback, reference entities re-confirmed

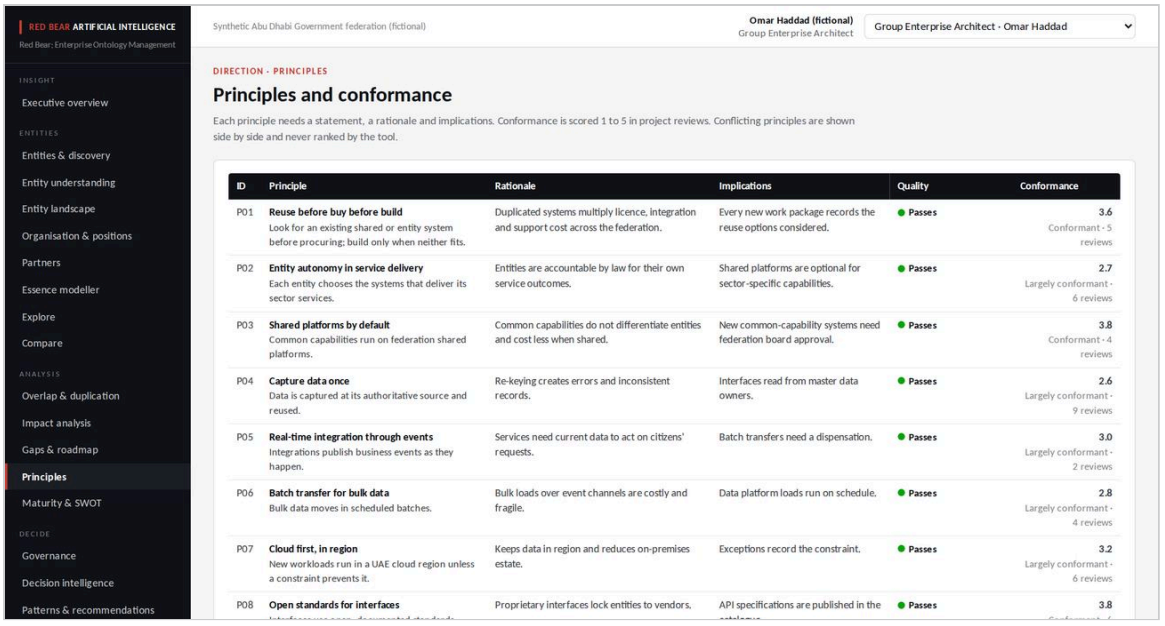
6 The user experience



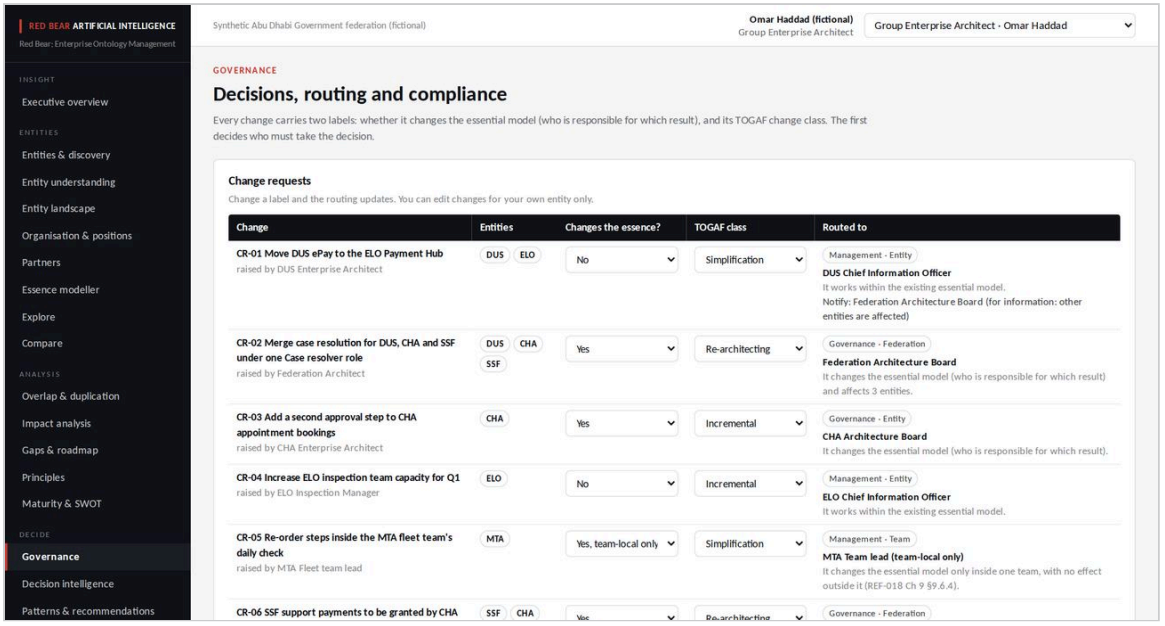
roadmap: S-05 Gaps & roadmap. Gaps between baseline and target per entity, the work packages that close them on a timeline, dependencies drawn, and the infeasible start flagged (a seeded violation in the synthetic data). Prototype render on synthetic data for fictional entities.



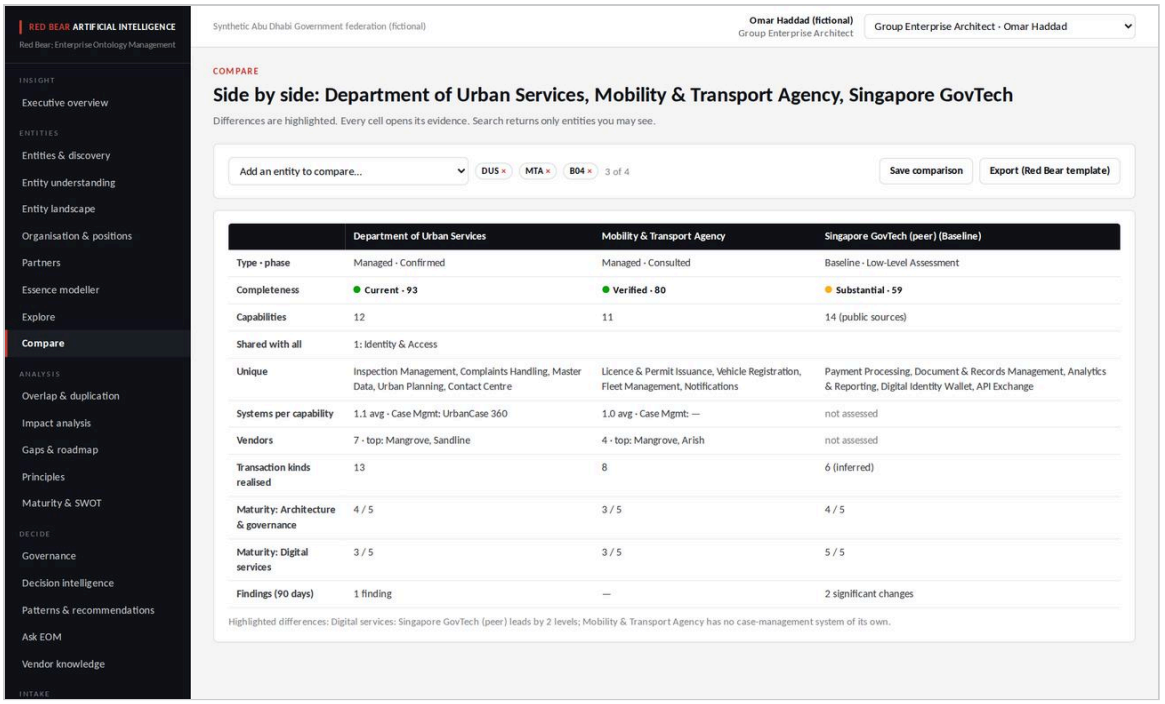
landscape: S-02 Entity landscape. One entity's capabilities, applications, data, vendors and contracts in their baseline, transition and target states, the raw material of its roadmap. Prototype render on synthetic data for fictional entities.



principles: S-06 Principles. Group principles with their lifecycle stage and each entity's conformance on the 1–5 scale, with the evidence behind every score and the dispensations in force. Prototype render on synthetic data for fictional entities.

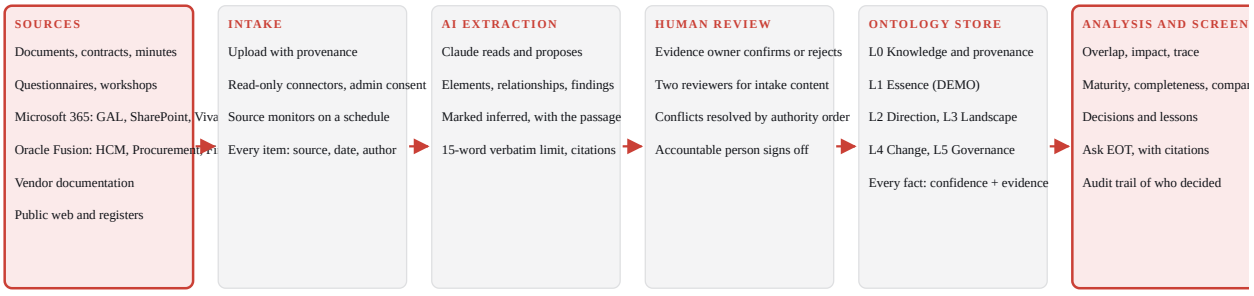


governance: S-07 Governance. Changes queued by decision class under the two-label rule, the approver named from the delegated-authority table, compliance reviews and time-limited dispensations. Prototype render on synthetic data for fictional entities.



S-20 Compare: S-20 Compare. Entities side by side on capability coverage, systems and vendors, maturity and completeness; the view used to choose and defend a reference entity. Prototype render on synthetic data for fictional entities.

7 Where the data comes from, and how it is checked



The pipeline for roadmap data: plans and project records enter through PPM and submissions; the harmonised view is computed from the confirmed facts of each entity.

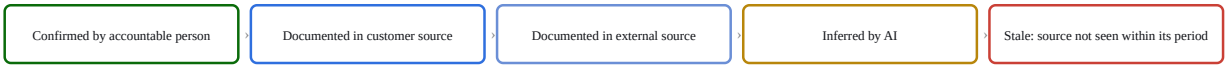
Inputs to the harmonised roadmap

Input	Source	Check
Baseline landscape	Connectors, documents, questionnaires; confirmed by the Entity EA	Completeness KPI and stale share shown beside the roadmap
Target and transitions	Entity strategy documents, submitted target architectures	Two reviewers; targets linked to transaction kinds and capabilities
Work packages	Oracle Fusion PPM projects and budgets; submitted plans	Each package linked to at least one gap; orphan packages flagged

Input	Source	Check
Dependencies	Declared in plans; derived from wait, access and initiator links in the essence and from interfaces in the landscape	Derived dependencies marked inferred until the Entity EA confirms
Principles and conformance	Group principle register; conformance scored with evidence	Score requires evidence at documented or confirmed; RB-ORIGINAL labels on the 1–5 scale
Reference entities	Chosen by the Group EA from the compare view	Reasons recorded; re-confirmed annually
Dispensations	Governance decisions	Time-limited; review date raised as a task

How it is checked

- **Feasibility is computed.** A work package whose start precedes the finish of a package it depends on is flagged; the synthetic data seeds one such violation so reviewers can see the flag.
- **Shared gaps are matched by essence.** Two gaps are shared only if they change the same transaction kind; name similarity is offered as a suggestion, never as a match.
- **Every conflict names both owners.** A sequencing conflict or cross-boundary dependency shows the two entities and the link it rests on, with its confidence.
- **Conformance needs evidence.** A principle score without evidence at the required confidence is shown as *not assessed*, not as zero.
- **Changes carry their labels.** No roadmap change enters governance without the essential-model label and the TOGAF change class; the approver follows from them.
- **The view is never stored.** The harmonised roadmap is recomputed on open; a report exported from it carries the date and the completeness of its inputs.



The confidence levels, inherited by every gap, dependency and conformance score on the roadmap.

8 Benefits realised

Benefit	How it shows up	Measured by
Parallel builds stopped before funding	Shared gaps listed with both work packages before the investment committee meets	Shared gaps resolved: shared, sequenced or accepted with reason
Dependencies known before delivery	Cross-boundary dependencies drawn from the essence and flagged on the timeline	Conflicts found at planning vs found in delivery
Principles that reach the plans	Conformance per entity; work packages that move it	Conformance trend; dispensations expiring on time
Convergence that is measured	Reference entity per capability; each entity's distance from it	Entities converging vs diverging per capability
Roadmaps that stay current	Re-forecast on every delivery and slip	Days between change and re-forecast

Benefit	How it shows up	Measured by
Decisions routed correctly	Two labels on every change; approver from the table	Governance-class changes approved at the right level

9 Risks managed

Risk	Control in Red Bear EOM
Harmonisation becomes central planning	The group view is computed, never stored; entities own their roadmaps; the delegated-authority table decides who may change what
False shared gaps from name matching	Gaps are shared only through the same transaction kind; name similarity is a suggestion for the analyst
Dependencies missed across boundaries	Derived from the essence (wait, access, initiator) and the landscape (interfaces), not only from declared plan dependencies
Standardising the wrong thing	Principles traceable to goals; the *exchange not storage* and *do not standardise social acts* warnings recorded as patterns; dispensations time-limited
Reference entity chosen by seniority	Chosen from the compare view with evidence and reasons; re-confirmed annually
Roadmap built on a stale landscape	Completeness KPI and stale share shown beside every roadmap; reassessment tasks raised by source monitors
Governance bypassed by re-sequencing	Two-label rule; changes that alter the essential model cannot be approved as management changes

Sources

Every definition and every claim attributed to a source in this paper names its source in the text, in the form *author, work, chapter or section*; the full references are below. Statements without a citation are Red Bear's own position, developed for Red Bear: Enterprise Ontology Management, and are marked RB-ORIGINAL in the product's method. Quotations are limited to fifteen words.

Cited as	Source	Authority
TOGAF Standard	The Open Group, *The TOGAF Standard*, 10th Edition, C220 Parts 0–5 (2022), used under Red Bear's licence	Industry Framework
Dietz and Mulder	J. Dietz and H. Mulder, *Enterprise Governance and Management*, Springer (2026)	Academic Reference
Greefhorst and Proper	D. Greefhorst and E. Proper, *Architecture Principles*, Springer (2011)	Academic Reference
Agile EA Playbook	The Open Group, *The Agile Enterprise Architect Playbook*, G226 (2022)	Industry Framework
Azure Architecture Center	Microsoft, *Azure Architecture Center* (19 patterns, read 25 September 2026)	Vendor Reference Architecture
Red Bear	RB-MM metamodel, RB-EAM method, EOM-FSD-01 v1.1 draft, function-explorer.md, eval-set.md	Red Bear

Glossary

Term	Meaning in this paper
Baseline and target architecture	The current state and the intended state of an entity's landscape; the gap between them is what the roadmap closes
Transition architecture	An intermediate state on the way from baseline to target (TOGAF Standard, Architecture Development Method §1.5.3)
Gap	An element in the target with no baseline counterpart, or a baseline element to be retired, or a change to an existing one
Work package	A unit of change that closes one or more gaps, with a start, duration, owner and dependencies
Harmonised roadmap	The computed cross-entity view of every entity's work packages, gaps and dependencies, with conflicts highlighted; not a merged plan
Reference entity	The entity chosen as the model for a capability; others converge toward its realisation
Principle conformance	How far an entity's architecture realises the group's principles, on a 1–5 scale with evidence (Greefhorst and Proper)
Dispensation	A time-limited, approved exception to a principle or standard (TOGAF Standard, EA Capability and Governance)

Term	Meaning in this paper
Re-forecast	Recomputing a roadmap's dates and feasibility after a dependency, budget or scope changes
Two-label rule	Whether a change alters the essential model, and its TOGAF change class

The series

This paper is one of five. Each stands alone and each follows the same nine sections, so a reader who knows one knows where to look in the next.

Paper	Title	Theme
EOM-WP-01	Enterprise Ontology for Federated Organisations	One essence, many entities
EOM-WP-02	Enterprise Ontology for Inter-Entity Automation	Why automation across the boundary fails without a shared ontology
EOM-WP-03	Enterprise Ontology Maturity and Baselining	How much do you actually know?
EOM-WP-04	Enterprise Architecture Roadmap Harmonisation	Roadmaps that agree (this paper)
EOM-WP-05	Enterprise Architecture Decision Intelligence	Decisions with a memory

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