



**Institute of
Commissioning &
Assurance**

Assuring Outcomes, Unlocking Productivity

by Peter Foxley

Institute of Commissioning and Assurance

Global Director | Governance and Policy Integration

Canada & the UK: Setting the Pace in Infrastructure Governance

Canada and the UK stand at the forefront of transforming infrastructure performance - not by coincidence, but by design. Both nations have embedded outcome-focused governance across national policy, institutional frameworks, and delivery practice.

In Canada, this commitment is reflected through federal mandates, lifecycle-integrated governance via the Project Navigator framework (2021), and the Canadian Infrastructure Council (CIC) established December 2024 - tasked with delivering the country's first National Infrastructure Assessment. Together, these initiatives embed commissioning principles into the institutional fabric of Canadian infrastructure planning and delivery, ensuring that performance is governed by intent, not hindsight.

In the UK, systemic alignment has been driven by the Infrastructure and Projects Authority and the formation of National Infrastructure & Service Transformation Authority (NISTA) in April 2025 - a consolidated body charged with unifying long-term infrastructure strategy and delivery best practice under joint HM Treasury and Cabinet Office oversight.

In both countries, a culture has emerged where infrastructure performance is assured from the outset - not inspected at the end.

Their leadership is underscored by the *Infrastructure for Good Barometer* - developed by **Economist Impact** - which ranked Canada first and the UK second globally for advancing infrastructure that delivers societal, environmental, and economic value.

Both nations are now shaping policy to elevate commissioning from a technical process to a sovereign discipline of socio-technical outcome assurance - one that ensures infrastructure performs by design, and by intended outcome across its lifecycle.

Together: Redefining Project Governance for a New Era

We are entering a decisive chapter in how societies imagine, deliver, and govern critical infrastructure systems. One where the stakes are higher, the systems more complex, and the consequences of failure harder to absorb. And yet - too often - we still govern projects as if they were linear, siloed, and one-dimensional.

Today, that must change

Traditional infrastructure governance treats project delivery as an endpoint - discrete, output-focused, and largely assessed through cost, schedule, and scope. This paradigm is no longer fit for the complexity, interdependence, and sustainability demands of 21st-century infrastructure.

The Problem

Surprisingly few projects are genuinely aligned to deliver their intended outcomes. Engineers focus on design intent. Contractors prioritise installation. Project managers track cost, schedule and report on progress. Rarely is there a dedicated group - from the outset - responsible for ensuring that the project delivers as a fully integrated, operational system capable of realising its promised benefits.

Commissioning complex infrastructure is inherently difficult. And for those unfamiliar with starting up a functioning system - not merely completing an asset - the early steps required to ensure success often remain unseen. Without a shared understanding of what success looks like, teams fall into goal ambiguity. And as with any collaborative endeavour, when the outcome is unclear and the path undefined, the likelihood of success sharply declines.

On most projects, each discipline delivers its own scope: engineering design, system installation, cost and schedule control. But when teams optimise for their own outputs instead of the collective outcome, alignment fractures. Silos deepen. The project devolves into a disconnected network - rather than a coordinated system designed to deliver enduring public value.

A New Governance Paradigm – From Silos to Systems

This necessitates a new approach: one guided by *Purpose, Stewardship, Integration, and Efficacy*. One where commissioning becomes not the final act - but the framing logic focused on the project outcome, right from the start. At ICxA, we define this as **Outcome Assurance**. It establishes a dedicated Outcome Authority, typically led by a project commissioner who understands what it truly takes to deliver a complex project. These are the visionaries who connect the end to the beginning - ensuring that outcomes are not only intended; but achieved. With a vivid understanding of what success looks like, they align every discipline to work with intention, clarity, and purpose from day one.

Outcome Authority Leaders are guided by Four Cornerstones:

1. **Purpose** (*Investment Planning*) — clarify what we're solving for, before defining how we deliver it
2. **Stewardship** (*Asset Management*) — manage value across the lifecycle, not just at handover
3. **Integration** (*Systems Engineering*) — align the moving parts into coherent, operable outcomes
4. **Efficacy** (*Outcome Assurance*) — track performance against intent, with transparency and trust

These pillars underpin a new infrastructure lifecycle model built for value creation - where contracts aren't just instruments of risk transfer, but catalysts for results.

Where commissioning evolves into a trusted function of assurance. And where the public no longer simply inherits infrastructure, but experiences its value - *transparently, accountably, and by design*. Outcome Authority Leaders are guided by the ICA Global Commissioning Standard, the proven approach used by successful project teams to deliver project outcomes in alignment with initial expectations. This is not theoretical – this is the proven battle-tested standard to follow that allows project owners to protect their project investment.

A Blueprint for Policy and Reform — The ‘How’

To operationalise this vision as an international standard, ICxA is bridging institutional boundaries and forging alignment across the professional ecosystems that govern the infrastructure lifecycle. There of course is lots of resistance to this new approach to projects, as many groups enjoy and benefit from the chaos and inefficiencies that currently exist. The construction industry will not willingly adapt to this way of governing projects, as shown by the lack of productivity gains over the last several decades. Instead, a new project environment must be created, with either conditions created to incentivize project participants to adopt this new way to govern projects, or to mandate projects to be governed in this manner. ICxA recognises that industry transformation cannot be achieved alone. That’s why it is forging alliances with like-minded partners - amplifying the message and advancing a shared agenda for outcome-focused project governance. The following partners are pivotal to this ambition:

- **World Bank & ADBI - Asian Development Bank Institute** Offer frameworks and training in infrastructure investment planning - including socioeconomic evaluation, consensus-building, and strategic capital programme prioritisation.
- **IIBA** — International Institute of Business Analysis Bridging strategic intent with operational clarity - ensuring stakeholder needs are visible, traceable, and actioned across the lifecycle.
- **ICE** — Institution of Civil Engineers Elevating commissioning from a late-stage activity to a leadership discipline - anchored in integration, planning consents, and delivery accountability.

- **IAM** — Institute of Asset Management Aligning Outcome Assurance with asset stewardship, lifecycle value, and sustainability imperatives.
- **IET** — Institution of Engineering and Technology Championing systems thinking, digital assurance, and engineering innovation - positioning Outcome Assurance at the intersection of physical and digital infrastructure integrity.
- **INCOSE** — International Council on Systems Engineering Integrating commissioning into the systems engineering lifecycle - embedding governance across technical interfaces
- **WorldCC** — **World Commerce and Contracting Association Advancing** commercial governance and relational contracting - ensuring commissioning principles shape procurement design, value creation, and performance-based collaboration.

Collectively, these institutional lenses converge through ICxA's four core governance pillars - forming a unified architecture that redefines how infrastructure is conceived, contracted, delivered, and sustained. This is not just alignment - it's a foundational shift toward system-level assurance, where public and private value are co-created by design.

Strategic Enabler Alignment

To bring commissioning-led infrastructure governance to life, three core enablers must operate in concert: **Organisational Change Management, Knowledge and Information Management, and Digital Governance**. These are not peripheral functions - they are the connective tissue that ensures institutions, insight, and technology evolve in sync with asset performance across the lifecycle. Together, they enable a dynamic governance environment where adaptation, intelligence, and integrity are continuously assured.

ICxA Strategic Enabler	Alignment Across Institutions
Organisational Change Management	IIBA, IAM, ICE and the World Bank recognise the centrality of behavioural change, leadership maturity, and capability development; INCOSE promotes whole-of-system integration; WorldCC relational contracting.
Knowledge & Information Management	IAM embeds knowledge transfer into asset strategies to ensure lifecycle continuity, while IIBA, INCOSE, and the World Bank promote evidence-based decisions and auditability - fostering governance integrity through traceability.
Digital Governance & Data Assurance	IAM, ICE and IET increasingly advocate digital twins and data integrity; The World Bank explores AI governance and digital policy tools

Reframing Infrastructure as a Living, Adaptive System

In a world marked by complexity, volatility, and accelerating change, infrastructure governance can no longer remain static. Linear, siloed approaches are unfit for the dynamic challenges ahead. ICxA offers a bold shift in mindset - recasting infrastructure as a living, adaptive system: interconnected, resilient, and continuously accountable to its intended outcomes.

- **Commissioning as a Strategic Activator:** Traditional governance typically asserts control after the design stage. ICxA reverses this logic, embedding governance from inception - activating strategic intent, planning consents, and verification early in the lifecycle. Commissioning becomes the pivot for system-wide coherence, initiating performance alignment from day one.
- **Outcome Assurance as a Sovereign Discipline:** While many delivery models gesture toward lifecycle performance, ICxA positions it as the central tenet of governance. Its Socio-Technical Outcome Assurance framework elevates outcome thinking to a sovereign discipline - integrating policy intent, technical rigour, and operational viability into a single, cohesive assurance architecture.
- **Systemic Orchestration:** Across Interfaces and Actors ICxA transcends asset-centric logic. Its socio-technical lens enables adaptive governance across multi-actor ecosystems - mirroring the lived realities of governments, investors, regulators, and integrators tasked with commissioning infrastructure that creates enduring public value.

Conclusion: Assuring Outcomes, Unlocking Productivity

By aligning the capabilities of leading professional institutions with ICxA's commissioning-led, outcome-focused framework, a new governance paradigm emerges - one that dissolves siloed thinking and unlocks system-wide productivity through outcome assurance.

Each partner contributes critical expertise - from interdisciplinary stewardship and infrastructure strategy to policy innovation and public value advocacy. But it is ICxA's Socio-Technical Outcome Assurance model that uniquely weaves these into a dynamic architecture of **enablement, integration, and continuous verification**.

This is more than a refinement of best practice - it is a step-change in governance. ICxA is pioneering a new paradigm where infrastructure is not only designed to deliver, but continuously governed to adapt and perform by intended outcome. In doing so, it lays the foundation for infrastructure that consistently delivers value - measurable, meaningful, and productivity-enhancing.

To bring this paradigm to life globally, it requires more than a framework - it demands leadership. The UK–Canada initiative provides that leadership: a transatlantic alliance capable of demonstrating commissioning-led governance at scale, shaping international standards, and accelerating adoption across jurisdictions.