



Draft Paper



BLUE DOT
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Embedding Blue Dot Network Quality Criteria in
Infrastructure Procurement

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Guidelines for Practitioners

This draft paper provides guidance for integrating Blue Dot Network quality infrastructure criteria into infrastructure procurement and contract management processes. It is intended primarily for public contracting authorities and procurement professionals responsible for the planning, procurement, and management of infrastructure projects, and may also be useful to infrastructure agencies, policy makers, multilateral development banks, development finance institutions, and advisers supporting project preparation and delivery. The guidance focuses on how public buyers can integrate these principles into procurement strategies, tender requirements, evaluation methodologies, contractual obligations, and contract management arrangements. It draws, in part, on the work and experience of ACCIONA. This document is launched as a working draft and may undergo minor changes as the analysis is further developed and updated.

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Abbreviations and acronyms

Acronym	Full Term	Notes / Context
BAFO	Best and Final Offer	A stage in competitive procurement where shortlisted bidders are invited to submit a final improved proposal before award.
BDN	Blue Dot Network	An international certification framework for quality infrastructure, developed by the OECD, G7 and partner economies. Covers ten elements and 47 themes.
BNG	Biodiversity Net Gain	A methodology for quantifying the net impact of a project on habitats, requiring a positive outcome above baseline measured in habitat units.
CAPEX	Capital Expenditure	Upfront investment costs covering design, construction and commissioning of an infrastructure asset.
CMF	Carbon Management Framework	A voluntary, structured guide that helps infrastructure project teams measure and reduce whole-life carbon emissions. Designed by FIDIC (International Federation of Consulting Engineers).
CO₂e	Carbon Dioxide Equivalent	A standard unit for measuring greenhouse gas emissions, normalising different gases against their global warming potential relative to CO ₂ .
COVID	Coronavirus Disease 2019	Referenced in the context of post-pandemic infrastructure investment programmes and fiscal multiplier studies.
DB	Design-Build	A contractual model integrating design and construction responsibilities within a single contract.
DBB	Design-Bid-Build	The traditional sequential procurement model separating design from construction through distinct contracts.
DBFO	Design-Build-Finance-Operate	A PPP variant integrating design, construction, financing and operation in a single long-term contract.
DBOM	Design-Build-Operate-Maintain	A contractual model integrating design, construction, operation and maintenance, creating full lifecycle accountability.
EBRD	European Bank for Reconstruction and Development	Multilateral development bank; referenced for guidance on value for money in public procurement.
EIA	Environmental Impact Assessment	A systematic process for identifying and evaluating the environmental consequences of a proposed project before implementation.
EPC	Engineering, Procurement and Construction	A lump-sum turnkey contract in which a single contractor is responsible for all design, procurement and construction activities.
ESG	Environmental, Social and Governance	A framework for reporting and assessing a company's performance across sustainability and governance dimensions.
ESMP	Environmental and Social Management Plan	A project-specific document specifying how environmental and social impacts will be managed and monitored during implementation.
ESMS	Environmental and Social Management System	An organisational framework, such as one aligned with ISO 14001 or IFC Performance Standards, for managing environmental and social risks across projects.
EUR	Euro	Currency of the European Union; used in the context of EU investment programmes and shadow carbon pricing.
FTE	Full-Time Equivalent	A unit measuring workforce size by converting part-time hours to a full-time basis; used in local workforce share KPIs.
GDP	Gross Domestic Product	A measure of national economic output; referenced in the context of public procurement as a share of GDP.
ICT	Information and Communications Technology	Digital infrastructure sector; used in illustrative weighting frameworks for award criteria.

IEA	International Energy Agency	Intergovernmental organisation; referenced for its Net Zero Scenario as a recognised net-zero pathway for carbon budget alignment.
IFC	International Finance Corporation	Private sector arm of the World Bank Group; its Performance Standards (IFC PS) are a recognised benchmark for environmental and social safeguards.
IISD	International Institute for Sustainable Development	Research organisation; referenced for analysis of infrastructure's role in achieving the SDGs.
ILO	International Labour Organization	UN agency setting international labour standards; its core conventions are referenced as a baseline for labour rights pre-qualification requirements.
IPD	Integrated Project Delivery	A collaborative contracting model aligning incentives across the owner, designer and contractor through shared risk and reward.
ISO	International Organization for Standardization	International standard-setting body; ISO 14001 (environmental management) and ISO 14064 (greenhouse gas accounting) and others are referenced throughout.
ISSB	International Sustainability Standards Board	Standard-setting body issuing IFRS Sustainability Disclosure Standards (S1 and S2); referenced as a framework for ESG reporting alignment.
KPI	Key Performance Indicator	A measurable value used to evaluate performance against defined objectives; used in contract monitoring and BDN certification evidence.
LCA	Lifecycle Assessment	A methodology for evaluating the total environmental impact of a product or project across its full lifecycle, from design through decommissioning.
LCC	Lifecycle Cost / Lifecycle Costing	An evaluation methodology that encompasses all costs from design through decommissioning, including CAPEX, OPEX, rehabilitation and environmental externalities.
MDB	Multilateral Development Bank	International financial institutions such as the World Bank, ADB and EBRD; their procurement and environmental standards are referenced as applicable frameworks.
MEAT	Most Economically Advantageous Tender	An EU procurement principle requiring award decisions to consider quality, sustainability and other criteria beyond lowest price.
NBS	Nature-Based Solutions	Approaches that use natural processes and ecosystems to address environmental and climate challenges within infrastructure design.
NRW	Non-Revenue Water	The volume of water lost in a distribution network before reaching the customer; a key performance indicator for water concessions.
OECD	Organisation for Economic Co-operation and Development	Intergovernmental organisation; primary source for procurement guidance, strategic public procurement frameworks, and green procurement research referenced throughout.
OPEX	Operational Expenditure	Ongoing costs of operating and maintaining an infrastructure asset, including energy, staffing, maintenance and insurance.
PPP	Public-Private Partnership	A long-term contractual arrangement between a public authority and a private entity for the delivery and financing of infrastructure or services.
PQQ	Pre-Qualification Questionnaire	A formal document used by contracting authorities to assess bidder capability and eligibility before the competitive tender stage.
PS	Performance Standards (IFC)	The IFC's eight Performance Standards on Environmental and Social Sustainability, widely adopted as a benchmark for infrastructure project safeguards.
RFI	Request for Information	A market engagement tool used during project preparation to gather feedback from potential bidders on project feasibility and quality ambition.
SDG	Sustainable Development Goal	The 17 goals of the UN 2030 Agenda for Sustainable Development; SDG 9 on resilient infrastructure is directly referenced.
SLA	Service Level Agreement	A contractual commitment specifying the performance standards a service provider must meet, including availability and response time thresholds.
SME	Small and Medium-sized Enterprise	Businesses below defined size thresholds; referenced in the context of procurement measures to maintain market competition alongside quality requirements.
TVO	Total Value of Ownership	An evaluation methodology encompassing all costs and value streams over the full asset lifecycle, extending lifecycle costing to include economic and social co-benefits.
UNDP	United Nations Development Programme	UN agency; referenced for guidance on SDG Goal 9 and sustainable infrastructure.
UNEP	United Nations Environment Programme	UN agency; referenced for analysis of infrastructure's influence on SDG targets.
USD	United States Dollar	Currency unit used in global infrastructure investment gap estimates and G7 programme commitments.
WLCA	Whole-Life Cost Analysis	A comprehensive cost evaluation covering all phases from design through decommissioning; used as the required submission format in BDN-aligned tender documents.

Executive summary

Infrastructure is a foundation of economic performance and social development, yet the benefits of investment depend far more on quality than on volume alone. The world faces an unprecedented investment wave, with cumulative needs of around USD 106 trillion by 2040, at a time of acute fiscal constraint and global public debt above USD 100 trillion. In this context, the decisive question for governments is not simply how much to invest, but how to ensure that each project delivers lasting public value. Quantity and quality are complementary, not competing, objectives.

Procurement is a strategic policy choice. Public procurement is one of the largest single instruments of public expenditure available to any government, and in infrastructure it is the moment when an approved concept becomes a set of contractual commitments. Its design shapes cost, quality, risk allocation, competition and service performance across the asset's life. Neither lowest-price selection nor the mere addition of qualitative criteria guarantees good outcomes: the aim is a proportionate set of requirements that genuinely influence performance, are intelligible to the market, supported by credible evidence, and carried through into contract implementation. Crucially, the decisions with the greatest leverage are taken earliest, and quality infrastructure begins well before the tender is issued.

The Blue Dot Network provides a common framework for defining quality by consolidating over 80 international standards into holistic framework covering all stages of the infrastructure life cycle. The BDN certification framework is organised across ten elements, forty-seven themes and 131 criteria, with criteria assigned three performance levels (Essential, Superior and Best-in-Class) that let authorities calibrate ambition to project context and institutional capacity. Its four-tier logic (Element → Theme → Criterion → Requirement) is what makes the framework operational: elements set the policy frame, and requirements provide the specifications against which tender documents and evaluation rubrics can be built. Not every criterion translates into a tender instrument. Some are *procurer-facing*, describing how the authority must design and govern the process, while others are *contractor-facing*, expressed as selection gates or scored award criteria. Authorities should therefore read the framework on two levels: as a checklist for their own procurement governance, and as a source of criteria to embed in tender documentation.

Embedding quality is a phase-by-phase task. These Guidelines set out a structured method across five sequential procurement phases:

1. **Project preparation.** Define the quality baseline and identify the material BDN elements before the tender.
2. **Pre-qualification.** Filter for genuine capability, not merely compliance.
3. **Tender design.** Translate BDN elements into award criteria, weightings and evaluation methodology.
4. **Bid evaluation.** Apply criteria consistently, transparently and defensibly.
5. **Contract management.** Close the loop between commitments and outcomes through KPIs, monitoring and, where pursued, certification.

The framework is a toolkit, not a checklist to be completed in full regardless of context. A risk-based, proportionate approach is essential: a limited number of well-designed criteria tied to a project's principal

outcomes will generally outperform a large set of weakly differentiated requirements that impose bidding and verification costs without improving performance.

Line of sight from policy to outcomes is the central discipline. Each material objective should be translated into a requirement precise enough for the market to understand, for evaluators to assess consistently, and for the contract manager to verify, with an identified data source, a responsible party and a consequence for non-performance. Wherever possible, authorities should draw on evidence already generated through appraisal, environmental and social assessment, financing and regulatory approval, rather than creating a parallel compliance process.

Procurement operates within a wider governance system. It cannot by itself correct an unaffordable, poorly prepared or weakly governed project. The Guidelines therefore situate BDN alignment within established OECD guidance, namely the Recommendations on the Governance of Infrastructure, on Public Procurement, and on the Public Governance of Public-Private Partnerships and alongside recognised international due-diligence frameworks. Used this way, BDN provides a common language across authorities, investors, contractors, regulators and communities, supporting decision-making and market confidence rather than functioning as a stand-alone compliance exercise.

The report concludes with ten recommendations for contracting authorities, infrastructure owners, policy makers, regulators and development partners, spanning lifecycle integration, project readiness, value-for-money testing, evidence-based procurement strategy, delivery-model choice, buyer capability, permitting and regulatory governance, market competition, outcome-focused contract management, and the use of performance evidence to improve future delivery.

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Part I: Infrastructure, procurement and quality: the strategic case

1. Infrastructure as an enabler of development

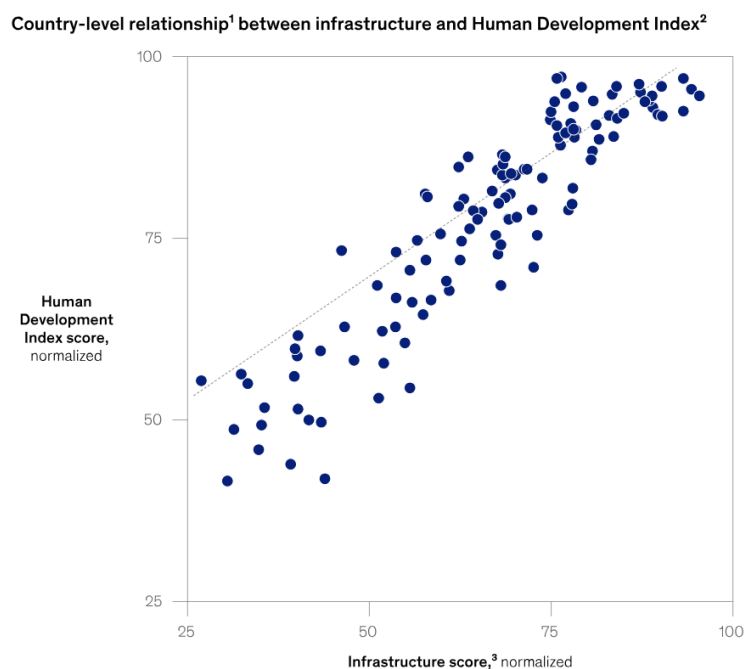
1.1. Infrastructure as the foundation of public agendas

Infrastructure is one of the most powerful instruments available to governments to advance their development agendas. Transport networks connect markets and people. Energy systems power productive activity. Water and sanitation infrastructure protects public health. Digital networks enable participation in the modern economy. Across all these dimensions, infrastructure does not merely support development — it makes it possible.

The relationship between infrastructure investment and economic performance is well established. Quality infrastructure raises productivity, reduces transaction costs, attracts private investment, and expands access to services and opportunities.

This approach builds on a long-standing body of research examining the relationship between infrastructure, productivity and economic growth. The seminal contribution of Aschauer (Aschauer, 1989^[1]) helped establish public capital as a central topic in macroeconomic analysis, although subsequent research has refined and qualified the magnitude of the effects identified in the early literature. Comprehensive reviews by Straub (Straub, 2011^[2]; Straub, 2008^[3]) conclude that, despite methodological challenges in establishing causality, the balance of evidence supports a positive contribution of infrastructure to economic performance and development outcomes. More recently, *Infrastructure Foundations: From Current Assets to Future Growth* emphasises that infrastructure is a fundamental enabler of growth, social inclusion and resilience, while highlighting that returns vary considerably across sectors, countries and stages of development and depend on the quality and efficiency of investment decisions (Straub, 2026^[4]). Evidence from McKinsey & Company (McKinsey, 2025^[5]) further shows that higher-quality infrastructure is closely associated with improved human development outcomes (Figure 1.1). Likewise, BCG (2025), analysing 92 countries over the past 30 years, finds that countries experiencing sustained increases in infrastructure stock tend to exhibit stronger long-run GDP growth. While the precise direction and magnitude of causality remain subject to ongoing research, the evidence consistently suggests that well-planned and effectively delivered infrastructure plays an important role in supporting economic and social development.

Figure 1.1. Relationship between infrastructure and HDI



¹ $R^2 = 0.85$.

²The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: having a long and healthy life (life expectancy), being knowledgeable (mean of years of schooling), and having a decent standard of living (gross national income per capita). The HDI is the geometric mean of normalized indexes for each of the 3 dimensions. The data shown is from 2023.

³The Infrastructure score from the World Economic Forum is part of the Global Competitiveness Index "Infrastructure" pillar, which aggregates multiple indicators (eg, quality of roads, ports, rail, electricity supply) to form a single score per each country. The data shown is from 2019.

Source: Human Development Index, UN Development Programme, 2023; Klaus Schwab, ed., The Global Competitiveness Report, World Economic Forum, 2019

Source: (McKinsey, 2025^[5])

Box 1.1. The multiplier effect of infrastructure investment

Infrastructure investment can generate economic benefits through two distinct channels. The first, discussed in this section, relates to the long-term productivity and development gains arising from improved infrastructure services. The second concerns the short-term macroeconomic stimulus generated by public spending during project delivery.

A meta-analysis of more than 3,000 estimates from over 200 academic studies conducted by the Global Infrastructure Hub found that public infrastructure investment carries an average fiscal multiplier of approximately 1.5 within two to five years, exceeding those typically observed for other categories of public expenditure. The multiplier increases to approximately 1.6 during economic downturns, when spare capacity in the economy reduces the risk of crowding out private activity.

These findings are particularly relevant in the context of countercyclical fiscal policy, where infrastructure spending can help support demand, employment and economic activity during periods of economic weakness. However, short-term multiplier effects should be distinguished from the longer-term development impacts of infrastructure. The enduring contribution of infrastructure to growth and well-being ultimately depends on whether projects improve the quality, accessibility and efficiency of the services provided to citizens and businesses.

The evidence therefore reinforces the importance of quality infrastructure: the benefits of investment depend not only on the volume of spending but also on whether projects are well-selected, well-

designed, transparently procured and aligned with broader development objectives (GI Hub, 2020^[6]; World Bank, 2020^[7]).

Beyond direct economic returns, infrastructure investment contributes to broader development outcomes, including reduced territorial inequality, improving social inclusion, and building the physical foundations for climate resilience.

Governments worldwide recognise this potential, with infrastructure playing a central role in national development plans, climate strategies, and global commitments such as the Sustainable Development Goals and the Paris Agreement. A United Nations Environment Programme report highlights that, beyond being an explicit objective under SDG 9, infrastructure acts as a foundational enabler of the broader development agenda, influencing over 80% of SDG targets, ending poverty and ensuring water and energy access to building sustainable cities and combating climate change (UNDP, 2018^[8]; IISD, 2015^[9]).

The G20 Principles for Quality Infrastructure Investment, endorsed in 2019, further affirm that infrastructure can maximise positive impact, raise economic efficiency, integrate environmental and social considerations, and strengthen governance (G20 Japan Presidency, 2019^[10]). Yet the gap between ambition and reality remains large: only 35% of SDG targets are on track (UN, 2025^[11]). Translating strategic commitments into infrastructure that genuinely serves public objectives requires more than political will and financial resources. It requires deliberate choices about how projects are designed, procured and delivered.

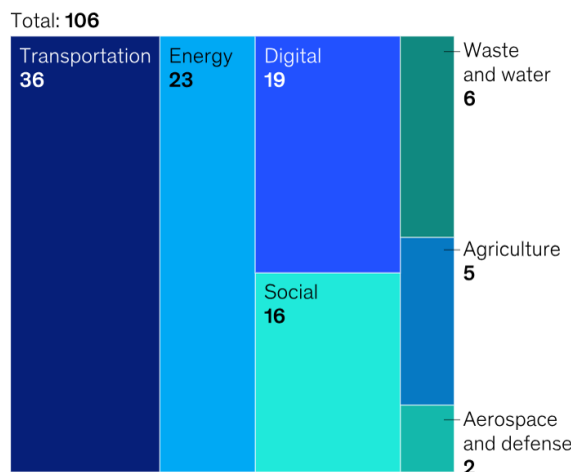
1.2. Rising infrastructure investment needs and the challenge of quality

The world's infrastructure investment needs are substantial and continue to grow. Aging assets, rapid urbanisation, demographic change, technological transformation, climate adaptation requirements and the energy transition are increasing demand for modern, resilient and sustainable infrastructure across transport, energy, digital and social sectors. A convergence of global forces is accelerating infrastructure investment needs. Aging assets, urbanisation, geopolitical pressures, and technological change are further widening existing gaps. An estimated \$106 trillion in cumulative investment will be required by 2040 (Figure 1.2) to meet demand and modernise infrastructure while decarbonizing assets/supply chains, particularly in transport, energy, digital, and social sectors (McKinsey, 2025^[5]).

Figure 1.2. Cumulative expected Investment by 2040

Cumulative infrastructure investment is expected to reach as high as \$106 trillion by 2040

Total infrastructure investment projected through 2040, by sector, \$ trillion



Note: Figure does not sum, because of rounding.

Source: Food and Agriculture Organization; Global Infrastructure Hub; International Energy Agency; International Monetary Fund; Organisation for Economic Co-operation and Development; Prequin; United Nations; World Bank; World Economic Forum; McKinsey analysis

This investment challenge is unfolding under growing fiscal constraints. Global public debt exceeded \$100 trillion in 2024 and is projected to approach 100% of global GDP by the end of the decade (IMF, 2025^[12]). As the demand for infrastructure increasingly outpaces available public resources, governments face difficult choices about where and how to invest. In this context, the central challenge is not simply mobilising additional finance but ensuring that investments are directed towards the projects that deliver the greatest economic, social and environmental value. Quantity and quality are therefore complementary imperatives rather than competing objectives.

The scale of infrastructure investment currently planned or underway globally is unprecedented. The European Union's Global Gateway initiative targets EUR 300 billion in infrastructure investment by 2027. The United States Infrastructure Investment and Jobs Act commits USD 1.2 trillion over a decade. The G7 Partnership for Global Infrastructure and Investment aims to mobilise USD 600 billion by 2027. The Global Infrastructure Hub projects total global infrastructure investment of USD 94 trillion through 2040 (GI Club, 2019^[13]).

The scale of planned infrastructure investment reflects the magnitude of global infrastructure needs. Yet the availability of funding alone does not guarantee positive outcomes. With resources remaining finite relative to demand, the benefits of this investment wave will depend on governments' ability to prioritise projects, allocate resources efficiently and ensure that infrastructure delivers lasting public value. The Blue Dot Network provides a framework to support these objectives.

1.3. Not all infrastructure contributes equally to public objectives

Not all infrastructure contributes equally to public objectives, and that difference is what these guidelines mean by quality infrastructure. The term is used here in the sense established by the G20 Principles for Quality Infrastructure Investment: infrastructure that maximises its positive economic, social and environmental impact across the full life cycle, while ensuring value for money, resilience to natural and other hazards, inclusiveness, and sound governance.¹ Quality in this sense is not a property of the asset alone but of the decisions that shape it — how closely it aligns with the contracting authority's policy priorities, how far it goes beyond minimum

mandatory standards and conventional practice, and whether it is procured on the basis of long-term value rather than lowest price alone.

Understood this way, sustainability is one dimension of quality infrastructure, but not the whole of it. Environmental and social performance sit alongside economic efficiency over the life cycle, resilience, transparency and governance: a project may be environmentally sound yet still fall short on quality if it is poorly aligned with public objectives, fails to deliver value for money, or is delivered through opaque processes. It is this broader, multi-dimensional understanding — quality as the sum of these attributes, anchored in recognised international principles and made verifiable through frameworks such as the Blue Dot Network — that the remainder of this report develops and operationalises.

This quantitative investment gap, however, conceals a deeper challenge. Not all infrastructure investment closes the development gap in a meaningful way. Projects that are poorly designed, inadequately maintained, or misaligned with long-term public objectives may consume scarce fiscal resources while generating limited development impact. In some cases, infrastructure that appears to close a gap in the short term creates new vulnerabilities over time — through unsustainable debt burdens, technological lock-in, environmental degradation, or insufficient resilience to climate shocks. In addition, increased infrastructure spending means increased carbon emissions from hard-to-abate industries such as concrete and steel, further undermining benefits in terms of global public goods and development outcome.

Two infrastructure projects with similar costs can generate vastly different outcomes in terms of economic impact, social inclusion, environmental sustainability, and long-term resilience. The difference lies in decisions made long before the first stone is laid.

A transport corridor that integrates territorial planning, incorporates climate resilience measures, enables multimodal connectivity, and is designed for long-term operational efficiency will generate substantially more economic and public value than one conceived solely to move vehicles from one point to another. Likewise, infrastructure that is designed around the specific needs and priorities of local territories and communities is more likely to generate lasting economic and social benefits. By contrast, projects that fail to respond to local demand or territorial realities risk becoming underutilised assets, delivering limited returns on investment while doing little to address the area's development challenges. An energy project that builds local technical capacity, embeds flexibility for future technology shifts, and applies rigorous environmental safeguards will contribute more to development than one optimised solely for minimum capital cost. As the OECD Implementation Handbook for Quality Infrastructure Investment notes, the development impact of infrastructure depends fundamentally on the quality of decisions taken throughout its lifecycle — not on the volume of spending alone (OECD, 2021^[14]).

Several dimensions of design quality determine the public value that infrastructure generates over its lifetime:

Strategic and Territorial integration. Infrastructure aligned with land use planning, connecting underserved communities and supporting regional economic development, generates broader and more equitable returns than infrastructure designed in isolation from its spatial context.

Climate resilience. Infrastructure designed to withstand current and projected climate risks — including extreme weather events, sea level rise, and shifting precipitation patterns — protects the value of investment over the long term and reduces the fiscal costs of emergency response and reconstruction. Every dollar invested in disaster-resilient infrastructure can save between USD 4 and USD 7 in recovery costs (OECD, 2024^[15]).

Lifecycle efficiency Design choices significantly influence long-term operation and maintenance costs. Prioritising lifecycle cost optimisation—rather than upfront capital expenditure—improves value for money for taxpayers and for investors. Preventive maintenance alone can reduce lifecycle costs by up to 32% (MLIT, 2018^[16]).

Environmental and social safeguards. Infrastructure that integrates environmental impact assessment, respects community rights, and promotes social inclusion generates broader co-benefits and reduces the risk

of costly delays, legal challenges, and reputational damage (IFC, 2012^[17]). More fundamentally, the long-term value and financial viability of infrastructure depend on public acceptance. Projects that secure broad community support are more likely to be delivered on time, effectively used once operational, and to generate sustainable economic and social returns, whereas projects lacking social acceptance often face delays, opposition, underutilization, or even failure.

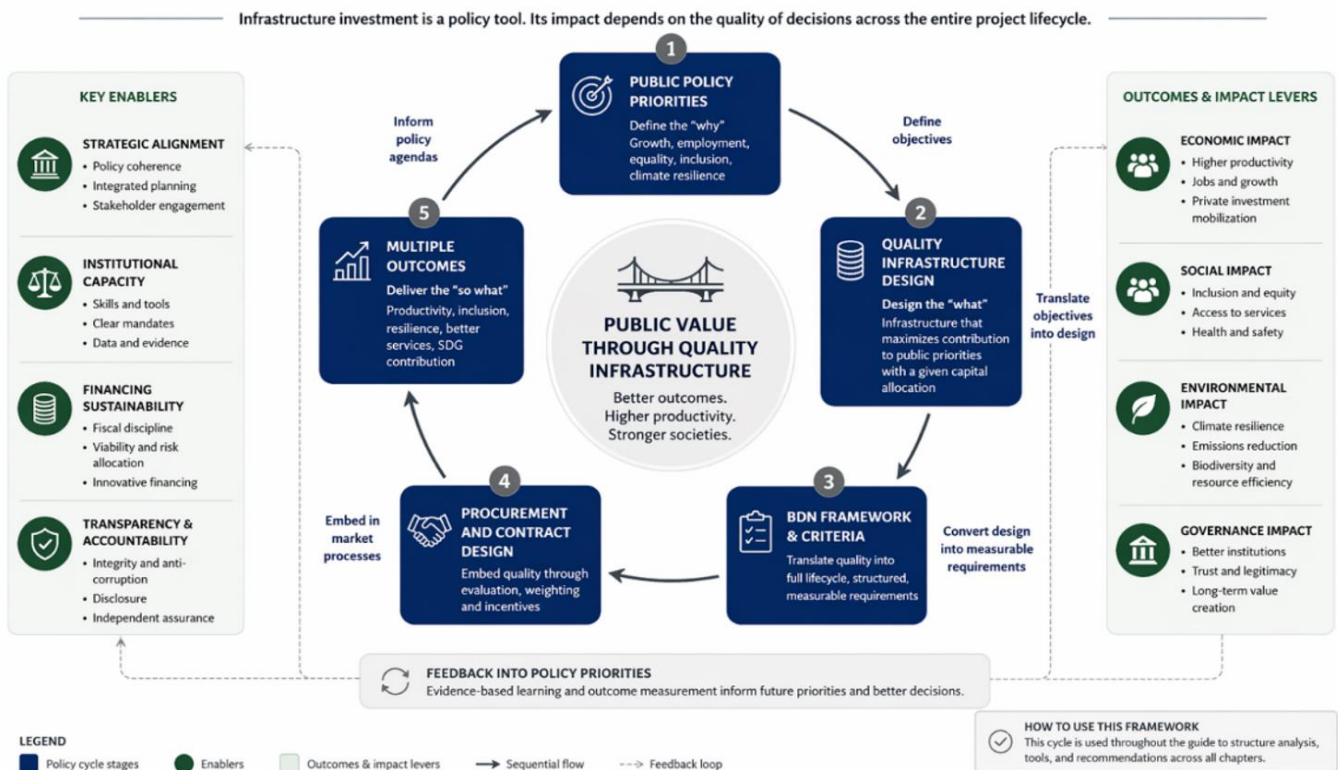
This has important implications for policymakers. Maximising the economic and social returns of infrastructure requires not only selecting the right projects but ensuring that they are aligned with broader development priorities and supported by coherent decision-making processes.

Infrastructure investment is ultimately a policy instrument, and its contribution to development depends less on the volume of spending than on the quality of the decisions taken at each stage of the project cycle (OECD, 2021^[14]). Figure 1.3 traces that cycle: public policy priorities define the objectives infrastructure is meant to serve; those objectives are translated into quality infrastructure design, structured through the Blue Dot Network framework and criteria, and embedded in procurement and contract design; and the resulting projects deliver a combination of economic, social, environmental and governance outcomes that together constitute public value. Each stage rests on a set of enabling conditions, from strategic alignment and institutional capacity to financing sustainability and transparency, and feeds evidence back into future policy decisions. Within this cycle, the design stage is decisive, because it is where the dimensions of quality that determine long-term public value are set. Several of these dimensions warrant particular attention.

Figure 1.3. The policy-to-outcomes cycle for quality infrastructure

THE QUALITY INFRASTRUCTURE POLICY CYCLE

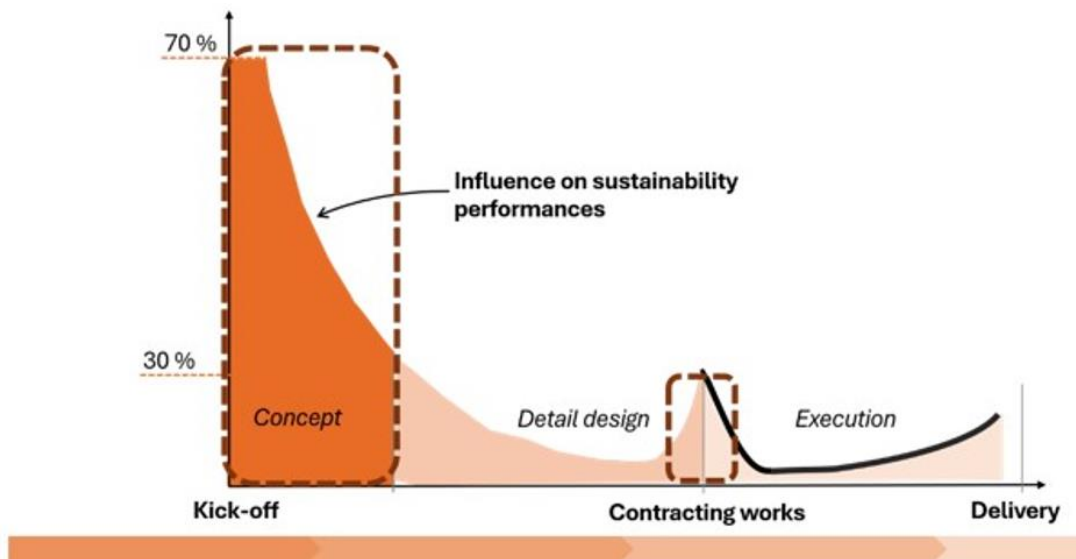
FROM PUBLIC POLICY PRIORITIES TO SUSTAINABLE INFRASTRUCTURE OUTCOMES



1.4. The decisions that matter most are taken earliest

The relationship between design freedom and project lifecycle follows a well-documented pattern: the earlier a decision is made, the greater its impact on the long-term performance of the assets and the lower the cost of incorporating quality considerations. As a project advances from planning through design, procurement, construction, and operation, the ability to influence fundamental parameters narrows rapidly, while the cost of change increases (Figure 1.4).

Figure 1.4. Curve of influence during Infrastructure Design & Build cycle



Decisions taken during the planning and design phase determine the fundamental architecture of the asset: its location, its capacity, its technology base, its exposure to risk, and its integration with broader systems. A life cycle approach matters precisely because it enables integrated risk management, resilience enhancement, adaptive capacity, and long-term cost savings, by identifying from the outset the interdependencies between different phases and planning accordingly (OECD, 2024^[15]).

Because these early decisions carry the greatest long-term consequence, they should rest on structured, verifiable evidence that can be reviewed, updated and audited as the project moves through procurement, delivery and operation, increasingly enabled by digital information management (as discussed in Box 2.4).

This has a direct implication for how quality must be approached. Quality cannot be audited into a project after the fact. It must be built-in ex-ante, from the earliest stages of project development, when the design space is still open and the cost of incorporating ambitious standards is lowest.

Feasibility studies and other project preparation activities are a critical foundation for these early decisions. Robust technical, financial, environmental and social assessments help identify risks, test alternative options, and ensure that projects are both viable and aligned with development objectives before major commitments are made. Yet, project preparation is often underfunded, with resources disproportionately concentrated on later stages of implementation. Investing adequately in high-quality upstream preparation is therefore essential to improving the overall quality, bankability, and long-term performance of infrastructure projects.

This insight shapes the fundamental logic of the Blue Dot Network certification framework, and of this guide. The question is not only what standards infrastructure should meet, but when and how those standards should be introduced into the project development process to have maximum effect.

2. Public procurement as an instrument of public policy: incentives, models, quality and current practices.

2.1. The procurement decision as a policy choice

Public procurement represents one of the most significant levers available to governments for translating policy objectives into concrete outcomes. Public procurement accounts for 13% of GDP in OECD countries, making it one of the largest single instruments of public expenditure available to any government (OECD, 2023^[18]).

In infrastructure, procurement is the point at which an approved project concept is translated into contractual commitments and brought to the market. Procurement decisions can affect cost, quality, timing, risk allocation, competition, service performance and accountability throughout delivery and operation. Procurement cannot, however, compensate for poor project selection, unaffordable scope, insufficient project preparation or unresolved regulatory and permitting conditions. It should therefore be understood as one component of a wider infrastructure-governance and project-delivery system.

Within this wider system, procurement provides several mechanisms for pursuing public objectives. Sustainability, resilience, innovation, accessibility, inclusion and responsible business conduct may be reflected in technical specifications, qualification requirements, award criteria, contract conditions and performance-management arrangements. The appropriate mechanism depends on the nature of the objective, the applicable legal framework, market capability, the availability of verifiable evidence and the contracting authority's capacity to manage the resulting obligations.

The use of lowest price is not inherently inconsistent with quality or value for money. It may be appropriate where requirements can be specified clearly, minimum quality standards are robust, offers are genuinely comparable and important lifecycle effects are either limited or addressed elsewhere in the procurement and asset-management arrangements. The greater risk arises where lowest initial price is used for complex projects whose quality is difficult to specify, whose future operating and maintenance costs are considerable, or whose unresolved risks bidders cannot price reliably.

Conversely, the inclusion of additional qualitative criteria does not automatically improve outcomes. Criteria that are weakly related to the project, difficult to evaluate or costly to verify may increase bid costs, reduce competition, create avoidable discretion or reward commitments that cannot subsequently be enforced. The objective is not to maximise the number or weight of quality criteria, but to identify a proportionate set of requirements that can influence project performance.

Procurement design is therefore a strategic policy choice, but one involving trade-offs. Contracting authorities should consider how specifications, award methods, contractual incentives, competition, risk allocation and implementation capacity interact. Quality objectives create public value where they are of essence to the project, intelligible to the market, supported by credible evidence and carried through into contract implementation.

The strategic character of procurement therefore lies not in selecting the most complex procurement model or the greatest number of quality criteria, but in choosing procurement arrangements that are proportionate to the project's objectives, risks and market circumstances.

2.1.1. Infrastructure procurement as a driver of public agendas

Governments are increasingly recognising that infrastructure programmes represent a defining opportunity to advance their broader public agendas (Box 2.1). This evolution is mirrored by recent reforms undertaken by multilateral development banks, which increasingly promote procurement approaches centred on quality, lifecycle value and development outcomes rather than price alone. As discussed in Box 2.2, these reforms provide further evidence of a broader shift towards strategic procurement as a tool for achieving public policy objectives and maximising the long-term value of infrastructure investment.

Box 2.1. Examples of legal and policy frameworks enabling strategic infrastructure procurement

A growing number of jurisdictions have created legal and policy frameworks that allow infrastructure procurement to consider quality, sustainability, innovation and lifecycle performance alongside price. The practical use and effectiveness of these provisions depend on project characteristics, market conditions, institutional capability and implementation arrangements.

United Kingdom. The UK's Procurement Act 2023 introduces a new framework for public contracts that explicitly elevates the concept of "value for money" beyond price, requiring contracting authorities to consider social and environmental factors in award decisions. The Infrastructure and Projects Authority provide detailed guidance on lifecycle costing methodologies for major infrastructure programmes.

Australia. The Australian Government's Infrastructure Investment Programme incorporates social procurement requirements into Commonwealth-funded projects, including targets for Indigenous employment and small and medium enterprise participation. The Infrastructure Australia framework requires all proposals to demonstrate alignment with national priorities including climate resilience and net-zero commitments.

European Union. The EU's 2014 procurement package — Directive 2014/24/EU (public sector), Directive 2014/25/EU (utilities) and Directive 2014/23/EU (concessions) explicitly enables lifecycle costing and the integration of environmental, social and innovation criteria in award procedures across the delivery models most relevant to infrastructure. Recent EU regulations such as Regulation (EU) 2024/1735 (Net-Zero Industry Act (NZIA)) as well as proposed EU legislation such as the Industrial Accelerator Act (IAA) go further by explicitly mandating sustainability and resilience requirements in award criteria for tenders and auctions. In 2022, 92% of surveyed OECD countries had adopted a national green public procurement policy framework (OECD, 2024^[19]).

Japan. Japan's Ministry of Land, Infrastructure, Transport and Tourism employs a comprehensive bidding system that evaluates positively construction companies incorporating advanced technology into their projects, compared to those that do not. The system provides direct financial incentives for innovation and quality in infrastructure delivery (OECD, 2024^[19]).

Brazil. Brazil's procurement framework under Law nº 14.133/2021 enables the use of the "most advantageous tender," combining price with quality, technical performance, and lifecycle considerations. The system also incorporates sustainability and innovation criteria, supporting a shift from lowest-cost selection toward long-term value in infrastructure delivery.

Chile. Chile uses its centralized procurement system managed by "ChileCompra" to integrate sustainability and social criteria into public purchasing. In infrastructure and concession models,

evaluation approaches emphasize lifecycle performance, service quality, and value for money beyond price, while maintaining strong transparency and competition.

Türkiye. Türkiye's approach to strategic infrastructure procurement in the transport sector is increasingly shaped by a policy-driven planning framework. The 2053 Transport and Logistics Master Plan, the 12th Development Plan, the Ministry of Transport and Infrastructure Strategic Plan, the Green Deal Action Plan, and the emerging Net Zero Transport Roadmap collectively position transport investment around key priorities such as logistics efficiency, multimodal integration, digitalization, climate resilience, accessibility, and sustainable mobility. Within this framework, public procurement serves not merely as a purchasing mechanism but as a strategic policy instrument. By embedding national transport priorities into technical specifications, lifecycle performance requirements, digital project management practices, carbon reduction commitments, and contract performance indicators, procurement can effectively translate strategic objectives into measurable project outcomes.

Box 2.2. Recent MDB procurement reforms.

The multilateral development banks have moved decisively away from lowest-price award in the years since most of the tenders analysed above were issued — reinforcing, from an authoritative source, the direction this guide advocates.

The World Bank's updated Procurement Regulations for Investment Project Financing (effective 1 March 2025) make rated, non-price criteria mandatory for most large internationally competitive Bank-financed contracts, set a minimum quality weighting (see the weighting framework in Section 4), integrate early market engagement for contracts above USD 10 million, and encourage aggregating smaller contracts and offering direct-payment options to widen participation. In July 2025 the Bank further strengthened requirements to support job creation and skills development, opening scope to build local-labour outcomes into rated criteria. The Asian Development Bank has announced merit-point evaluation for all internationally advertised contracts from 1 January 2026.

At the system level, fifteen MDBs, co-ordinated through their Heads of Procurement Network and led by the ADB, have developed a common Value-for-Money assessment framework (endorsed 2026). Each bank applies it independently, but all share an approach that assesses procurement against economy, efficiency, effectiveness and equity across the project cycle — anchored in an early value-for-money statement and SMART indicators rather than price alone.

Two implications follow. First, these reforms validate BDN-aligned procurement design: quality weightings, rated criteria, early market engagement and lifecycle value are now default practice at the institutions financing much of the world's infrastructure. Second, they are recent — several tenders in the sample analysed here pre-date them and may not reflect current MDB practice. Note too that MDBs typically place technical capability, environmental and social safeguards, integrity and financial capacity at the qualification stage rather than scoring them, a reminder that rated criteria are one instrument among several (see the implementation-mechanisms framing in Chapter 4).

The scale of current investment commitments — from national recovery plans to regional development funds and climate transition programmes — means that decisions about how infrastructure is procured will shape economies and societies for decades.

Public procurement in general, and green public procurement in particular, is increasingly seen as a strategic government tool for achieving sustainability objectives and meeting national commitments on climate change under the Paris Agreement. In 2022, almost every OECD country responding to a survey had developed a green

public procurement policy framework or strategy, and 29 of them refer explicitly to public procurement in their national environmental commitments as a tool for pursuing sustainability goals (OECD, 2024^[19]).

Beyond environmental objectives, strategic procurement is being mobilised to advance innovation, local economic development, social inclusion, and responsible business conduct. Public procurement has the potential to be a "strategic asset for societal change" beyond improving efficiency and lowering costs. Governments can leverage their purchasing power to promote ethical, sustainable, and inclusive practices — prioritising suppliers with fair labour standards, fostering diversity, supporting small and minority-owned businesses, encouraging environmental sustainability, supporting their industry's digital transformation and ensuring ethical supply chains (Monteiro, 2024^[20]).

The countries that are advancing most rapidly in this direction share a common approach: they treat procurement not as an administrative function but as a strategic instrument of governance. They develop methodologies for lifecycle costing that move beyond upfront capital expenditure. And they build monitoring systems that track outcomes — not just compliance with process requirements.

Building procurement capacity requires sustained investment in the skills and professional development of procurement practitioners. This applies not only to public procurement authorities, but also to implementing agencies and institutions such as multilateral development banks that support infrastructure delivery. Procurement is increasingly expected to integrate lifecycle costing, sustainability, resilience, and value-for-money considerations, requiring specialised expertise that cannot be assumed. Yet investment in procurement training remains insufficient in many contexts. Strengthening procurement capabilities is therefore a prerequisite for translating procurement frameworks into better infrastructure outcomes.

2.2. What procurement design, market conditions and implementation shape outcomes

Procurement design influences infrastructure outcomes by determining what the authority requires, what suppliers compete on, which risks they are expected to manage and how performance will be monitored. These incentives are important, but their effects depend on the wider delivery environment, including the maturity of the project, the quality of available information, market depth, the authority's capability, the regulatory framework and the credibility of contract enforcement.

Suppliers respond to the combination of specifications, evaluation criteria, contractual responsibilities, payment arrangements and expected enforcement. Where the authority specifies outputs poorly or transfers risks that bidders cannot control, suppliers may respond through higher prices, contractual qualifications, reduced participation or subsequent claims. Similarly, procurement designs that rely predominantly on price-based evaluation may reduce the ability of contracting authorities to attract a broad range of competitive offers and secure the best overall value for money. In addition, where broader policy objectives are not translated into clear, proportionate and operational procurement requirements, participation costs and uncertainty may increase, discouraging some qualified bidders from competing. Conversely, where responsibilities and performance requirements are clear and commercially workable, competition can encourage suppliers to identify more efficient technical and organisational solutions.

Lifecycle costing can improve procurement decisions by making future operating, maintenance, renewal and end-of-life costs more visible. It does not by itself create lifecycle responsibility or guarantee lifecycle optimisation. Its effectiveness depends on credible assumptions, comparable methodologies, reliable data and the contractual or organisational arrangements under which future performance will be managed. Similar care is required when using sustainability, resilience and social objectives: some are best expressed as minimum requirements, others as evaluated criteria, and others as contractual or asset-performance obligations.

Relevant BDN elements can inform these choices, but the relationship between BDN criteria and procurement instruments is not one-to-one. Some BDN considerations concern upstream project governance, public financial

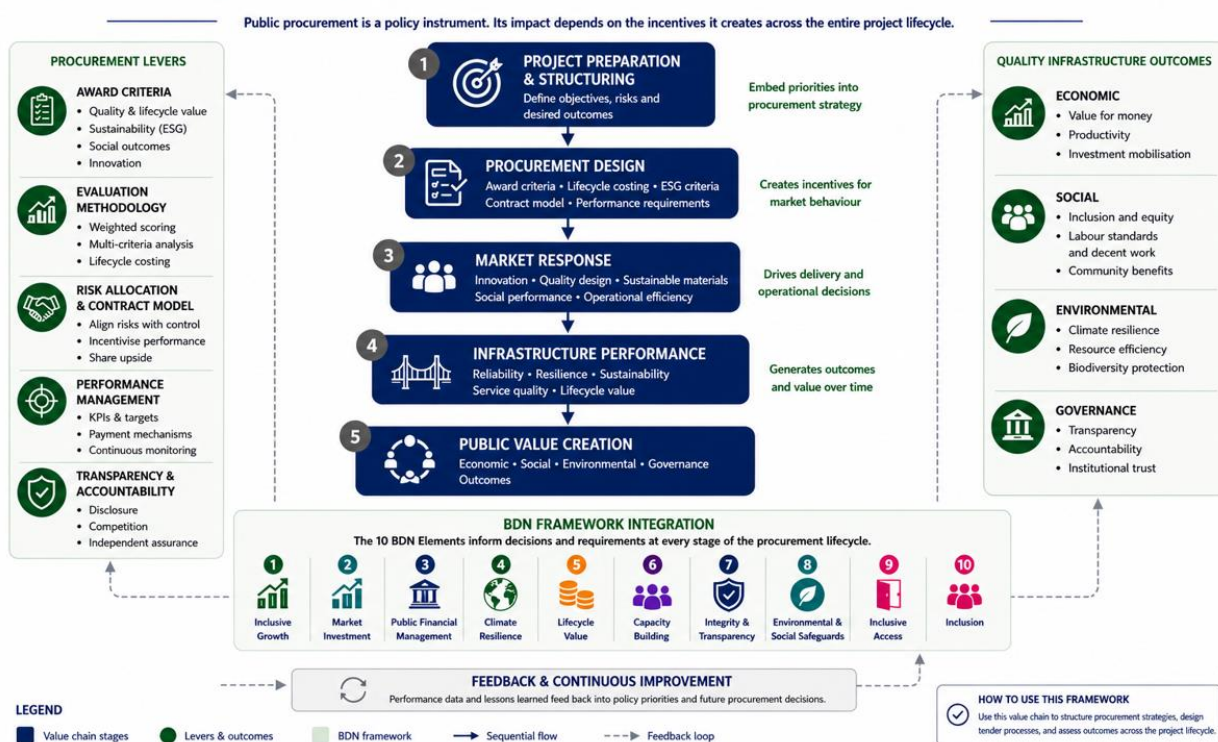
management or stakeholder participation; some are primarily legal or regulatory requirements; some can inform supplier qualification or award criteria; and others are best addressed through contractual performance, reporting or asset-management arrangements. Contracting authorities should therefore identify where each BDN objective can most effectively and proportionately influence the project lifecycle.

The Blue Dot Network's ten elements map onto procurement design choices across the project lifecycle. Each can be expressed as criteria, requirements and metrics that are embedded in tender documents, evaluated during bid assessment, and monitored through contract management. Figure 2.1 sets out this value chain: procurement levers such as award criteria, evaluation methodology, risk allocation and performance management determine how policy objectives move through procurement design, market response and infrastructure performance into public value, with the ten elements informing decisions at every stage. Embedding requirements is only the first step, because the commitments bidders make, on quality, innovation, sustainability, maintenance or social and environmental performance, create value only where monitoring and contract management verify that they are delivered. Monitoring too often receives insufficient attention and resources, so this guide provides practical tools to carry each element through from tender design to delivered performance.

Figure 2.1. Embedding, evaluating and monitoring BDN elements across the procurement value chain

THE STRATEGIC PROCUREMENT VALUE CHAIN

How procurement design translates public policy objectives into infrastructure outcomes



2.3. Contractual models and their implications for quality

Different contractual models distribute risks, responsibilities, and decision-making authority in different ways — and these differences fundamentally shape the quality of infrastructure outcomes. Understanding how each model structures incentives is therefore a prerequisite for designing procurement processes that can effectively deliver public objectives.

The contractual model is not neutral. It does not merely govern execution — it defines what is optimised across the lifecycle of the asset. Some models optimise for upfront cost; others for delivery certainty; only a subset are capable of optimising long-term performance, resilience, and system-level value. The critical question is not whether quality can be achieved under a given model, but whether the model's incentive structure is explicitly aligned with the quality objectives pursued by the contracting authority.

2.3.1. Delivery-model choice as part of procurement strategy

The choice of delivery models is one component of a broader procurement strategy. Before selecting a contractual form, the contracting authority should consider how the project will be divided into work packages, which activities should be performed internally or outsourced, which packages should be combined, how interfaces will be governed, how suppliers will be selected and paid, and which capabilities the public authority must retain. OECD STEPS methodology can help ensure that the procurement strategy is chosen to optimize value for money (VfM) and the project is divided into working packages in a way that is aligned with the VfM (OECD 2021, OECD 2025).

Delivery models are not interchangeable, but neither is any model intrinsically superior. Design-Bid-Build, Design-Build, engineering, procurement and construction (EPC) contracts, long-term performance contracts, concessions, public-private partnerships and collaborative arrangements distribute responsibilities, risks and control differently. Their suitability depends on the project's objectives, design maturity, uncertainty, asset specificity, market structure, regulatory environment, financing conditions and the authority's capacity to manage the resulting relationship.

Major projects should be analysed at the level of their principal commercial work packages rather than treated as homogeneous assets. Different packages may face different uncertainties, supplier markets and interface risks. The resulting strategy may combine several contractual arrangements within the same project. This work-package perspective can also reveal whether bundling intended to reduce interfaces would unduly restrict competition or exclude capable smaller suppliers.

Value for money provides the organising principle for comparing these choices. It concerns the expected relationship between costs and service quality over time, taking account of timing, risk, performance, affordability, fiscal exposure and wider public outcomes. The comparison should be made against the best feasible alternative rather than against an abstract or poorly performing baseline and should be revisited when project or market conditions change.

2.3.2. Separated design and construction

Under Design-Bid-Build, the public authority or its advisers complete the design before construction is procured separately. This arrangement may offer strong value where the scope can be defined with reasonable certainty, the authority wishes to retain design control, the market for construction is competitive and the public buyer can manage the interface between design and construction.

Its principal limitations are that contractor input may arrive too late to influence design, the public authority retains design and interface risks, and construction incentives are not automatically linked to subsequent operation and maintenance. These limitations do not make the model inherently price-driven or adversarial. Quality, sustainability and resilience can be incorporated through project design, specifications, evaluation, construction assurance and asset-management requirements. The effectiveness of the model depends substantially on the quality of preparation and public-side management.

2.3.3. Integrated design and construction

Design-Build and EPC arrangements integrate design and construction responsibility to varying degrees. Integration can reduce some interfaces, improve constructability and support schedule or cost certainty where

the authority can specify the required outputs and the underlying site, scope and approval conditions are sufficiently mature.

These potential advantages involve trade-offs. The authority may have less direct control over design development; bid preparation may be more costly; market participation may narrow; and transferred risks will be reflected in price. Where scope, land, utilities or permitting remain unresolved, nominal transfer of these risks may produce qualifications, risk premiums, disputes or financial distress rather than effective risk management. EPC and Design-Build contracts also do not ordinarily create lifecycle incentives unless operation, maintenance or longer-term performance obligations are expressly included.

Performance-based and lifecycle contracts

Performance-based arrangements link some part of remuneration or contractual consequence to specified outputs or service outcomes. They can be applied to construction, operation, maintenance and longer-term integrated contracts, and should therefore be understood as a contractual or payment mechanism rather than as a single delivery model.

Such arrangements can support durability, reliability, availability and efficiency where performance is measurable, attributable to the contractor and supported by reliable baselines and monitoring. They are less suitable where outcomes depend predominantly on demand, regulation, public-sector decisions or other factors outside the contractor's control. Poorly calibrated indicators can also encourage gaming, underperformance in unmeasured areas or excessive monitoring costs.

PPPs, concessions and private finance

PPPs and concessions encompass a range of arrangements rather than a single standard model. Depending on the project, they may combine design, construction, financing, operation and maintenance, with remuneration derived from government payments, user charges or a combination of both. Their defining features and risk profiles therefore vary.

Lifecycle integration can create useful incentives where outputs are measurable, the contract is capable of addressing long-term performance, and risks, if they can be priced efficiently, can be transferred to the parties best able to manage them. These potential benefits must be compared with the higher cost of private capital, transaction and advisory costs, contractual rigidity, fiscal commitments, renegotiation risks and the public capacity required to manage a complex long-term contract.

Private participation should be selected only where it is expected to provide a better price-quality relationship than the best feasible public-sector organisational alternative. The availability of private finance is not itself evidence of value for money, nor should PPPs be used primarily to avoid budgetary constraints or move obligations outside public accounts. Affordability, direct and contingent liabilities and long-term fiscal commitments should remain transparent.

Competition for a PPP or concession contract can generate useful information and discipline at award, but it is a one-off event and does not guarantee efficient performance throughout the life of the asset. The assessment should also consider whether the operator will face continuing competitive pressure, credible economic regulation or another mechanism capable of maintaining service quality and cost discipline after award. In natural-monopoly sectors, a regulated organisational model may warrant comparison with a project-based PPP or concession.

BDN objectives concerning resilience, inclusion, environmental performance, transparency and service quality may be incorporated into PPPs and concessions as contractual obligations and performance requirements. Their inclusion does not establish that a PPP is the preferred delivery option. BDN considerations should inform the quality dimensions included in the comparison, while the delivery decision remains governed by value for money, affordability, market evidence and institutional capability.

Collaborative delivery arrangements

Alliancing, integrated project delivery and related collaborative arrangements use shared governance, transparent information and collective incentives to support joint problem-solving. They may be valuable where uncertainty is high, interfaces are complex and important design or delivery decisions cannot be resolved efficiently before contract award.

Collaboration does not remove trade-offs or governance risks. These arrangements may weaken conventional price competition, increase reliance on negotiated target costs, and require considerable discretion during implementation. Their effectiveness depends on a capable and informed public owner, reliable cost information, open-book arrangements, independent cost assurance, clear decision rights, transparent performance measures and effective integrity controls. They should be selected where these conditions exist and where the expected benefits of collaboration exceed its governance and transaction costs.

Relevant BDN criteria can be incorporated under different delivery arrangements: through completed design and specifications under separated models; output requirements under Design-Build or EPC; performance indicators under operation and maintenance contracts; long-term obligations under PPPs and concessions; or shared outcome frameworks under collaborative arrangements. The capacity of a project to demonstrate alignment with BDN criteria should therefore be assessed from its substantive requirements, governance and performance evidence, not inferred from the contractual model used.

Table 2.1. Contractual model features and BDN integration point

Arrangement	Potential contribution to value for money	Conditions for effective use	Principal trade-offs and risks	Illustrative BDN integration
Separated design and construction	Public design control; broad construction competition; clear separation of responsibilities.	Mature design; capable public owner; manageable interfaces.	Public retains design and interface risk; limited contractor input into completed design; no automatic operation and maintenance incentive.	Design standards, technical specifications, construction assurance and asset-management requirements.
Integrated Design-Build or EPC	Reduced design-construction interfaces; constructability; potential schedule and cost certainty.	Clear outputs; mature site and approvals; credible supplier market; workable risk allocation.	Reduced design control; higher bid costs; narrower market; risk premiums where unresolved uncertainty is transferred.	Output specifications, design-performance requirements, carbon or resilience requirements and verification.
Performance-based operation or maintenance	Incentives linked to availability, condition, reliability or efficiency.	Measurable and attributable outputs; baselines; monitoring capability.	Indicator gaming; monitoring costs; inappropriate transfer of demand or regulatory risks.	Service-level KPIs, maintenance standards, asset-condition requirements and reporting.
PPP or concession	Potential lifecycle integration; financing and delivery discipline; long-term service obligations.	Comparative value for money; affordability; transparent fiscal treatment; measurable services; capable authority and regulator.	Higher financing and transaction costs; rigidity; renegotiation and fiscal risks; demanding contract management.	Lifecycle performance, environmental and social obligations, transparency and service-quality requirements.
Collaborative or alliance arrangement	Joint resolution of uncertainty and complex interfaces; early supplier contribution.	Mature owner; cost transparency; independent assurance; clear governance and integrity controls.	Weaker conventional price competition; discretion; target-cost and accountability risks.	Shared outcome framework, open-book evidence and jointly governed performance targets.

Note: These arrangements are illustrative and not mutually exclusive. Projects may combine several approaches across different work packages. Sustainability, resilience and quality outcomes depend on the requirements, incentives, governance and implementation capability associated with the chosen arrangement; they are not intrinsic attributes of a contractual label.

2.4. Quality infrastructure begins before the tender

A procurement process can only deliver what has been designed into it. The quality of infrastructure outcomes depends not only on the criteria used to evaluate bids, but on the objectives that have been defined before the tender is issued — during the project preparation and structuring phase that precedes formal procurement.

This insight has significant practical implications. Contracting authorities that wait until the tender stage to introduce quality criteria will find that the space for ambition is already constrained by preliminary design choices, budget envelopes, and stakeholder expectations set earlier in the project development process.

Conversely, contracting authorities that invest in project preparation — clarifying objectives, assessing options, structuring risk allocation, and defining performance requirements — arrive at the tender stage with the foundations for quality already in place. Effectively embedding quality objectives such as carbon reductions into procurement and project delivery requires diligent upstream planning driven by strong leadership and supported by collaboration (Box. 2.3).

Box 2.3. Whole-life carbon management

Carbon management is most effective when treated as a whole-life discipline that begins at project inception and continues through operation. Procurement is one component of that discipline, not its starting point. The FIDIC Carbon Management Framework (CMF) organises the discipline into seven components, and provides a structured approach for meeting BDN criteria related to embodied carbon and integrating carbon reduction into the procurement process.

CMF component	What it involves
1. Leadership & accountability	Named senior accountability for carbon; a responsibility matrix across owner, designers, procurement and contractors.
2. Carbon assessment	A measurable whole-life baseline with defined boundary, reference design, data hierarchy and emission-factor rules.
3. Baseline & targets	The owner sets a carbon baseline and budget with transparent assumptions and change control, ideally before tender.
4. Driving carbon reductions	A reduction hierarchy applied through design optioneering, not only bid evaluation.
5. Collaboration	Early, carbon-specific market engagement; opportunity registers and challenge workshops during delivery.

Carbon requirements should be applied where material and proportionate — with an embodied-carbon focus at lower capability levels, extending to full whole-life carbon where the project and market allow.

Once the project's strategic case, scope and affordability have been established, the contracting authority should develop an evidence-based procurement strategy before fixing the tender structure. The strategy should address work-package design, make-or-buy choices, market capacity, interfaces, delivery arrangements, payment mechanisms, risk allocation, competition and the capability the public authority must retain. For major or bespoke projects, STEPS or an equivalent structured methodology can make these trade-offs explicit and reduce reliance on a preferred model or untested institutional convention (OECD, 2021^[21]; OECD, 2025^[22]).

Note: The CMF is referenced here as a leading example of good practice; BDN remains methodology-neutral and does not mandate any single carbon-assessment standard. The value-for-money case should be updated as the project develops. Changes in scope, design, cost, schedule, demand, financing conditions, regulatory arrangements or market appetite may alter the relative merits of the chosen approach. Reassessment at defined decision points can test whether the original strategy remains justified before tender launch, contract award and contract modification.

Ensuring the efficiency and integrity of this process, which involves multiple stages, decision gates, and actors (e.g. contracting authorities, engineers, contractors, operators, etc.), is a key challenge. Digital methods, tools and data standards are invaluable for enabling better decision-making, effective collaboration and more efficient data management (Box 2.4).

Box 2.4. Digital methods, tools and data standards as an enabling layer for BDN-aligned procurement

Digital methods and tools can help contracting authorities move from infrastructure quality principles to measurable outcomes. They should not be treated as an end in themselves, nor as a requirement to use any particular software. Their purpose is to create structured, comparable, and auditable evidence that supports better decisions across the procurement lifecycle.

During project preparation, the SourceX platform, a multilateral project development platform, can provide a valuable roadmap to guide governments in preparing quality projects in a rigorous and structured manner. Through mapping BDN criteria and those of other frameworks such as FAST-Infra, SourceX also serves as a standards delivery tool supporting projects seeking to align with international frameworks by providing readiness checklists and building synergies across different processes.

Furthermore, digital optioneering can help compare alternatives across lifecycle cost, whole-life carbon, climate exposure, constructability, environmental and social impacts, and service outcomes. During tender design and bid evaluation, standardized lifecycle cost models, whole-life carbon calculations, climate stress-testing, and structured ESG evidence can make bidder commitments more comparable and defensible.

During contract management, building information modeling, common data environments or equivalent information-management arrangements, KPI reporting systems, audit trails, and certification evidence registers can help ensure that commitments made at award are translated into performance during delivery and operation.

Digital requirements should be proportionate. For smaller or lower-risk projects, structured templates, controlled document registers, and periodic reporting may be sufficient. For major, complex, climate-exposed, long-duration, or certification-seeking projects, more advanced project digital delivery, geospatial analysis, digital contract monitoring, or lifecycle asset information management may be justified.

Throughout the asset life cycle, standardised information management can play an important role in delivering quality infrastructure. The BS EN ISO 19650 series provides an internationally recognised framework for organising, exchanging and managing information across design, construction, operation and maintenance. By establishing common information requirements, structured data environments and consistent information standards, ISO 19650 improves interoperability between project participants, supports lifecycle decision-making, facilitates the use of modelling, digital twins and artificial intelligence applications, and helps ensure that information generated during project delivery remains usable during operation and maintenance.

Relevant BDN criteria can strengthen this process by making dimensions of quality visible within the comparison of options. They should inform the outcomes against which delivery arrangements are assessed, rather than predetermine the use of an integrated, privately financed or collaborative model. The Blue Dot Network certification framework's ten elements provide a structured methodology for defining quality objectives across all relevant dimensions of a project — from economic sustainability and climate resilience to governance, social inclusion, and environmental safeguards — at the stage when those objectives can most effectively shape the procurement design.

The following chapters of this guide translate those elements into practical procurement tools: tender criteria, contract clauses, evaluation methodologies, and monitoring frameworks that contracting authorities can adapt to their specific contexts and regulatory requirements.

2.5. State of the Art Review

This section summarises the principal findings of a State of the Art (SotA) analysis on the integration of quality infrastructure criteria into procurement frameworks, based on a structured review of infrastructure tenders across six geographic regions (EU, Latin America, North America, Africa, Asia, and Oceania).

Selection of tenders followed a purposive sampling strategy to ensure variation across key dimensions, including geographic location, procurement type (e.g., MEAT/OEPV, design-build, MDB frameworks), and degree of ESG integration.

A standardized analytical framework was developed to ensure consistent extraction, classification, and comparison of both qualification criteria and award criteria across all tenders. Each tender was systematically deconstructed into two main components: (i) qualification/selection requirements, and (ii) award/evaluation criteria, capturing their structure, logic, and interrelation.

For the qualification stage, the analysis focused on identifying and documenting eligibility and capacity requirements, including legal and administrative eligibility, technical and professional capacity, financial capacity, environmental, social, health and safety (ESHS) requirements, and certifications and regulatory compliance. These criteria were treated as threshold (pass/fail) conditions, with particular attention to the extent to which environmental and social aspects were embedded at this stage.

For the award stage, the analysis captured the full hierarchy of evaluation criteria, including primary criteria (e.g., price, technical quality), sub-criteria, and further nested scoring elements where applicable. For each criterion, the following attributes were systematically recorded: criterion group (e.g. technical or economic); criterion label and sequential number; points or weight assigned and the unit of measurement; criterion type; scoring mechanism code and label; formula or performance metric detail; legal basis category and source level; contracting authority type; and taxonomy category and keyword basis.

The underlying dataset created from the aforementioned analysis yielded 550 coded criteria rows: 247 qualification criteria and 303 technical/economic award criteria, extracted and classified (BDN ECG, forthcoming^[23]).

Box 2.5: Assumptions and Limitation of the SotA

The analysis is based on a sample of 21 tenders of recent issues (i.e. less than 5 years old) selected to enable a comparative review of award criteria, scoring methodologies, and the integration of environmental and social considerations across procurement systems. The sample is intended to provide analytical depth rather than statistical representativeness of evaluation criteria and is concentrated in infrastructure, energy, and engineering sectors, particularly within the European Union and multilateral development bank procurement frameworks. Consequently, the findings may not be fully generalizable to other sectors or jurisdictions.

The analysis relies on tender documentation and therefore reflects published evaluation criteria rather than their practical application, which may involve additional discretion and interpretation by evaluation committees. Assessments of factors such as implementation difficulty, precision, and the classification of environmental and social criteria are based on a standardized analytical framework and professional judgment.

The MDB-financed tenders in the sample also reflect procurement documentation published before the 2025–26 reforms to MDB value-for-money and rated-evaluation practice (ADB, 2026^[24]); the analysis therefore captures the baseline these reforms are intended to raise, rather than their effect.

Finally, a note on scope. Because the analysis is built from published tender documentation, it observes procurement at the qualification and award stages, where criteria are set and competition is decided, but not the contract stage, where many quality obligations are ultimately embedded, monitored and enforced. The prominence of award criteria in these findings therefore reflects what tender documents reveal, not a judgement that scoring is the only, or the primary, way to embed BDN principles. Technical specifications and contract performance conditions are equally important instruments, addressed in Chapters 4 and 5 rather than captured in the dataset.

The analysis identifies how qualification and award criteria have been structured in the reviewed tenders. It does not establish a causal relationship between particular evaluation architectures, contractual models and infrastructure outcomes. The presence or weighting of BDN-related criteria should not be interpreted as evidence that the resulting commitments were implemented effectively after award. The findings should therefore be used as a source of design examples and comparative questions, rather than as a ranking of delivery models or a universal procurement template.

2.5.1. Observed procurement architectures: patterns from practice

The State-of-the-Art analysis reveals that the tenders in the dataset are not random variations on a common template — but cluster into recognisable patterns, defined by three structural features of the evaluation design:

- i) the **role that price** plays in the overall scoring formula,
- ii) the **composition of the quality score** across criterion domains, and
- iii) the **scoring mechanisms** applied within each domain.

Understanding these patterns provides a framework for contracting authorities to identify viable options for ensuring their procurement systems deliver quality infrastructure.

Every tender in the dataset is an instance of the same universal structure: a final score determined by some combination of a price or cost signal and a quality or capability signal.

Across the tenders, three price roles have been observed:

- i. **Price/Quality as weighted additive terms.** The dominant model; both price and quality features are assigned a fixed percentage weight and scored to produce a single composite score, with the highest aggregate score winning the contract.
- ii. **Price as a sequential selector applied after quality gates.** Bidders must first pass a quality threshold; among those that qualify, the contract is awarded to the lowest-priced offer; and
- iii. **Price is integrated with quality and sustainability commitments into a single economic variable:** typically through monetary deductions from the bid sum, so that performance commitments directly alter the effective price signal.

A second element is the composition of the quality score: how weight is distributed across technical delivery capability, environmental and social performance, integrity, and financial capacity.

A third fork is the scoring mechanism: the degree to which scores are determined by evaluator judgment, graded tables, objective KPI thresholds, or deterministic formulas.

As part of tender design for a BDN-aligned procurement, it is useful to identify where the current evaluation architecture sits relative to the range of approaches documented in international practice. The State-of-the-Art analysis of infrastructure tenders identified four distinct procurement patterns, defined by the role of price in the evaluation formula, the composition of the quality score, and the scoring mechanisms applied.

Price vs. quality patterns

Price criteria are the only evaluation dimension present in all 21 tenders, but with a median weight of 30% they were probably not the determining variable. The more revealing figure is the weighting distribution from 10% to 95% which reflects policy choices rather than legal constraints, since tenders at both extremes frequently operated under identical statutory frameworks.

The structural asymmetry that matters most for BDN alignment is not between price and quality overall, but within the quality score itself. Environmental and social criteria appear in 18 of the 21 tenders analysed, indicating that sustainability considerations are widely incorporated into procurement design. However, these criteria account for an average of 21% of the technical score, compared with 59% allocated to delivery-related criteria. This suggests that sustainability considerations are commonly treated as one component of quality assessment rather than the primary driver of bid differentiation.

This finding should not be interpreted as evidence that environmental and social considerations are underrepresented across the infrastructure lifecycle. Many such requirements are addressed upstream through planning, permitting and regulatory approval processes. Rather, the analysis highlights the relative emphasis placed on different criteria at the procurement and bid evaluation stage.

Scoring mechanisms

The most frequent procurement design across the dataset is a two-mechanism formula: a deterministic price formula and qualitative evaluator judgment for everything else. This dominant pattern is the standard Most Economically Advantageous Tender (MEAT) template into which BDN criteria most easily slot. The most important mechanism finding is the gap between how price and sustainability are scored: formula-based calculation dominates price criteria (78%) while qualitative judgment dominates environmental (58%), social (68%), and integrity (75%) criteria. Objective scoring for sustainability — KPI thresholds, formula-based deductions — is a minority practice observed in only a few tenders, each requiring substantial pre-tender investment to define baselines and performance bands (see section 2.5.3).

Type of quality criteria

Delivery capability — methodology, personnel, equipment, schedule — dominates at 56% of all award criteria across all regions and frameworks, reflecting the fundamental requirement that a contractor must first demonstrate it can build the project.

Environmental criteria are widespread but predominantly take the form of management plan submissions scored qualitatively, which is the weakest integration approach from an outcome assurance perspective; GHG, biodiversity, and lifecycle criteria are present but concentrated in a small number of advanced tenders.

Social criteria are dominated by occupational health and safety, with workforce diversity and local participation present but unevenly distributed.

Integrity criteria serve two distinct functions: exclusionary screens at qualification and positive governance scoring at awards, but less than half of the reviewed tenders included no award-stage integrity criteria at all, meaning most integrity work happened at the gate rather than through competitive differentiation.

2.5.2. Scoring methodologies: how sustainability criteria are evaluated in practice

Across the 303 award criteria in the dataset, distinct scoring methodologies were identifiable, ranging from fully deterministic formula-based calculation to open evaluator judgment. Understanding this spectrum matters for practitioners: the choice of scoring methodology determines how much discretion evaluators exercise, how legally defensible the process is, and, critically, what incentive the scoring design creates for bidders to invest in genuine sustainability performance.

Methodologies observed across the dataset can be grouped into four broad categories for practical purposes, with possibility of finding mixed approaches:

- **Judgment-based scoring** is the dominant approach across sustainability criteria. An evaluation/expert committee assesses the quality of a submitted proposal — e.g. an environmental management plan, a social value strategy, a carbon reduction approach — against a set of defined quality indicators, and assigns a score based on professional judgment. This approach is flexible and can capture complex, context-specific sustainability commitments that cannot be reduced to a single number. Its limitation is that it relies on evaluator expertise and introduces subjectivity that must be carefully managed to ensure consistency and legal defensibility.
- **Threshold and table-based scoring** assigns points by reference to predefined performance bands or lookup tables. A bidder commits to a specific, measurable level of performance — a GHG reduction target, a local employment percentage, a warranty period — and receives points according to where that commitment falls within a defined scale. This approach is more objective than pure judgment and creates clearer competitive incentives: bidders know precisely what they need to commit to in order to achieve each score level. It requires greater pre-tender preparation by the contracting authority, including the definition of performance bands that are ambitious enough to differentiate between bidders while remaining credible and achievable. It was observed as the predominant mechanism for schedule commitments and equipment availability criteria (delivery) in the dataset, and the primary mechanism for environmental criteria in the most advanced tenders.
- **Documentary scoring** awards points for possession of a recognised certification or accreditation — ISO 14001, gender equality certification, integrity programme accreditation — rather than for what the contractor commits to deliver on the specific project. Scoring is typically binary: the certificate is either held or it is not. Its limitation is that it rewards credential accumulation rather than performance ambition, making it more appropriate as a pre-qualification threshold than as a scored award criterion.
- **Formula-based scoring** is fully deterministic: the score is calculated mathematically from a submitted input value, with no evaluator discretion. It is the dominant mechanism for price criteria across the dataset and appears for sustainability criteria only in the most structurally advanced cases, i.e. where

verified carbon reduction commitments are translated directly into monetary deductions from the bid sum, making environmental performance a price-equivalent competitive variable. Formula-based scoring for sustainability requires the highest pre-tender preparation investment — verified baselines, standardised calculation methodologies, and independent verification protocols — but produces the clearest and most legally robust evaluation outcomes.

The practical implication for BDN-aligned procurement design is that the choice of scoring methodology should follow the maturity of the criterion. For sustainability dimensions where measurable baselines exist and performance can be independently verified, threshold or formula-based scoring produces stronger competitive incentives and more defensible outcomes. Where sustainability performance is genuinely complex and context-dependent — and cannot be pre-specified as a target without losing the ability to assess genuine quality — judgment-based scoring remains appropriate, provided the evaluation committee has the expertise to apply it consistently and is free from undue influences and/or conflicts of interest, and the scoring indicators are defined with sufficient specificity to guide both bidders and evaluators.

2.5.3. Contracting authority capacities

The scoring mechanisms observed across the dataset can be ordered by how much pre-tender preparation and baseline establishment they require of the contracting authority. The deeper the sustainability integration a mechanism achieves, the heavier the capacity it presupposes. Understanding this gradient allows an authority to match its scoring ambition to its current readiness, and to build capacity deliberately rather than adopt an instrument it cannot operate.

Qualitative narrative scoring (lightest preparation)

The authority scores a written response against a points scale, judging the confidence a proposal gives that the bidder can meet the stated requirements. No quantitative reference point is needed. The capacity demand is concentrated in rubric design and evaluator calibration: drafting clear scoring descriptors, defining what distinguishes a strong response from a weak one, and ensuring evaluators apply the scale consistently. This is the most accessible entry point for an authority beginning to strengthen its qualitative criteria, and also at front end as to what quality rating against price should be, as per recent MDB reforms.

Weighted criteria with plan-based or self-declared evidence (moderate)

Sustainability sits as a weighted item alongside price, and bidders earn points by submitting plans or commitments. The authority's preparation centres on setting defensible weights and specifying what evidence earns which score. No external benchmark is required. The capacity demand is mainly procedural and methodological rather than technical: ensuring weights are proportionate, evidence requirements are unambiguous, and the criterion is genuinely linked to the subject matter of the contract.

Benchmark-referenced and monetised criteria (heavy)

Scoring is anchored to a reference value the authority defines in advance, such as a cost benchmark or a monetised value target, against which bidder proposals are measured. This requires the authority to construct that reference point before the tender is issued, using its own data and a methodology it can defend if challenged. The capacity demand shifts decisively toward technical and analytical work: costing or monetisation modelling, access to reliable internal data, and the in-house expertise to build and stand behind the benchmark.

Price-adjustment and deduction models (heaviest preparation)

The highest-integration mechanisms convert sustainability performance directly into a price adjustment, for example by translating proposed emissions reductions into a monetary deduction from the tender sum. To

operate this, the authority must define a quantitative baseline against which performance is measured, a conversion methodology that turns performance into a price effect, and a measurement and verification standard it can enforce at evaluation and through delivery. This tier presupposes all the capacities of the tiers below it, plus the analytical maturity to establish and maintain a credible baseline.

Reading across the gradient, the artefacts and competencies that separate higher-integration mechanisms from lower ones are consistent:

- **A quantitative baseline or benchmark.** The ability to establish a credible reference point is the single clearest dividing line between mechanisms. It is also the most resource-intensive to produce, and the work tends to be underestimated unless it is planned for explicitly.
- **A conversion or monetisation methodology.** A defensible, transparent basis for translating performance into points or price effects.
- **A measurement and verification standard.** A means of holding bidders to their commitments both at evaluation and into the delivery phase.
- **Embedded technical expertise.** Cost, carbon and lifecycle competencies available before the tender is issued, rather than procured reactively once bids arrive.
- **Planning capacity to absorb the preparation cost.** Where baselining is planned for and built into the procurement timetable, it is manageable; where it is not, the resource demand emerges late and can divert specialist effort away from the substantive task of identifying genuine improvements.

The practical implication is that integration depth tracks authority capacity rather than legal framework. An authority cannot move directly to the most ambitious mechanisms without the baselining capability, conversion methodology and verification capacity they depend on. This supports a staged approach to strengthening qualitative criteria: rubric design and evaluator calibration first, weighted plan-based criteria next, benchmark-referenced scoring as analytical capacity develops, and price-adjustment models only once a credible baselining function is in place.

2.5.4. Presence of BDN elements in the sample

Across the 47 BDN themes, the analysis found coverage in 22, clustering in six of the elements:

- **Element 4:** GHG emissions, Climate disclosure, and Resilient plans and designs;
- **Element 5:** Competitive procurement based on life cycle costs, Effective project management monitoring and oversight, Efficient maintenance, and Technology and innovation;
- **Element 6:** Skills transfer
- **Element 7:** Anti-corruption and Transparent procurement;
- **Element 8 (environmental):** Management of environmental and social risks, Biodiversity, Pollution, Resource efficiency, and Waste and hazardous materials;
- **Element 8 (social):** Meaningful stakeholder engagement with affected communities, Human rights, Labour and working conditions, and Community health and well-being; and
- **Element 10:** Addressing needs of women and marginalised groups, Employment opportunities, and Safety and well-being for women and vulnerable users.

Element 8 is the centre of focus, contributing nine of the twenty-two present themes, more than any other element.

On frequency, the most common themes are concentrated in Element 8; the themes of Management of environmental and social risks and Labour and working conditions are the two most common, each appearing in one third of the analyzed tenders, the latter driven mainly by occupational safety provisions. Meaningful stakeholder engagement with affected communities follows, observed in around five tenders, and Anti-corruption is similarly recurrent, appearing in about five. A middle band, each in roughly three to four tenders,

includes Technology and innovation, Resource efficiency, Biodiversity, Waste and hazardous materials, Resilient plans and designs (carrying the Nature-based solutions criterion), Skills transfer, and all three Element 10 themes. This ordering is consistent with the report's own headline distribution, where Environmental criteria appear as award criteria in eighteen of twenty-one tenders and social value in fifteen, making Element 8 the workhorse of sustainability scoring while the other elements appear more selectively.

At the thin end, several present themes rest on a very narrow base: Human rights, Pollution, and Community health and well-being each surface in only one or two tenders, and within Element 5 the value-for-money themes appear mostly as delivery-time and life-cycle-cost mechanics rather than as full appraisal logic. The broader finding the SotA analysis supports is that presence is not the same as depth: most of these themes are scored through qualitative judgment rather than quantified targets, and the same theme can carry materially different weight from one authority to another. So, while Element 8 themes are both the most present and the most common, their prominence reflects where contracting authorities have chosen to compete on environmental and social management, not a uniform or regulated treatment of quality infrastructure across the framework.

2.5.5. Key insights derived from the SotA Report

Quality and sustainability criteria are present across the dataset but unevenly distributed. Environmental criteria appear as award criteria in 18 of 21 tenders; social criteria in 15 of 21. Together with integrity criteria, sustainability-related dimensions account for 33% of all award criteria. Project delivery criteria dominate at 56%, reflecting the technical core of competitive evaluation. Price criteria are the only dimension present in all 21 tenders — and across the 17 tenders where price weight is quantifiable, it ranges from 20% to 95%, with a median of 30%.

The dominant scoring mechanism for sustainability award criteria is qualitative judgment. This reflects a structural feature of evaluation design in the sample: most quality dimensions were not pre-specified as measurable targets but rather assessed through evaluator judgment. A minority of tenders achieved formula-based or KPI-based scoring for environmental criteria, representing integration approaches that reduce subjectivity but require greater pre-tender preparation investment.

Depth of integration varied substantially. A clear tier structure was observable: high-integration tenders — where sustainability criteria account for more than 25% of the technical evaluation total — are concentrated in EU statutory frameworks and MDB-governed tenders. At the other end, several tenders include sustainability criteria at weights too low to materially influence competitive outcomes.

Critically, the depth of sustainability integration was not found to be primarily determined by the legal framework governing the procurement. Within the group of tenders operating under comparable statutory frameworks — all subject to MEAT-based award requirements — sustainability integration depth ranged from 7% to 49% to a fully integrated GHG deduction model. This variation reflected contracting authority choices and institutional capacity rather than legal obligation. The legal framework sets the floor; but not necessarily determined the ceiling.

Contracting authority capacity is a key factor on how deeply an authority can integrate sustainability into award criteria. The mechanisms that deliver the greatest integration are also the ones that demand the most baselining, methodology and verification work before a tender is issued, so the question facing a contracting authority is less whether the law permits an ambitious approach than whether the authority is ready to operate it. Building that readiness in stages, beginning with rubric design and progressing toward benchmark-referenced and price-adjustment models as analytical capability matures, allows an authority to raise its ambition without overreaching its capacity, and is the most reliable route to strengthening the use of qualitative criteria in practice.

These findings have direct implications for contracting authorities seeking BDN alignment. They show that procurement frameworks across the jurisdictions represented in the dataset provide sufficient flexibility to incorporate quality-oriented and strategic objectives into tender design. The challenge therefore appears to lie less in the formal legal permissibility of such approaches and more in the institutional capability required to

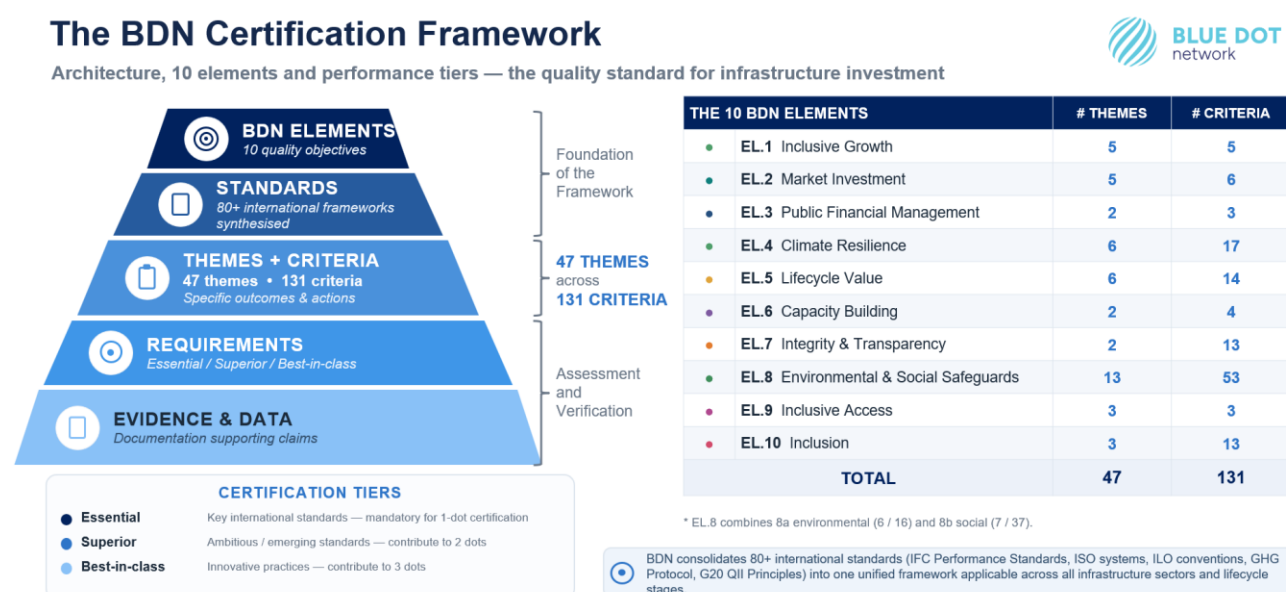
design, evaluate and manage them effectively. At the same time, the results highlight the importance of balancing strategic procurement objectives with the core delivery mission of infrastructure projects. Alignment with the BDN framework is not simply a matter of introducing additional criteria, but of ensuring that quality, sustainability, resilience and governance objectives are integrated in ways that support rather than dilute project delivery. This reinforces the importance of contracting authority maturity, including the capacity to select appropriate procurement approaches, design robust evaluation methodologies, manage performance throughout the project lifecycle, and make informed trade-offs between competing policy objectives.

3. The Blue Dot Network: from global framework to project design

3.1. The BDN Certification at a glance

The Blue Dot Network (BDN) [Certification Framework](#) is structured across 10 Elements, 47 themes, and 131 criteria, organised in a three-tier hierarchy moving from broad principles to specific, verifiable requirements. The 10 Elements cover a full spectrum of quality infrastructure concerns — spanning economic sustainability, environmental performance, climate resilience, social inclusion, labour rights, gender equity, anti-corruption, and governance (Figure 3.1).

Figure 3.1. The ten BDN elements: policy alignment and procurement relevance



Criteria are assigned three performance levels —i.e. Essential, Superior, or Best in Class (totaling 232 requirements) establishing a graduated ladder of ambition that allows contracting authorities to calibrate procurement requirements to project context and institutional capacity.

This four-tier architecture (Element → Theme → Criterion → Requirement) serves as the primary organising logic for translating BDN certification intent into procurement instruments: Elements provide the policy frame, themes, the performance dimensions, criteria, the analytical unit of comparison, and requirements the actionable specification against which tender documents and evaluation rubrics can be designed.

It is important to note that not all BDN criteria necessarily translate directly into tender instruments. A meaningful subset of criteria are:

- **Procurer-facing:** they describe features that the contracting authority itself must satisfy through the design and conduct of the procurement process, such as ensuring open competition, managing conflicts of interest, or conducting structured stakeholder consultation. These criteria inform how procurement is organised and governed and are satisfied through institutional policy and process compliance rather than through bidder evaluation.
- **Contractor-facing:** they describe commitments, plans, certifications, or performance targets that a bidder is expected to demonstrate, and which can be expressed as selection gates and/or scored award criteria within a tender document.

Specific criteria may combine both aspects, requiring the authority to design and govern the process and the bidder to demonstrate delivery and are best understood as points on a spectrum rather than a strict division.

This distinction matters in practice, contracting authorities should therefore read the framework on two levels, i.e. as a checklist for their own procurement governance, and as a source of award and selection criteria to be embedded in tender documentation, aspects which are further discussed in Sections 4 and 5.

Box 3.1. Examples of Procurer facing criteria (Numbering indicates Element and criteria number)

2.5. Risks allocated transparently between public and private partners

3.1. Project assets, costs and liabilities are recorded in public sector accounts and disclosed

5.4. Project delivery mode choice considers value for money

5.5. Procurement method designed to attract multiple qualified bidders

7.8. Procurement information made publicly available

7.9. Procurement process ensures fair and equal treatment of all bidders

7.10. Prohibitions against corruption in procurement

7.11. Procurement process includes protections against bid-rigging

8.16. Procurement and tender documents include environmental and/or social performance as competing factors (This is the central focus of the ECG working group efforts on the present document).

8.23. As part of due diligence process, adverse impacts and risks to human rights are identified, prioritised, assessed and addressed, including in the supply chain

9.1. Contracts do not privilege certain end-users or suppliers

10.4 Procurement processes support women and marginalised groups

3.2. Integrating BDN from the design phase: maximum impact at minimum cost

The case for integrating BDN criteria from the earliest stages of project development rests on a straightforward observation: the cost of quality is lowest when quality is designed in, and highest when it must be retrofitted. A project that arrives at the procurement stage with BDN elements already embedded in its objectives, design

parameters, and risk allocation framework will require less modification — and generate better outcomes — than one that attempts to add quality requirements as an afterthought.

Early integration of BDN criteria generates several concrete benefits for contracting authorities. It clarifies objectives before procurement begins, reducing ambiguity in tender documents and the risk of disputes during execution. It signals quality ambition to the market early enough for potential bidders to develop genuinely innovative proposals. It builds the evidence base — studies, assessments, consultations — that certification will require, reducing the marginal cost of the formal certification process. And it positions the project to attract the broadest possible range of financing, including from development finance institutions and institutional investors whose due diligence requirements align with BDN standards.

Box 3.2. The BDN certification process: a practical overview

The BDN certification process follows a structured sequence designed to ensure independent, evidence-based verification. Project applicants first complete an expression of interest, then perform a self-assessment against BDN criteria using a template provided by the Secretariat, submitting supporting documentation and data as evidence.

An independent third-party certification entity reviews the self-assessment and verifies whether the evidence supports the claims made, requesting additional information where necessary. On the basis of the verification results, the certification body determines whether to award one, two, or three Blue Dots.

Certified projects are subject to streamlined annual monitoring to track material changes that could affect certification status and must apply for renewal within five years (or within two years of operations beginning for projects certified during construction).

For contracting authorities, this process has a direct implication: the self-assessment template provides a practical diagnostic tool that can be used during project preparation to identify gaps, prioritise design improvements, and build the evidence base that certification will require. Used proactively rather than retrospectively, the BDN certification process becomes a quality management framework for the entire project development cycle.

3.3. Supporting alignment with existing international due diligence frameworks

The Blue Dot Network certification does not replace existing environmental, social, governance, or financing due diligence frameworks. Rather, it provides a structured framework that can help contracting authorities incorporate internationally recognised good practices into project preparation, procurement design, and contract management.

Many infrastructure projects ultimately seek financing from multilateral development banks (MDBs), development finance institutions (DFIs), or private investors that apply their own due diligence requirements. These include frameworks such as the IFC Performance Standards and similar safeguard systems used by institutions including the Inter-American Development Bank (IDB), the European Bank for Reconstruction and Development (EBRD), and other development finance providers.

By integrating BDN criteria into procurement processes, contracting authorities can help ensure that projects generate the documentation, assessments, management systems, and governance arrangements commonly required during subsequent due diligence processes. This can reduce project preparation gaps, improve project quality, and facilitate access to finance.

BDN certification does not substitute for the independent due diligence, appraisal, or approval processes of any financing institution. Compliance with BDN requirements should therefore be understood as complementary to, rather than a replacement for MDB or DFI requirements.

Where infrastructure is primarily domestically financed and does not benefit from the upstream technical support, oversight, and quality assurance typically associated with MDB or DFI involvement, this complementary relationship does not arise in the same way. In these contexts the BDN framework is valuable in its own right: it supplies a structured, internationally recognised quality discipline spanning the same project preparation, evidence-building, and implementation arrangements that would otherwise depend on the presence of a development finance partner.

Box 3.3. How BDN supports readiness for MDB and DFI due diligence

BDN criteria can assist contracting authorities in preparing projects for subsequent environmental, social, governance, and climate-related due diligence processes commonly applied by MDBs and DFIs.

Examples include:

- Stakeholder engagement requirements that support preparation of Stakeholder Engagement Plans and consultation records.
- Environmental and social risk management requirements that support preparation of Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), and monitoring systems.
- Climate resilience requirements that support climate risk assessments, adaptation planning, and resilience-focused project design.
- Labour, community health and safety, resettlement, biodiversity, and cultural heritage requirements that align with internationally recognised safeguard practices.
- Governance and transparency requirements that strengthen project documentation, disclosure, integrity systems, and accountability arrangements.

Projects developed using BDN-informed procurement processes are therefore likely to be better positioned for subsequent due diligence reviews by MDBs, DFIs, export credit agencies, and other infrastructure financiers.

3.4. Relationship with other sustainable infrastructure certifications

The Blue Dot Network certification shares substantial common ground with other leading voluntary infrastructure rating and labelling schemes, including Envision, the FAST-Infra Sustainable Infrastructure Label, and the Infrastructure Sustainability (IS) rating scheme.

All are voluntary frameworks that assess the sustainability and quality of an infrastructure project or asset across its life cycle. They rest on the same internationally recognised foundations, principally the IFC Performance Standards and the G20 Principles for Quality Infrastructure Investment, and they organise their criteria around a similar set of environmental, social, economic, and governance dimensions. Most also offer the possibility of third-party verification as a means of giving their results external credibility, which is what allows any of them to be cited in a procurement process as a recognised credential.

The schemes differ in their origin, purpose, and the way results are expressed. Envision and the IS rating scheme are scored rating systems that award banded achievement levels and are strongest on granular environmental and technical performance, with regional roots in North America and in Australia and New

Zealand respectively. The FAST-Infra label is finance-facing, with a focus on sustainability, and is designed to make assets comparable and bankable for investors. It is self-declared by default, with independent verification encouraged but not required.

The Blue Dot Network certification, by contrast, is a public-private collaboration with government backing hosted at the OECD that requires independent third-party verification and recognises three progressive performance levels. It is broader on the economic and governance axis, addressing financial structuring, fiscal transparency, and procurement integrity that the environment-and-social-centred rating systems largely do not cover, while those systems in turn offer more detailed environmental and technical scoring than the Blue Dot Network does.

Rather than competing, these frameworks are largely complementary (Losos, Fetter, 2022^[25]). The Blue Dot Network does not create a new standard; it consolidates and synthesizes a large body of existing international standards and frameworks, several of which it draws directly. Because the schemes share the same baseline references, alignment with one will generally satisfy a substantial part of another, particularly at the level of the IFC Performance Standards. For a contracting authority, this means these certifications can be used in tenders as recognised, third-party verified credentials when accompanied by independent verification. Designing a project to the Blue Dot Network framework also moves it toward the wider family of sustainable infrastructure standards. It should be noted, however, that this interoperability operates at the level of shared reference standards and does not constitute formal mutual recognition: certification under one scheme should not be assumed to confer certification under another.

Part II: Procurement of quality infrastructure

4. Designing public procurement processes that can deliver quality infrastructure

An open, well-documented, transparent, accountable and consistently applied procurement process is the upstream condition that allows quality criteria to be passed down to bidders credibly and then enforced through evaluation and contract management.

Trust in the integrity of the procurement process itself is fundamental in order to attract quality bidders as it provides them with the assurance that bids will be treated fairly. It also helps to underpin public confidence, often intermediated by civil society organisations, that public funds will be well spent.

The first step in applying procurement to deliver quality infrastructure involves taking a close look at the procurement process itself. BDN element 7 (Protections against corruption and transparent procurement) include criteria that fall under the responsibility of the contracting authority such as making information on the procurement process publicly available (7.8), ensuring fair and equal treatment of all bidders (7.9), and including protections against bid-rigging (7.11).

The integrity duties that fall on the contracting authority's own process are elaborated in detail in the OECD Infrastructure Anti-Corruption Toolbox (IACT) Handbook (OECD, 2025^[26]), which provides implementation guidance for meeting the anti-corruption and transparent procurement criteria under Blue Dot Network certification.

The authority's conduct of the process and the obligations it imposes on bidders are not separate concerns. They are the upstream and downstream halves of the same mechanism, and the downstream requirement holds only where the upstream process is sound. This section sets out how an authority establishes that upstream integrity.

4.1. Transparency, integrity, and procurement governance in quality infrastructure

For quality infrastructure procurement, integrity risk is not merely a governance concern, it is a direct threat to the delivery of sustainability criteria. Integrity risk in procurement operates through two primary opportunities.

The first opportunity emerges at the design stage: when technically ambitious and well-structured sustainability criteria are combined with transparent evaluation methodologies, procurement processes can become powerful mechanisms for rewarding innovation, long-term value creation and higher-quality infrastructure outcomes. Clear governance, objective scoring frameworks and competitive procedures help ensure that sustainability commitments are assessed as genuine indicators of quality, resilience and lifecycle performance. The OECD highlights the importance of strengthening integrity and transparency during the pre-tendering phase to ensure that technical specifications and procurement procedures foster open competition and trust in public procurement systems.

The second opportunity arises during the execution stage: sustainability obligations embedded into contracts — such as environmental management plans, labour standards commitments and social inclusion targets — can become effective drivers of measurable impact when supported by robust monitoring, accountability and performance-management mechanisms. Strengthening oversight during implementation not only improves delivery quality and compliance, but also enhances efficiency, reduces delays and reinforces confidence in procurement systems. Research on contract performance monitoring across European procurement systems suggests that greater supervision and accountability at the implementation phase can significantly improve project outcomes and long-term public value creation (Tátrai T., 2024^[27]).

Transparency is strengthened when procurement information is not only published but also structured, searchable, and traceable. For major or high-risk projects, contracting authorities should maintain a digital procurement record covering market engagement, questions and answers, evaluation criteria, scoring decisions, clarifications, contract amendments, KPI reports, and verification findings.

The goal is to ensure that procurement processes evolve from formal compliance toward fully operational systems capable of translating quality and sustainability requirements into tangible outcomes. When effectively implemented, procurement frameworks can align tender documents, evaluation methodologies and contractual obligations with the real delivery of resilience, environmental performance and long-term public value. Referencing frameworks such as BDN criteria within procurement processes can provide a strong foundation for consistency, transparency and higher-quality infrastructure development.

The OECD highlights that legal provisions and integrity frameworks are essential starting points because they establish the institutional basis for corruption prevention, accountability and trust in public procurement systems. Their effectiveness increases significantly when complemented by robust operational enforcement, monitoring and verification mechanisms (OECD, 2026^[28]). This evolution is especially important for sustainability criteria: as monitoring capabilities mature, sustainability moves from being primarily a formal requirement to becoming an integrated performance-management tool capable of shaping real project outcomes, improving delivery quality and strengthening long-term societal and economic value creation.

4.1.1. The response: building integrity into the procurement architecture

The literature is consistent on one finding: disclosure of procurement information is a necessary but not sufficient precondition for accountability (Bulus, 2025^[29]). Publishing tender notices, evaluation criteria and weightings, bid scores, contract award decisions, and contract amendment notices reduces information asymmetries between public officials and the market, enables bidders to identify and challenge procedurally irregular decisions, and creates the evidentiary basis for audit and oversight.

The OECD's 2026 Anti-Corruption and Integrity Outlook underscores that transparency, access, e-procurement, capacity, risk management, and accountability are intertwined principles, each reinforcing the integrity of the procurement system as a whole and nonsufficient in isolation (OECD, 2026^[28]).

For contracting authorities implementing BDN-aligned procurement, integrity safeguards should be designed into the procurement architecture across all its phases, not treated as a compliance overlay applied after the fact. The following measures are grounded in international best practice and directly relevant to quality infrastructure procurement.

At the design stage. Evaluation criteria and their scoring methodologies should be published in full in the tender documentation. For scored quality criteria, this means specifying not only the criterion and its weight but the scoring matrix, what a proposal must demonstrate to achieve each score level.

Criteria that cannot be defined with sufficient precision to permit transparent, replicable scoring should either be redesigned or converted to pass/fail thresholds. Vague sustainability criteria e.g. "demonstrate commitment to environmental responsibility" scored by committee judgment without a rubric, are not only weak procurement instruments; they are integrity risks. The OECD Recommendation on Public Procurement explicitly calls on

governments to deliver clear and integrated tender documentation, standardised where possible, and proportionate to the need (OECD, 2015^[30]).

At the qualification stage. Integrity requirements should function as genuine pass/fail gates, not formal declarations. Pre-qualification requirements for BDN-aligned procurement should include: anti-corruption policy (consistent with BDN Element 7); evidence of an operational integrity management system (ISO 37001 or equivalent); confirmation of no material findings of fraud or misconduct in a defined look-back period; and, for large-scale projects, documented compliance with applicable international anti-bribery obligations. Supplier debarment provisions, present in 95% of OECD Member and partner countries, should be actively cross-referenced in the pre-qualification process rather than relied upon as a passive backstop (OECD, 2026^[28]). These requirements should be verified through documented due diligence rather than accepted on declaration alone.

At the evaluation stage. Evaluation committees assessing quality criteria should include documented expertise relevant to the criteria being scored, such as environmental specialists for environmental criteria, labour specialists for social criteria and should apply a written moderation protocol that records the basis for scores awarded. Committee composition rules should ensure independence from the bidders and from political interference. Evaluation outcome reports, including individual criterion scores and the rationale for decisions, should be retained and made available to unsuccessful bidders upon request and to auditors.

At the contract stage. Sustainability obligations written into contracts must be accompanied by monitoring mechanisms capable of detecting non-compliance. This means: defined KPIs with agreed measurement methodologies; reporting obligations requiring the contractor to submit regular compliance data; the right of independent verification through site inspection, audit, or third-party monitoring; and graduated sanctions for non-compliance, up to and including contract termination. Evidence from comparative research on contract performance monitoring confirms that structured data collection on contract execution, tracking cost deviations, time deviations, and modification notices is itself an integrity risk deterrent (Tátrai T., 2024^[27]). Contracting authorities should apply the same logic to sustainability commitments: what is not monitored will not be delivered. The OECD identifies unjustified contract modifications as a key integrity red flag that should trigger further investigation, alongside single-bidding rates and repeated awards to the same contractor (OECD, 2026^[28]).

The integrity practices set out above concentrate on the points where the conduct of the procurement most directly affects whether sustainability criteria are delivered. Three further procurement-authority duties under BDN Element 7 (Anti-Corruption) bear on process integrity more broadly and are set out in full in the IACT Handbook: the fair and equal treatment of all bidders, including controlled communication during the procurement (criterion 7.9); protection against bid-rigging through tender design and the detection of collusion (criterion 7.11); and the participation of independent observers in the process (criterion 7.13). Contracting authorities should apply these alongside the practices described here, drawing on the Handbook's detailed implementation guidance for each.

4.1.2. Integrity systems as competitive differentiation

BDN Element 7 (anti-bribery and integrity protections) addresses integrity requirements both as exclusionary screens and as positive quality criteria. The SotA dataset confirms that fewer than half of reviewed tenders included any award-stage integrity criteria, most integrity work was confined to the qualification gate. This represents a missed opportunity. The OECD notes that suppliers can increasingly view integrity initiatives not merely as compliance obligations but as strategic tools that support market access, strengthen competitiveness, protect organizational reputation, and contribute to long-term business sustainability and that extending integrity standards beyond public buyers to the full supply chain is essential for managing integrity risks that can be concealed within complex, fragmented supply chains (OECD, 2026^[28]).

Award-stage integrity criteria should be designed to reward genuine organisational capability rather than credential accumulation. While certifications such as ISO 37001 can provide useful signals, they do not by themselves demonstrate effective implementation. Some countries have therefore moved towards approaches that assess the operational quality of integrity management systems. Mexico's Business Integrity Programme and Argentina's Registry for Business Integrity and Transparency (RITE), for example, encourage firms to demonstrate concrete integrity practices rather than merely hold certifications. Scored award criteria should similarly focus on evidence of implementation: governance arrangements, accountability mechanisms, reporting processes, training systems, whistleblowing channels, and performance in comparable projects. This approach is more closely aligned with the BDN emphasis on transparency, accountability and institutional integrity.

is the contractor's track record on integrity in comparable projects?

As procurement systems evolve from lowest-price models toward quality- and outcome-based approaches, the central governance challenge becomes how to increase sophistication without increasing discretion. International best practices increasingly focus on transforming quality criteria into transparent, measurable and auditable mechanisms capable of reducing subjectivity, limiting opportunities for corruption, and strengthening public trust (Figure 4.1).

Table 4.1. Key integrity risks and good practices

Risk Area	Anti-Subjectivity Anti-Corruption Good Practice	How It Reduces Risk	Reference Authorities / Guidance
Ambiguous quality criteria	Use measurable and verifiable criteria instead of narrative commitments	Limits evaluator discretion and prevents arbitrary scoring	European Commission JRC – Method for Mandatory GPP Requirements • ISO 20400 Sustainable Procurement Guidance
Tailored technical specifications	Define requirements through performance outcomes rather than proprietary solutions or brands	Prevents specifications designed to favour specific bidders	European Commission – Public Procurement Directive 2014/24/EU
Opaque evaluation processes	Publish scoring methodologies and weighting ex ante	Ensures predictability and transparency for all bidders	OECD Recommendation on Public Procurement
Subjective ESG claims	Require standardized methodologies (LCA, EPD, carbon metrics, ISO standards)	Converts sustainability claims into auditable evidence	European Commission – Green Public Procurement Criteria
Evaluator bias or capture	Use multidisciplinary evaluation committees and evaluator rotation	Reduces concentration of influence and individual capture risks	OECD – Public Procurement Toolbox
Hidden conflicts of interest	Mandatory conflict-of-interest declarations and independent oversight	Increases accountability and traceability of decisions	Transparency International – Curbing Corruption in Public Procurement
Manipulation during contract execution	Introduce measurable contractual KPIs linked to payments and penalties	Reduces space for informal renegotiation and non-enforcement	World Bank – Sustainable Procurement Guidance
Abuse of contract modifications	Strict governance and independent review of change orders	Prevents post-award manipulation and hidden cost escalation	OECD – Public Procurement Toolbox
Unverifiable certifications	Accept equivalent certifications only where independently verifiable	Avoids discriminatory practices while preserving verification standards	European Commission – Public Procurement Directive 2014/24/EU
Lack of transparency after award	Publish awards, scores, KPIs and contract performance data	Enables public scrutiny and external accountability	European Commission – Public Procurement Data Space
Weak monitoring capacity	Use digital procurement platforms and structured procurement datasets	Facilitates anomaly detection and forensic auditing	Open Contracting Partnership
Artificial sustainability commitments	Evaluate operational outcomes instead of corporate narratives	Reduces ESG “box-ticking” and performative procurement	Blue Dot Network

Risk Area	Anti-Subjectivity Anti-Corruption Good Practice	How It Reduces Risk	Reference Authorities / Guidance
Excessive discretion in innovation procurement	Use structured competitive dialogue procedures with documented interactions	Maintains innovation while preserving procedural integrity	European Commission – Innovation Procurement Guidance

4.2. From strategic objectives to procurement requirements: the translation challenge

The preceding chapters have established two complementary arguments. First, that infrastructure quality — understood as the degree to which a project serves public objectives over its full lifecycle — depends fundamentally on the decisions made during the design and procurement phases. Second, the Blue Dot Network provides a comprehensive, internationally recognised framework for defining what quality means across ten dimensions, each grounded in widely adopted international standards.

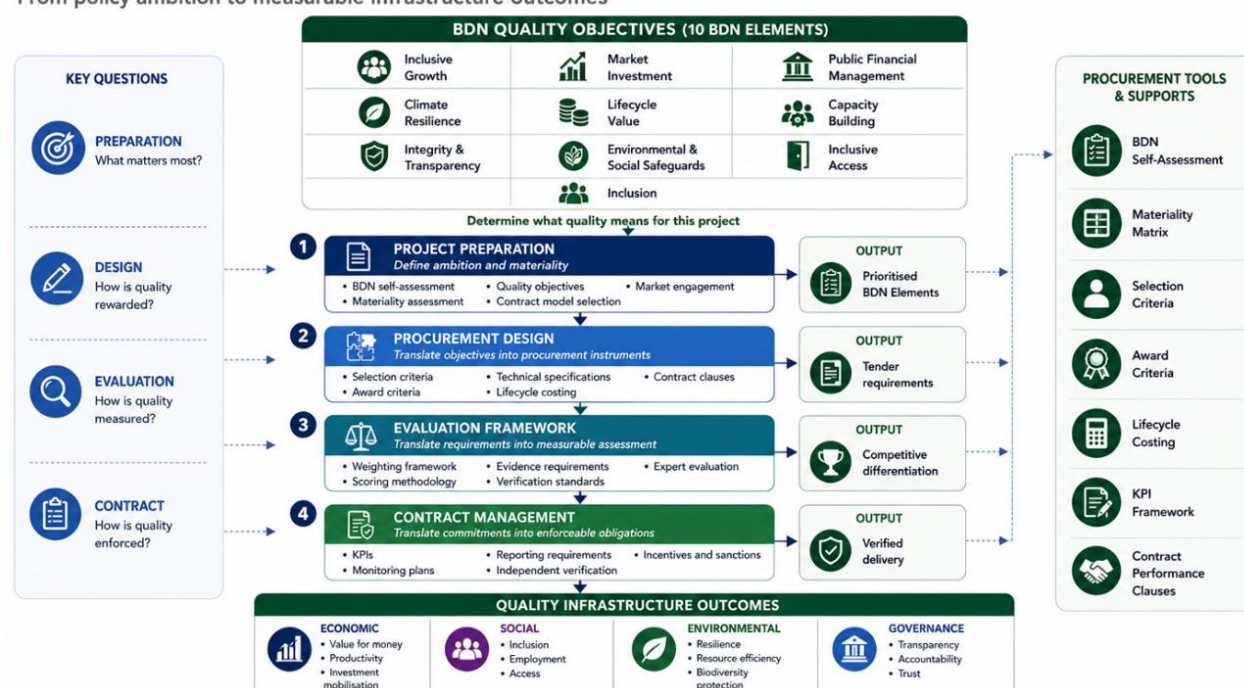
The challenge addressed in this chapter is the translation challenge: **how do BDN elements — which are defined at the level of principles and outcomes — become operational requirements in a procurement process?** How does a contracting authority move from "BDN Element" to a concrete criterion in a tender document that can be evaluated, scored, and enforced?

This translation is not straightforward. Procurement frameworks are necessarily structured around legal requirements, comparative evaluation, and verifiable deliverables. BDN elements, by contrast, are expressed as broad quality objectives. Bridging the two requires deliberate methodological choices at each stage of the procurement cycle — from project preparation through prequalification, tender design, bid evaluation, and contract management (Figure 4.1).

Figure 4.1. From BDN Quality Objectives to Infrastructure Outcomes

THE TRANSLATION OF BDN QUALITY OBJECTIVES INTO PROCUREMENT REQUIREMENTS

From policy ambition to measurable infrastructure outcomes



A BDN element can be carried into a procurement through several complementary instruments: as a qualification or selection requirement that sets a threshold of capability; as a technical specification that fixes a mandatory design or performance standard; as a scored award criterion that rewards proposals going beyond the minimum; or as a contract performance condition, key performance indicator, or payment mechanism that binds and enforces delivery after award. These instruments are not either/or alternatives: the same principle is often best secured at more than one level, set as a mandatory floor, differentiated through scoring, and then locked into the contract for delivery. Scored award criteria are therefore one instrument among several, not the default vehicle for every objective.

Which instrument carries a given principle is a deliberate design decision, turning on two questions. First, the nature of the principle: whether it is a non-negotiable minimum (better placed as a qualification requirement or technical specification), a genuine point of differentiation between capable bidders (suited to a scored award criterion), or primarily a matter of delivery over the contract life (best handled through performance clauses and KPIs). Second, the institutional context: where evaluation discretion is tightly scrutinised by audit and oversight bodies, objective qualification thresholds, mandatory specifications and enforceable contract conditions can embed BDN principles more robustly than discretionary scoring, without diluting ambition. The phase-by-phase guidance that follows returns to each of these instruments in turn.

Between BDN objectives and procurement instruments sits an operational evidence layer. For outcome-based criteria to be comparable and enforceable, contracting authorities should define how relevant data, models, calculations, assumptions, and verification records will be produced and maintained. This may include the use of digital modelling and simulation solutions for lifecycle cost and carbon, a centralized platform operating as a common data environment, and the use of common methodology.

This chapter provides practical guidance for making those choices. It is organised around the phases of the procurement cycle, with specific tools provided at each stage.

4.2.1. Choosing implementation mechanisms across the procurement lifecycle

While BDN principles provide a framework for defining quality infrastructure outcomes, contracting authorities must decide how these requirements will be translated into procurement and contract management arrangements. There is no single implementation mechanism suitable for all projects. The choice depends on factors such as the maturity of the market, institutional capacity, legal constraints, risk allocation, and the stage of the procurement lifecycle at which intervention is most effective.

Qualification requirements: can be used to ensure that bidders possess the necessary technical, financial, environmental, social, or governance capabilities to deliver quality infrastructure. Examples include requiring experience in climate-resilient infrastructure, environmental management systems, community engagement processes, or compliance programmes. Qualification requirements are particularly useful where deficiencies in supplier capacity could jeopardise project outcomes. However, they should be used cautiously, as overly restrictive requirements may reduce competition and limit participation by smaller or newer market entrants.

Technical specifications: provide a direct mechanism for incorporating BDN principles into project requirements. These may include requirements related to resilience, accessibility, environmental performance, safety, resource efficiency, or social safeguards. Wherever possible, contracting authorities should prefer performance-based or outcome-based specifications rather than prescriptive solutions, allowing suppliers to propose innovative approaches while still delivering the desired outcomes. Technical specifications are effective for defining minimum requirements but may be less suitable for encouraging performance beyond compliance thresholds.

Award criteria: allow contracting authorities to evaluate proposals on qualitative considerations in addition to price. BDN-related criteria may include climate resilience measures, life-cycle sustainability, stakeholder engagement approaches, local skills development plans, governance arrangements, or innovation proposals.

This mechanism is particularly useful when quality outcomes depend on the bidder's proposed methodology or management approach. However, award criteria require robust evaluation methodologies and sufficient institutional capacity to ensure consistency, transparency, and objectivity.

Contractual obligations: Certain BDN requirements may be better addressed through contractual commitments that apply throughout implementation and operation. Examples include obligations related to environmental and social management, stakeholder engagement, integrity measures, reporting requirements, maintenance of certification status, or compliance with specified performance standards. Contractual provisions create legally enforceable obligations and are particularly effective where outcomes must be sustained over long periods. Their effectiveness, however, depends on the contracting authority's ability to monitor compliance and enforce remedies when required.

Key performance indicators (KPIs): can be used to monitor whether BDN objectives are being achieved during implementation and operation. Indicators may relate to service quality, environmental performance, resilience, safety, local employment, stakeholder satisfaction, or other project-specific outcomes. Performance indicators help shift attention from inputs to results and create a transparent basis for monitoring project delivery. Their usefulness depends on selecting indicators that are measurable, relevant, and capable of being independently verified.

Payment and incentive mechanisms: Where appropriate, contracting authorities may link payments, bonuses, or penalties to the achievement of specific quality infrastructure outcomes. For example, performance payments may be tied to service quality standards, environmental targets, asset availability, or user satisfaction measures. These mechanisms align financial incentives with project objectives and can encourage continuous improvement. However, they require reliable performance measurement systems and may be difficult to apply where outcomes are difficult to quantify or where institutional monitoring capacity is limited.

Selecting the appropriate mechanism: In practice, BDN principles are often implemented through a combination of mechanisms rather than a single instrument. Qualification requirements help identify capable suppliers; technical specifications define minimum standards; award criteria reward superior solutions; contractual obligations ensure long-term compliance; performance indicators monitor delivery; and payment mechanisms reinforce desired outcomes. The most appropriate combination will depend on the project's objectives, risk profile, market conditions, and institutional context. Contracting authorities should therefore focus less on selecting a single "best" mechanism and more on identifying the mix of tools that provides the strongest alignment between procurement processes and the quality infrastructure outcomes sought by the BDN framework.

4.3. Project preparation: defining quality objectives before the tender

The most consequential procurement decisions are taken before the tender is issued. The definition of project objectives, the choice of contractual model, the preliminary assessment of market capacity, and the initial identification of key risks all shape the space within which subsequent procurement design operates.

A contracting authority that invests in rigorous project preparation arrives at the tender stage with the foundations for quality already in place.

Lifecycle costing can be used in the pre-tender phase during option analysis to help contracting authorities evaluate different technical solutions and compare the cost drivers of different approaches, identifying which cost categories are most relevant. Preliminary data gathered through market consultation with relevant parties — including end-users, other departments, and potential suppliers — can inform this analysis (OECD, 2022^[31]).

For BDN-aligned procurement, the project preparation phase should accomplish four distinct objectives.

4.3.1. Define ambition

Define quality ambition across all ten BDN elements.

Before designing the tender, the contracting authority should conduct a preliminary self-assessment against the BDN framework, identifying which elements and criteria are most material for the specific project context. Not all criteria will carry equal weight in every project — for example, a logistics hub being developed within an existing industrial zone is likely to require less emphasis on criteria relating to resettlement and biodiversity (BDN element 8) compared to that of a dam that will flood a significant area of land.

This preliminary mapping determines where the procurement design should concentrate its quality requirements and where minimum standards suffice.

4.3.2. Contract features

Select the contractual model that best aligns incentives with quality objectives. As established in the strategic orientation table, different contractual models create fundamentally different incentive structures. The project preparation phase is the right moment to make this choice — before procurement documents are drafted and market expectations are set. The decision should be driven by the project's quality priorities, the maturity of the local market, the contracting authority's capacity to manage complex contracts, and the nature of the risks to be allocated.

4.3.3. Early market engagement

Contracting authorities should engage with the market as early as possible in the procurement process to inform potential tenderers about sustainability-related selection and award criteria that will be applied. Early market engagement helps ensure that suppliers have sufficient time and information to prepare and adapt their business practices and supply chains to participate in tenders, thereby safeguarding adequate levels of competition (OECD, 2025). It also provides suppliers with greater visibility over upcoming projects, enabling them to plan and allocate the human, technical and financial resources needed to deliver them. As firms operate with finite capacities and must make strategic decisions about which opportunities to pursue, greater predictability allows them to invest in the capabilities required to meet higher quality standards and strengthens competition for complex infrastructure projects.

For BDN-aligned procurement specifically, early engagement also allows the contracting authority to assess market capacity to meet quality requirements — and to calibrate ambition accordingly.

This preliminary mapping should draw on market knowledge that extends beyond quality standards alone, encompassing available products, supplier technical capacity, and innovation potential.

While early market engagement is an important tool for understanding market capabilities and improving procurement outcomes, it should be conducted within a clear governance framework to safeguard transparency, fairness and integrity. Contracting authorities should establish procedures governing interactions with suppliers, including documentation requirements, equal access to information, conflict of interest safeguards, and appropriate oversight mechanisms. Such frameworks help prevent undue influence, preserve competition, and maintain public trust in the procurement process.

Box 4.1. Early market Engagement tools

Early Market Engagement (EME) can be undertaken through a variety of tools, including annual procurement plans, requests for information (RFIs), requests for quotations (RFQs), supplier fairs, meet-the-buyer events, business roundtables, pre-tender briefings, supplier workshops, demonstration sessions, question-and-answer forums, and supplier debriefings. These mechanisms enable contracting authorities to gather market intelligence, understand available solutions, validate requirements, identify innovation opportunities, and improve the quality and neutrality of procurement documents. Case studies can be found in focusing on four Latin American (OECD, 2026^[32]) countries and the US (OECD, 2024^[33]).

4.3.4. Establish the baseline

Build the evidence base for certification. A project that intends to seek BDN certification should begin assembling the required evidence from the earliest stages of project development. Environmental and social baseline studies, climate risk assessments, financial management frameworks, and community consultation records — all of which BDN certification will require — are most efficiently produced during project preparation, when they can simultaneously serve procurement, financing and certification purposes.

4.4. Structuring the tender: criteria, weighting and evaluation methodology

The tender document is where quality ambition becomes operational. The choices made in structuring evaluation criteria and their relative weights determine what the market will optimise for. Encouraging the inclusion of secondary policy objectives as part of award criteria — rather than drafting descriptive technical specifications — is a way to stimulate the market to offer innovative solutions. When detailed technical solutions are prescribed, economic operators are unlikely to submit proposals that substantially exceed minimum requirements, as a cheaper solution that meets minimum thresholds may be more likely to succeed. Using the Most Economically Advantageous Tender (MEAT) criteria alongside lifecycle cost methodology can support quality and innovation outcomes (OECD, 2019^[34]).

BDN-aligned procurement requires a structured approach to three interdependent design choices: the selection of evaluation criteria, their relative weighting, and the methodology used to assess proposals.

4.4.1. Selection criteria (pre-qual) vs. award criteria

A critical distinction in procurement design is between criteria used to qualify bidders for participation (selection criteria) and criteria used to choose among qualified bids (award criteria). BDN alignment can and should be introduced at both stages, but the nature of the requirements differs.

Selection criteria establish minimum thresholds of capability and track record. For BDN-aligned procurement, prequalification requirements should include demonstrated experience with the relevant quality dimensions — environmental management systems, social impact assessment capacity, lifecycle costing methodology, anti-corruption compliance frameworks, and relevant sector-specific technical capabilities. These are pass/fail requirements: bidders who cannot demonstrate adequate capacity are excluded before competitive evaluation begins.

Award criteria determine which qualified proposal offers the best value. This is where the relative weighting of quality dimensions is established and where the most consequential procurement design choices are made.

BDN-aligned award criteria should be expressed as outcome requirements — what the project must achieve — rather than prescriptive technical specifications that constrain innovation.

4.4.2. Weighting framework

The allocation of weights between quality and price dimensions is the single most important signal a contracting authority sends to the market. A large obstacle to achieving procurement outcomes related to innovation, environment and sustainability is using the lowest price as the exclusive award criterion. To encourage the inclusion of more criteria, an increasing number of OECD countries collect data on the degree to which strategic public procurement goals are met (OECD, 2023^[35]).

In general, price weight evidence across the scored tenders found a median price weight of 30%; thus quality-dominant designs are achievable. Latin American tenders showed highest price variability (10%–95%), whereas EU tenders consistently quality-dominant (i.e. price 10–40% (BDN ECG Group, 2026).

For infrastructure projects seeking BDN alignment, the following weighting principles are recommended.

Price or cost, including lifecycle cost, should not exceed 40% of the total award score in projects where quality dimensions are material. The 40% figure is set as a single ceiling rather than a range because it marks the point beyond which price weight begins to neutralise quality differentiation: once price accounts for more than 40% of the score, the structural capacity of quality criteria to overturn a price-based ranking weakens sharply, and the evaluation reverts in practice toward a lowest-price exercise (the precise tipping point depends on the price-scoring formula applied). Contracting authorities may depart from this benchmark where justified by project characteristics, market conditions, or applicable legal frameworks, provided that quality, lifecycle value and strategic outcomes continue to exert a meaningful influence on award decisions.

The threshold aligns with recognised practitioner guidance on rated criteria (World Bank, 2025^[36]), which recommends a technical-to-price ratio between 90:10 and 60:40 for procurements where quality is prioritised, making 40% the highest price weight within that recommended band — and it is consistent with the World Bank's 2025 procurement reforms, which require a minimum 50% quality weighting for most internationally competitive Bank-financed procurement: a quality floor that the 60% recommended here comfortably exceeds (World Bank, 2025^[37])

It is also consistent with observed practice: across the infrastructure tenders analysed in the SotA, the median price weight is approximately 30%, comfortably within the 40% ceiling, with only lowest-price-dominated models exceeding it.

Where a lifecycle costing methodology is used, the cost component should encompass the full asset lifecycle, not capital expenditure alone. Extending the cost basis to operation, maintenance, and end-of-life substantially changes the competitive dynamic and favours quality-oriented proposals, since whole-life durability and efficiency are rewarded rather than penalised as up-front cost.

Quality criteria should collectively account for at least 60% of the total award score, distributed across the BDN elements most relevant to the specific project. The distribution should reflect project context rather than a fixed template: a project with material climate exposure should weigh Element 4 themes more heavily, while a project in a socially sensitive setting should give greater weight to Element 8 themes.

4.5. Pre-qualification and shortlisting: signaling quality ambition to the market

The prequalification stage serves two functions simultaneously: it filters out bidders who lack the minimum capability to deliver a quality project, and it signals to the market the level of ambition the contracting authority intends to maintain throughout the procurement. Both functions are important for BDN-aligned procurement.

Prequalification requirements for BDN-aligned projects should address the following dimensions:

4.5.1. Technical and environmental capacity

Demonstrated experience with environmental impact assessment, climate risk analysis, and lifecycle carbon management. Where BDN Element 8 (environmental and social safeguards) is material, evidence of systems aligned with IFC Performance Standards or equivalent frameworks.

4.5.2. Social and labour standards

Demonstrated compliance with ILO core labour conventions and, where applicable, evidence of collective bargaining frameworks or global framework agreements. BDN Element 8 specifically references respect for labour rights — prequalification should establish that this is a non-negotiable baseline, not a scored criterion.

4.5.3. Financial management and transparency

Demonstrated capacity for robust financial management, transparent financial reporting, ESG reporting aligned with recognised frameworks (ISSB, EU Taxonomy, or equivalent), and independent audit compliance. Where appropriate to the delivery model and contractual arrangement, contracting authorities may also require or incentivise open-book accounting arrangements to strengthen transparency, accountability and value-for-money oversight. For PPP and concession contracts where BDN Element 3 (debt transparency) is material, evidence of sound financial management systems is essential.

4.5.4. Anti-corruption and integrity systems

Demonstrated compliance with applicable anti-corruption frameworks, including OECD Anti-Bribery Convention requirements where relevant. Exclusion criteria should align with BDN Element 7 (anti-corruption protections).

Track record in quality infrastructure. Evidence of previous projects that demonstrate the bidder's capacity to deliver across the relevant BDN dimensions. Where BDN certification has been obtained for previous projects, this constitutes strong evidence of capability.

4.5.5. Digital and information-management capability

Demonstrated experience delivering projects under ISO 19650 or equivalent information-management standards, including use of a Common Data Environment and open, interoperable approaches, to provide high-quality digital asset information supporting operation, maintenance and lifecycle decisions.

4.6. Award criteria: moving beyond price

The design of award criteria is where the quality ambition established in project preparation is translated into competitive evaluation. For each BDN element identified as material in the project preparation phase, the contracting authority must define: what the criterion measures, how proposals will be evaluated against it, and what evidence bidders must provide.

Award criteria should address the following dimensions:

4.6.1. Environmental performance and carbon management

Scored evaluation of the contractor's proposed approach to construction/operation-phase carbon reduction, including quantified GHG targets, methodology for baseline measurement, and commitments to low-carbon materials and processes.

Where BDN Elements 4 and 8a are material, criteria should assess the quality and credibility of the Environmental and Social Management Plan (ESMP), including biodiversity protection measures and waste minimisation strategies. Higher performance levels under the BDN framework e.g. Superior and Best in Class should attract proportionally higher scores.

4.6.2. Climate resilience and adaptation

Scored evaluation of the contractor's proposed design and construction approach to climate risk, including evidence of climate vulnerability screening, adaptation measures embedded in methodology, and alignment with recognised frameworks such as ISO 14090 or equivalent. BDN Element 4 (climate resilience) criteria are particularly relevant for infrastructure in high-exposure contexts and should be weighed accordingly.

4.6.3. Social value and inclusive employment

Scored evaluation of commitments to local employment, skills development, and targeted inclusion of underrepresented groups — including women, indigenous peoples, and persons with disabilities where project context makes these material. BDN Elements 8b and 10 (social inclusion and gender equity) provide normative reference; award criteria should require quantified targets and a credible delivery plan rather than generic commitments.

4.6.4. Employment and supply chain standards

Scored evaluation of the contractor's supply chain management approach, including mechanisms for monitoring subcontractor compliance with ILO core labour conventions, living wage commitments, and freedom of association protections. BDN Element 8b (fair employment) criteria operate at the award stage as plan and disclosure instruments — bidders should demonstrate systems and due diligence processes designed to identify, prevent, mitigate and monitor labour-related risks across their supply chains, with particular attention to suppliers and subcontractors over which they exercise direct influence or control. Where full supply chain visibility is not feasible, bidders should demonstrate measures to progressively strengthen traceability, transparency and oversight.

4.6.5. Innovation and sustainable delivery methodology

Scored evaluation of the contractor's proposed technical approach with respect to innovation, value engineering for sustainability outcomes, and knowledge or technology transfer where BDN Element 5 is material. Criteria should reward approaches that demonstrably advance quality infrastructure outcomes beyond minimum specification compliance, consistent with the BDN's distinction between Essential, Superior, and Best in Class performance.

Box 4.2. Key findings of the SotA report dataset

Analysis of the tender dataset's award criteria found that scored criteria aligned with 20 of the 47 BDN themes. This finding reflects the current state of practice rather than a ceiling of ambition: themes that may be adjusted as contractor -facing (as described in Section 3.1) absent from the dataset are not to be understood as unimplementable but rather not been observed as explicit procurement instruments in the tenders reviewed.

The following principles guide the design of BDN-aligned award criteria:

- **Express criteria as outcomes, not inputs.**
A criterion that asks bidders to demonstrate what carbon emissions reductions they will achieve across the asset lifecycle generates fundamentally different proposals than one that asks whether they have an environmental management system in place. Outcome-oriented criteria drive genuine innovation; input-oriented criteria drive compliance minimalism.
- **Permit variant bids where innovation is sought.**
Where the authority wants to open space for alternative solutions, it can expressly authorise variant bids, letting bidders depart from a reference design while meeting the same outcome requirements. Variants must be enabled in the tender documents, with their minimum requirements and scoring basis stated up front, and used selectively, since evaluating divergent solutions adds complexity.
- **Require lifecycle costing as a standard methodology:**
A comprehensive lifecycle cost analysis takes into consideration the costs of mitigating or reducing external environmental impacts, meaning that the best solution is identified based on both economic and environmental aspects. Furthermore, by taking into account the costs related to energy consumption during the lifecycle, energy-efficient solutions can be favoured — having a favourable impact on the environment given that fewer resources are consumed (OECD, 2022^[31]). Lifecycle costing should be a standard requirement for all infrastructure procurement of significant scale, with a common methodology provided in the tender documentation to enable like-for-like comparison between proposals (OECD, 2022^[31]).
- **Anchor measurement to recognised reference methodologies.**
Where a criterion requires a quantified outcome e.g. carbon, lifecycle cost, climate risk, environmental impact — different projects will produce non-comparable results if each applies a different method. Award criteria should therefore reference an established methodology for each measured domain, and the tender should specify the single methodology all bidders must apply, so proposals are directly comparable and results are transparent across projects.
- **Define scoring methodologies transparently.**
Each criterion should have a clearly defined scoring methodology — ideally a scoring matrix that specifies what a proposal must demonstrate to achieve each score level. Transparency in scoring methodology reduces the risk of legal challenge, increases bidder confidence, and improves the quality of proposals by clarifying exactly what the contracting authority values.
- **Balance ambition with market realism.**
A persistent challenge in implementing sustainable public procurement relates to the misperception among procurement officials that environmentally sustainable products are more expensive than conventional counterparts.

- **Manage the bid-preparation burden.**

BDN-aligned tenders ask bidders to prepare extra deliverables — carbon management plans, whole-life cost analyses, biodiversity and integrity plans, which raise the (usually unreimbursed) cost of bidding and can deter capable firms, narrowing the field. Two practices help preserve competition: providing standardised, partly pre-filled templates for these submissions, and reimbursing a share of tender costs to qualified bidders who complete the process (see Box 4.2).

The OECD's report on green public procurement highlights remaining challenges in mainstreaming green objectives, including the lack of established lifecycle costing methodologies and insufficient training for the procurement workforce (OECD, 2024^[19]), whereas the European Commission (European Commission, 2025^[38]) indicate that criteria that the market cannot credibly meet will either reduce competition or generate proposals that overstate capability. Early market engagement, as recommended in previous section, is the primary tool for calibrating ambition to market reality.

Box 4.3. Managing the tension between quality criteria and market competition

A common concern among contracting authorities is that ambitious quality criteria — including BDN-aligned requirements, may reduce market competition by excluding smaller bidders or raising the threshold for participation. This concern is legitimate but manageable.

The OECD's "Survey on Public Procurement" shows widespread use of measures that support SME access while mitigating the risk that sustainability requirements reduce competition. These measures include the use of lots, reported by 63% of respondents; capacity-building initiatives (50%); the use of dynamic purchasing systems (48%); and the simplification of administrative procedures (40%) (OECD, 2025^[39]).

For BDN-aligned infrastructure procurement, the following approaches can maintain market depth while sustaining quality ambition: structuring contracts in lots that allow specialist firms to bid for components; distinguishing clearly between pass/fail minimum requirements (which must be set at genuinely achievable thresholds) and scored criteria (where a range of performance levels is acceptable); conducting pre-tender market engagement to validate that requirements are achievable before they are published; treating specific certifications and management-system labels as one acceptable means of demonstrating capability rather than a mandatory requirement, and accepting equivalent forms of evidence, so that capable firms, including smaller ones, are not excluded for lacking a particular label; and providing capacity-building support through pre-bid workshops, technical guidance documents, and access to BDN self-assessment tools, that enables a wider range of bidders to understand and meet quality requirements. Where market capability is still maturing, these measures can be reinforced by introducing demanding quality and sustainability requirements progressively across successive procurement cycles — signalling direction early so that suppliers can invest and adapt, rather than imposing the full set of requirements in a single tender. The OECD's guidance on mainstreaming gender equality, which extends to public procurement and infrastructure, documents this graduated approach and illustrates it with practice from Bogotá (OECD, 2023^[40]).

The OECD STEPS methodology (OECD, 2025^[41]) provides a structured, evidence-based framework to compare delivery and contracting options, make informed trade-offs, and improve value for money, while mitigating risks and supporting more transparent and effective procurement strategies.

Box 4.4. Lifecycle costing methodology: principles and application

Lifecycle costing (LCC) is susceptible for use at different stages of the procurement cycle — allowing a better understanding of the full costs of any good, service or work in the preparation phase, enabling objective evaluation and comparison of tenders in the award phase, and ensuring consistent evaluation of results during contract implementation. A comprehensive LCC analysis takes into consideration not only construction and operational costs, but also the costs of mitigating or reducing external environmental impacts — meaning that the best solution is identified based on both economic and environmental criteria (OECD, 2022^[31]).

For BDN-aligned infrastructure procurement, a lifecycle costing methodology should encompass at minimum the following cost categories: capital expenditure (design and construction); operational expenditure over the full contract period (energy, maintenance, staffing, insurance); major rehabilitation and refurbishment costs at defined intervals; decommissioning or end-of-life costs; and the monetised cost of environmental externalities, including carbon emissions priced at a defined shadow carbon price consistent with Paris Agreement pathways.

To enable like-for-like comparison between proposals, contracting authorities should provide a standardised LCC template in the tender documentation, specifying the discount rate, the shadow carbon price, the asset lifecycle assumptions, and the methodology for monetising environmental externalities. Proposals that do not complete the template in full should be excluded from evaluation.

4.7. Contract Performance Clauses

Winning a public contract on the strength of sustainability commitments does not automatically mean those commitments will be delivered. The critical gap between what is offered at tender and what is realised during execution is well documented, yet the literature on sustainable public procurement has devoted comparatively little attention to how sustainability criteria transition from award stage into binding contractual obligations (Uysal, 2024^[42]).

Regardless of legal framework, sustainability commitments made by the successful tenderer, whether embedded in technical specifications, contract performance conditions, or scored award criteria, only produce real-world outcomes if they are expressly carried forward into the contract and actively managed during execution. The OECD (2020) defines performance clauses as contractual terms that outline specific performance criteria a supplier must fulfil in order to successfully carry out the contract during the contract period, with breach potentially leading to sanctions or termination. This distinguishes them structurally from qualification and award criteria: whereas the latter govern who competes and who wins, performance clauses govern what is actually delivered. Plans, methodologies and performance levels offered in response to award criteria, including environmental management plans, CO₂ reduction commitments, social value approaches and labour standards, should therefore be incorporated as contract documents upon award rather than treated as pre-contractual representations that expire once the contract is signed. Where this translation does not occur explicitly, sustainability commitments risk becoming unenforceable or simply forgotten as execution pressures mount.

The tenders examined in the SotA report illustrated both the variety of approaches and the structural importance of this translation step. In several high-performing tenders across the dataset, social value and environmental commitments made at bid are explicitly stated to become contract documents upon award, with quantified obligations forming part of the contractor's binding deliverables. In others, the Contractor's Environmental and Social Management Plan (C-ESMP) submitted at bid is incorporated into the contract as an appendix, with a

defined penalty schedule for non-compliance by individual plan item. In a number of internationally financed infrastructure projects, monthly reporting of environmental and social metrics against the ESMP is an explicit contract requirement, with the reporting format and content defined in the conditions of contract. These examples confirm that both plan-based and performance-based sustainability criteria can be made contractually binding, but only if the contracting authority designs the translation mechanism into the procurement documents from the outset. The Canadian practice cited by the (OECD, 2020^[43]) illustrates the same principle at the institutional level: ethical procurement certifications submitted during bidding become binding contract documents at financial close and are subject to verification at any point during the contract period, with untruthful certification constituting grounds for contractor default.

The São Paulo Companhia Paulista de Parcerias (CPP) has taken an innovative approach to ensuring quality criteria are embedded in the project throughout its life cycle. The CPP submitted a project for BDN certification ahead of launching an international tender. The successful bidder was then contractually required to maintain the certification status which involves being subjected to annual monitoring by the certification entity (see Section 5.2.6).

Uysal (Uysal, 2024^[42]) characterises sustainability obligations in public contracts as Sustainable Performance Contract Clauses (SPCCs): provisions that must relate to the actual delivery of the works, services or supplies, rather than to the general conduct of the contractor as a firm. This distinction matters across jurisdictions. A requirement for a contractor to hold a corporate environmental policy is qualitatively different from a requirement to achieve a specified carbon reduction target on the project being procured. The latter is linked to what is being delivered; it can be monitored, verified and enforced against a measurable baseline. Contracting authorities should design sustainability criteria with this enforceability test in mind from the outset: if a commitment cannot be monitored and verified during execution, it has limited value as a contractual obligation regardless of how it was framed at award.

A consistent finding from across the SotA tender dataset is the asymmetry between quantitative and plan-based sustainability criteria at the monitoring stage. Performance criteria expressed as measurable targets, such as carbon reduction values, environmental cost indicators and certification levels, can be tracked on a rolling basis and tested against objective benchmarks. Plan-based award criteria, including environmental management plans, social value delivery frameworks and ESMP implementation strategies, are typically evaluated holistically, often only at project delivery, and rely more heavily on the quality of the CA's contract management capacity for meaningful oversight. This asymmetry is confirmed by Gelderman et al. (Gelderman, 2024^[44]) in their analysis of Dutch infrastructure contracting, where quantitative performance criteria were reported and verified periodically throughout construction, while qualitative award criteria embedded in design solutions tended to be assessed only upon completion. The implication is not that plan-based criteria should be avoided, since in many project contexts they are the only appropriate instrument for capturing complex sustainability commitments, but that contracting authorities must design explicit verification milestones and reporting requirements for them, rather than deferring assessment to project closeout.

Evidence on actual verification practice across jurisdictions reveals a persistent gap between the inclusion of sustainability performance clauses and their active monitoring. The (OECD, 2020^[43]) survey of central purchasing bodies found that while more than two-thirds verify environmental, labour rights and integrity obligations for main contractors during contract execution, verification drops sharply at the subcontractor level, with only a small number of countries monitoring compliance beyond the first tier of the supply chain even in specific cases. The methods most commonly used are requests for justifying documents and third-party audit assessments, with site visits and digital compliance tracking used by only a minority of purchasing bodies. For social objectives, including gender, disability and inclusion of disadvantaged groups, verification during contract execution is considerably weaker still, even where such criteria were included as performance clauses at award. This pattern confirms that the weakest link in sustainable procurement is not the design of criteria but the systematic follow-through during delivery.

Enforcement is the dimension most frequently underdeveloped in sustainable procurement practice. Where a contractor was selected partly on the basis of sustainability commitments, tolerating non-delivery without consequence effectively retroactively changes the basis of award, disadvantaging competitors who may have bid differently had lower sustainability standards been acceptable. The most robust examples in the dataset address this directly: non-compliance with specific environmental and social plan items triggers defined financial penalties, creating an ongoing monetary incentive for contractor compliance throughout the works rather than a single pass/fail test at delivery. More broadly, Uysal (Uysal, 2024^[42]) argues that contracting authorities bear a legal duty to enforce what they procured, since non-delivery of sustainability commitments that were material to the award decision may constitute an unlawful contract modification, a principle with analogues across multiple legal frameworks beyond any single jurisdiction.

Gelderman et al. (Gelderman, 2024^[44]) identified contractual flexibility as a structural enabler of sustainability performance over the life of long-duration infrastructure contracts. Contractors frequently adopt additional sustainability measures during execution beyond what was committed at tender, particularly where the CA and contractor maintain collaborative working relationships and where the contract allows for upward adjustment of ambition in response to technological developments or updated policy requirements. Provisions for sustainability uplift, such as shared innovation budgets, periodic sustainability reviews or agreed mechanisms for incorporating new standards, are compatible with contractual enforceability and may in practice deliver stronger outcomes than static compliance monitoring alone.

The three-step enforcement sequence identified by Uysal (Uysal, 2024^[42]), comprising preventive monitoring, relational enforcement, and termination or debarment as a last resort, provides a broadly applicable framework for managing sustainability performance during contract execution. Proactive monitoring through periodic reporting, third-party verification and clear key performance indicators tied to original bid commitments forms the first line, drawing on the range of methods identified by the OECD (OECD, 2020^[43]): justifying documents, self-assessment questionnaires, third-party audits and, where capacity allows, site visits and digital compliance tracking. Where non-compliance is identified, collaborative remediation through early intervention and agreed corrective action plans is typically more proportionate and more effective at achieving the underlying sustainability objective than immediate punitive response. Debarment or contract termination provisions remain important as structural incentives that shape contractor behaviour even when not exercised. Contracting authorities with limited monitoring capacity should concentrate their oversight on quantitative, independently verifiable commitments, and weigh these more heavily than plan-based qualitative criteria when designing the award stage, since what cannot be monitored cannot be enforced.

Box 4.5. Examples of BDN certified projects

Certified projects ([Projects - Blue Dot Network](#)) have translated BDN requirements into procurement and contractual arrangements in different ways. Beyond requiring the maintenance of certification throughout implementation, procurement documents can incorporate specific BDN criteria as technical specifications, evaluation criteria, performance indicators, reporting obligations, or contractual commitments. For example, tender documents may require bidders to demonstrate how they will meet BDN objectives related to climate resilience, nature-positive outcomes, stakeholder engagement, or monitoring and reporting. Contractual provisions can then require the selected contractor or concessionaire to maintain compliance with these commitments throughout the project life cycle, with periodic verification and reporting mechanisms aligned with the BDN framework. Examples from certified projects provided by BDN based on implementation experience include:

- **Águas do Rio, Brazil.** The certification highlighted the project's use of performance-based management through contractually defined service-level obligations and KPIs covering water coverage, sewage services, and operational performance. The project's focus was on demonstrating that quality outcomes are sustained through measurable performance requirements and continuous monitoring.
- **Angololo Water Resources Development Project, Kenya-Uganda.** Certification recognised the project's emphasis on comprehensive feasibility studies, environmental and social assessments, climate resilience analysis, life-cycle considerations, and transparent governance arrangements, creating a strong foundation for subsequent procurement and implementation decisions.
- **REZA Hybrid Renewable Energy Project, Egypt.** A particular focus was placed on stakeholder engagement, local employment opportunities, skills development, and participation of local suppliers, illustrating how quality infrastructure principles can be incorporated into project development well before construction starts.
- **El Dorado International Airport, Colombia.** The project combines environmental performance measures, support for local economic participation, and stakeholder-oriented management practices within its operational and investment framework, illustrating how quality infrastructure principles can be embedded into long-term asset management, performance monitoring, and continuous improvement processes.
- **Eurasia Tunnel, Türkiye.** Certification recognised the project's focus on operational reliability, safety, resilience, governance, and performance accountability throughout the concession period, demonstrating how quality infrastructure outcomes can be maintained during decades of operation.

These projects show that BDN certification can strengthen infrastructure quality in different ways depending on the project context. Some projects use certification to create binding contractual obligations (CPP), others to reinforce performance-based delivery (Águas do Rio), front-end project preparation (Angololo), governance and investability (REZA), sustainable asset management (El Dorado), or long-term operational accountability (Eurasia Tunnel). Together, they illustrate the flexibility of the BDN framework in translating quality infrastructure principles into practical project requirements across the entire project life cycle.

5. Implementing quality criteria in procurement processes, contracts and project execution

5.1. How to embed BDN quality criteria in a public tender: a phase-by-phase guide

The Blue Dot Network certification framework provides a structured and internationally recognised methodology for defining quality across ten dimensions of infrastructure investment. Translating this framework into operational procurement practice — from the earliest stages of project preparation through to contract management and eventual certification — requires a deliberate, phase-by-phase approach.

Box 5.1. A note on proportionality

The framework set out in this chapter is comprehensive by design — it is intended to cover the full range of project types and contexts to which BDN criteria apply. No single project will require the application of every tool described here with equal intensity. The BDN certification framework applies a risk-based approach meaning that the measures implemented should be proportionate to the nature and magnitude of the risks and impacts generated by the project. The first and most important judgment a contracting authority must make is which BDN elements are most material for the specific project, and where the greatest quality leverage lies.

For a large-scale energy PPP in a climate-exposed developing economy, climate resilience, environmental safeguards, and local capacity building will be the dimensions where ambitious procurement design generates the greatest return. For a digital infrastructure concession, transparency, performance quality, and universal access may be more determinative. The phase-by-phase guide provided here is a toolkit, not a checklist to be completed in full regardless of context.

The contracting authorities that will derive the greatest value from BDN alignment are those that use this framework as a starting point for a deliberate, evidence-based process of quality design — adapting its tools to their specific project context, regulatory environment, and institutional capacity, and building their own expertise iteratively across successive procurement cycles.

This section is organised around five sequential procurement phases (Table 5.1). For each phase, it identifies the key decisions to be made, maps them to the most relevant BDN elements.

Table 5.1. Procurement phases and key tools for BDN integration

Phase	Primary objective	Key BDN integration tool	Responsible actor
1. Project preparation	Define quality baseline before the tender	BDN self-assessment template; preliminary gap analysis	Project owner / contracting authority
2. Pre-qualification	Filter for capability, not just compliance	BDN-aligned selection criteria; minimum threshold requirements	Procurement team
3. Tender design	Translate BDN elements into evaluation criteria	Award criteria framework; weighting methodology	Procurement team + legal advisors
4. Bid evaluation	Apply criteria consistently and defensibly	Scoring matrix; evaluation panel guidance; moderation protocol	Evaluation committee
5. Contract evaluation	Close the loop between commitments and outcomes	KPI framework; monitoring system; certification preparation	Contract manager + technical team

5.2. Phase 1: Project preparation: anchoring the tender in public policy priorities

The most consequential procurement decisions are taken before the tender is issued. But before any procurement design question can be answered — e.g. which contractual model, which evaluation criteria, which performance indicators — a more fundamental question must be answered: ***“what is this infrastructure investment actually trying to achieve for the country, the region, or the community it serves? how can this project achieve public policy objectives?”***

The answer to that question is not technical, it is political. Every government has strategic priorities, economic development agendas, climate commitments, social inclusion goals, territorial cohesion plans, and industrial policy objectives.

Infrastructure is one of the most powerful instruments available to translate those priorities into tangible outcomes. But that translation does not occur automatically. It requires deliberate design choices, starting at the earliest stage of project preparation, that embed policy objectives into the structure of the procurement before a single tender clause is written.

Phase 1 of BDN-aligned procurement therefore begins not with an assessment of the BDN framework, but with a structured articulation of the public policy priorities that the infrastructure investment is intended to serve.

The BDN elements then become the tool for translating those priorities into quality requirements — not an external framework imposed on the project, but a structured methodology for maximizing the policy return on the public investment.

5.2.1. Mapping public policy priorities

The first task in project preparation is to identify, explicitly and in writing, the public policy priorities that the infrastructure investment is intended to advance. This mapping should draw on the government's existing strategic documents; national development plans, climate strategies, industrial policy frameworks, territorial cohesion plans, social inclusion agendas — and translate them into specific, project-relevant objectives.

The following framework (Table 5.2) structures this mapping across the policy domains most commonly relevant to infrastructure investment and connects each domain to the BDN elements through which procurement can amplify policy impact. The procurement lever column provides a forward reference to the award criteria and contractual instruments developed in detail in Phase 3; at this stage it serves as orientation only.

Table 5.2. BDN relevance to public policy priorities

Public policy priority	How infrastructure can amplify it	BDN elements /themes most relevant	Procurement lever
Economic growth & competitiveness	Reduce logistics costs, connect markets, attract investment, raise factor productivity in the project corridor. Multiplier effects are strongest when infrastructure design integrates territorial planning and enables downstream economic activity.	BDN 1 — Inclusive growth BDN 5 — Lifecycle value BDN 2 — Market investment	Local economic development; economic impact criteria; lifecycle cost evaluation weighted above CAPEX
Climate transition & net-zero	Align asset design with national net-zero pathway; reduce embodied and operational carbon; build physical resilience to climate impacts over asset lifetime; integrate nature-based solutions.	BDN 4 — Climate resilience BDN 8 — Environmental safeguards	Carbon budget as scored criterion; mandatory climate stress-testing; net-zero alignment evidence at bid stage
Natural capital & biodiversity	Avoid and minimize ecosystem degradation; integrate biodiversity net gain or no net loss approaches; restore habitats and strengthen ecosystem services.	BDN 8 — Environmental safeguards BDN 4 — Climate resilience	Biodiversity net gain or no net loss as scored criterion; mandatory biodiversity management plan at bid stage; natural capital valuation within lifecycle cost assessment
Territorial cohesion & regional development	Connect underserved regions, reduce urban-rural service gaps, enable economic diversification, generate local employment in lagging areas.	BDN 1 — Inclusive growth BDN 6 — Capacity building BDN 9 — non-discriminatory access	Workforce development; SME participation; coverage targets for underserved populations
Social inclusion & poverty reduction	Ensure access to essential services regardless of income, geography, gender, or disability. Design infrastructure as a platform for social mobility, not just physical connectivity.	BDN 9 — non-discriminatory access BDN 10 — Marginalised groups BDN 1 — Inclusive growth	Affordability as contractual obligation; accessibility standards; gender and inclusion plan as mandatory deliverable
Fiscal sustainability	Protect public finances from contingent liabilities; ensure debt sustainability; prevent fiscal lock-in from poorly structured long-duration contracts; maximise value from limited public capital.	BDN 3 — Public financial management BDN 5 — Value for money BDN 2 — Market investment	Lifecycle cost evaluation; debt sustainability assessment; open-book accounting requirement
Industrial policy & local capability	Build domestic technical capacity, develop local supply chains, create conditions for technology transfer, generate skilled employment that persists beyond project completion.	BDN 6 — Local capacity building BDN 1 — Inclusive growth	Skills transfer as scored criterion; technology transfer obligations; local SME participation requirements
Governance & anti-corruption	Use infrastructure procurement to demonstrate and reinforce institutional integrity. High-visibility projects signal the government's commitment to transparent, accountable use of public resources.	BDN 7 — Anti-corruption BDN 3 — Public financial management	Anti-corruption policy as selection criteria and contractual requirement; Beneficial ownership disclosure; open-book accounting; independent audit rights; public reporting obligations
Resilience of critical services	Ensure essential services — energy, water, transport, digital — can withstand climate shocks, natural disasters, and systemic disruptions without extended service loss.	BDN 4 — Climate resilience BDN 5 — Lifecycle value	Business continuity requirements; adaptive design clauses; recovery time KPIs as payment conditions

5.2.2. Translating policy priorities into project-specific quality objectives

Once the government's priority policy domains have been identified, the next step is to translate them into specific, measurable quality objectives for this project. This translation is the core intellectual task of project preparation — and the one most frequently skipped in procurement processes that move too quickly from project identification to tender design.

A quality objective is not a general aspiration. It is a specific, quantified commitment that can be embedded in tender criteria, monitored during execution, and verified by independent third parties. The following worked

example illustrates how policy priorities translate into project-specific quality objectives across a major transport infrastructure project.

Box 5.2. Example - road corridor: from policy priority to quality objective

- **POLICY PRIORITY I: Territorial cohesion — reduce economic isolation of rural communities in the project corridor.**

QUALITY OBJECTIVE: The project shall deliver measurable improvement in market access for agricultural producers within 50 km of the corridor, with a target reduction in transport costs of at least 30% within 3 years of project completion. Local employment during construction shall reach a minimum of 45% of total workforce, with priority given to workers from communities in the project corridor. The project shall include feeder road connectivity to a minimum of 12 rural communities currently lacking paved access.

- **POLICY PRIORITY II: Climate resilience — protect the investment from climate impacts over its 30-year asset life.**

QUALITY OBJECTIVE: The project design shall be stress-tested against climate scenarios for the 2050 and 2080 horizons, covering increased precipitation intensity, temperature extremes, and flooding risk. Design standards shall provide protection against a 1-in-100-year rainfall event and shall include adaptive design provisions for upgrading drainage and surface materials within cost envelopes defined at design stage.

- **POLICY PRIORITY III: Fiscal sustainability — maximise value from limited public capital.**

QUALITY OBJECTIVE: The preferred delivery model shall integrate design, construction, and maintenance responsibility in a single contract, with performance-based payments linked to road condition indices over a minimum 10-year maintenance period. Whole-life cost per vehicle-kilometre shall be a primary evaluation criterion weighted at 25% of the total award score.

5.2.3. Map quality objectives to BDN elements

Once project-specific quality objectives have

been defined, they can be mapped to the BDN framework. This mapping identifies which BDN elements are most material for this project — where the procurement design should concentrate its quality requirements — and ensures that the project's quality commitments are structured in a way compatible with BDN certification requirements.

Not all BDN elements will carry equal relevance in every project. The materiality signal column in the table below provides guidance on the conditions under which each element should be treated as a primary design priority, helping contracting authorities concentrate procurement effort where it will generate the greatest quality return.

Table 5.3 BDN element materiality mapping: policy relevance and procurement priority by element

BDN element	Policy objective it serves	Key procurement questions	Materiality signal
1. Sustainable & inclusive growth	Economic growth, territorial cohesion, social inclusion, industrial policy	Does the project create economic opportunities for local communities? What are the downstream economic multipliers?	High if project is in underserved region or targets social and economic development outcomes
2. Market-driven investment	Fiscal sustainability, industrial policy, private sector development	Is private sector participation planned? Can the project attract international institutional capital?	High for PPP, concession, and blended finance structures; critical where mobilising private capital is a policy objective
3. Public financial management	Fiscal sustainability, governance and anti-corruption	What is the fiscal exposure of the public authority? Are debt sustainability risks material?	High for large-scale, long-duration contracts; critical where debt sustainability is a sovereign concern
4. Climate resilience & net-zero	Climate transition, resilience of critical services, fiscal sustainability	What climate risks does the project face over its lifetime? What are the stranded asset risks if climate projections materialise?	High for all long-duration infrastructure; critical for projects in climate-exposed locations or with significant carbon footprint
5. Value for money / lifecycle cost	Fiscal sustainability, economic growth, quality of public services	Is the evaluation methodology measuring total cost of ownership or only CAPEX? Are maintenance costs budgeted over the full asset life?	High for all projects; critical for DBB contracts where lifecycle costs are separated from construction
6. Local capacity building	Industrial policy, territorial cohesion, social inclusion	Will the project generate transferable skills? What technical capacity will remain after project completion?	High for projects in countries with limited local contractor capacity; critical where technology transfer is a policy objective
7. Anti-corruption & transparency	Governance, public trust, fiscal sustainability	Will the project strengthen or undermine institutional trust in public procurement? Is procurement integrity independently verified?	High for all projects; critical in high-risk procurement environments and high-visibility projects
8. Environmental & social safeguards	Biodiversity and pollution control, social inclusion, governance	Are significant environmental or social impacts anticipated? What communities will be affected and how will their rights be protected?	High for projects with significant physical footprint, community displacement, discharge of pollutants, water consumption, waste generation or proximity to sensitive ecosystems
9. Non-discriminatory access	Social inclusion, territorial cohesion, poverty reduction	Will the infrastructure serve all user groups regardless of income, geography, or disability? Are affordability standards specified as contractual obligations?	High for utility, public transport, and water concessions; critical where universal service obligations exist
10. Inclusion of marginalised groups	Social inclusion, gender equality, poverty reduction	Are women, people with disabilities, and other marginalised groups explicitly considered in design and delivery? Are inclusion commitments measurable?	High for all projects; critical for projects in regions with significant gender or social exclusion challenges

5.2.4. Select the contractual model

The contractual model is the mechanism through which policy objectives are converted into market incentives. The model selection decision should follow directly from the policy priority mapping in Step 1 — not from technical preference or institutional habit.

Sections 2 and 3 established the general relationship between contractual models and incentive structures, and Table 3.1 mapped that relationship across quality dimensions. The task at this stage of project preparation is

more specific: to select the model that best serves the priority policy objectives identified for this project. Table 5.4 applies a complementary lens to that earlier framework, organising the model selection decision by policy priority rather than quality dimension, so that a contracting authority can move directly from its stated development objectives to a model recommendation. It is intended as an aid to judgment rather than a decision rule: the models listed are indicative starting points, and the appropriate choice for any given project will depend on the project-specific factors.

Table 5.4. Contractual model options, by priority policy objective

Priority policy objective	Indicative model options	How the model serves the objective
Fiscal sustainability & lifecycle value	PPP (availability-based) / DBOM / Alliance	Integrating design, construction, and maintenance eliminates the perverse incentive to minimise CAPEX at the expense of lifecycle cost. Availability-based payment makes the contractor's revenue contingent on long-term asset performance.
Climate resilience & net-zero	DBOM / PPP / Alliance	A contractor bearing operational risk has every financial incentive to invest in resilience at design stage — because the cost of climate-related service disruption falls on their revenue, not on the public authority.
Territorial cohesion & local development	PPP / Concession with social clauses / Alliance	Long-duration contracts with community benefit obligations create sustained accountability for local employment, supplier development, and service access — outcomes that require contractual continuity.
Social inclusion & universal access	Concession with regulated tariffs / PPP with affordability covenants	Concession models embed affordability obligations as regulatory conditions of operation, with tariff review mechanisms maintaining access commitments over the contract duration.
Industrial policy & capacity building	Alliance / IPD / Design-Build with technology transfer	Collaborative models integrating local partners from project inception create conditions for genuine knowledge transfer. Compliance-based local participation requirements rarely achieve meaningful capacity building.
Governance & transparency	PPP with open-book accounting / Alliance / Any model with mandatory ESG disclosure	Governance objectives are served by transparency obligations that are structural — built into the payment mechanism, monitoring system, and reporting requirements — rather than aspirational statements in the contract preamble.

Notes: Model choice also depends on fiscal capacity and affordability, value for money against transaction and management costs, the available legal framework, market capacity, risk allocation, and the authority's capacity to manage complex contracts. The combinations shown are illustrative, and more than one model may be appropriate for a given objective.

5.2.5. Market engagement

Once the policy priority mapping and quality objective definition are complete, early market engagement validates that the ambitions established are achievable in the market context. Quality criteria that the market cannot credibly meet will either reduce competition or generate proposals that overstate capability.

For BDN-aligned procurement, early market engagement practices should include:

- A Request for Information (RFI) describing the project's policy objectives, quality dimensions to be evaluated, and preferred contractual model, inviting market feedback on feasibility, cost implications, and capability gaps.
- One-on-one supplier meetings with large integrated contractors, specialist sustainability firms, local suppliers, and potential financing partners to gather qualitative feedback on market capacity
- A published summary of market feedback and the contracting authority's response, including adjustments made to quality requirements and the rationale — maintaining transparency and building market confidence before the formal tender process begins.

Starting the certification evidence base during project preparation also disciplines the quality objective-setting process: it requires that commitments be evidence-based and independently verifiable from the outset, rather than aspirational targets added late in the procurement design.

5.2.6. Integration with BDN certification process

The project preparation phase is a crucial stage in the certification process. Starting the process early maximises the chances of successful certification (while also embedding quality upfront) since it is much simpler and cheaper to embed BDN requirements during project preparation and design than to retrofit a project that is in the process of implementation.

The project preparation phase can advance the certification process in a number of ways:

1. **Embedding BDN criteria into early project design:** by privileging certain alternatives (e.g. selecting a site that will minimize impacts on local communities) and design choices (e.g. using energy efficient technology) the contracting authority can increase the likelihood of a successful certification process.
2. **Building the evidence base for certification:** A project that intends to seek BDN certification should begin assembling the required evidence from the project preparation stage. Environmental and social baseline studies, climate risk assessments, financial management frameworks, and community consultation records are most efficiently produced during project preparation. Central to this effort is the Environmental Impact Assessment (EIA) process, which applied at early phase may be able to provide the technical data needed to align tender specifications with certification standards. These documents serve procurement design and certification purposes simultaneously, eliminating the need for duplicative evidence-gathering at a later stage.
3. **Initiating the self-assessment process:** the contracting authority can take advantage of the project preparation phase and the availability of experts to initiate the self- assessment process focusing on those aspects for which it has information and/or control. Responsibility to finalise the self-assessment could be transferred to the contractor post contract award. Performing self-assessment during project preparation also provides a useful roadmap and checklist for contracting authorities to prepare projects that are more likely to be successfully tendered and attract financing from MDBs, DFIs and international investors.
4. **Complete the self-assessment process and obtain the certification:** the contracting authority may opt to complete the self-assessment and apply for certification prior to launching a tender. This would send a signal to the market and potential bidders that it is a well-prepared project and could also facilitate the process of raising financing. Responsibility to implement certain commitments and maintain the certification status could be transferred to the contractor as a contractual obligation.

Starting the certification process early does however present certain challenges. First, some of the evidence and documentation required to obtain certification may not yet be available. In addition, the implementation of certain requirements may depend on the actions of contractors or concessionaires who have yet to be appointed. These are not obstacles to achieving certification: applicants can commit to implementing requirements, and providing evidence at a later date, once it becomes available. Implementation of the requirements is then tracked by the certification entity through an annual monitoring process. Finally, projects at the preparation stage are inherently uncertain with regard to their ultimate scope, design, timing, and even implementation. To acknowledge this uncertainty, projects that receive BDN certification prior to contract award are given a “*pale* blue dot” (as opposed to one or more “blue dots”). When projects progress to contract award, they can then graduate to “blue dots” on the condition that they demonstrate that they have implemented the relevant commitments in the subsequent certification monitoring.

In order to ensure the implementation of commitments, contracting authorities can hardwire requirements into tender specifications and contracts. For example, contracts can impose a requirement on contractors to prepare a waste management plan (BDN element 8). For projects that obtain certification prior to contract award, contracts can require contractors to maintain the certification status over the lifetime of the contract (Box 5.3).

Box 5.3. Example — State of São Paulo: embedding BDN certification through contracts

CPP pursued BDN certification before launching the tender process, with the successful bidder contractually required to maintain the project's certification status throughout implementation. This approach extended BDN quality requirements beyond project preparation and embedded ongoing compliance, annual monitoring, and continuous improvement obligations into the contractual framework, ensuring that quality infrastructure principles remained relevant throughout the project life cycle.

5.2.7. Preparations for pre-qualification.

Before moving to pre-qualification, contracting authorities should verify that the core project preparation tasks have been completed. The checklist below consolidates the key actions from Phase 1 into a single reference instrument.

Table 5.5. Project preparation checklist — Phase 1

✓	Project Preparation Checklist – Phase 1
☐	Government's priority policy objectives identified and documented with reference to strategic plans
☐	Policy priority-to-infrastructure opportunity mapping completed across all relevant domains
☐	Project-specific quality objectives defined for each priority — specific, quantified, and measurable
☐	BDN element materiality mapping completed, identifying high-priority elements for this project
☐	Contractual model selected with documented rationale aligned to priority policy objectives
☐	Early market engagement conducted: RFI issued, supplier meetings held, feedback documented
☐	Market feedback summary published and quality objective calibration documented
☐	BDN certification pathway identified and preliminary timeline established
☐	Project financial management framework and debt sustainability assessment completed
☐	Internal procurement team capacity assessed and training needs identified
Early EIA activities (if available)	
☐	Preliminary E&S risk screening and EIA scoping initiated
☐	High-level climate vulnerability screening conducted; full climate risk assessment scoped and planned.
☐	Stakeholder identification completed; preliminary community engagement plan prepared for integration into tender requirements

5.3. Phase 2: Pre-qualification: filtering for capability, not just compliance

Pre-qualification serves two functions simultaneously: it filters out bidders who lack the minimum capability to deliver a quality project, and it signals to the market the level of ambition the contracting authority intends to maintain throughout the procurement. A well-designed pre-qualification process raises the floor of the competitive field — ensuring that every bidder who reaches the tender stage has demonstrated genuine capacity to deliver across the relevant BDN dimensions.

The key design principle for BDN-aligned pre-qualification is the distinction between compliance and capability.

- **Compliance** pre-qualification asks whether a bidder has the required certificates, accreditations, and financial standing.

- **Capability** pre-qualification asks whether a bidder has demonstrated, through evidence of past performance, the capacity to deliver the specific quality outcomes the project requires. BDN alignment demands the latter.

5.3.1. Pre-qualification Criteria Framework

Pre-qualification requirements for BDN-aligned projects should address the following capability dimensions. Each requirement should be expressed as a minimum threshold — pass/fail, not scored — to ensure that the competitive evaluation stage focuses on differentiating between capable bidders, not on compensating for fundamental capability gaps.

Box 5.4. Insights from the SotA report on pre-qualification

Pre-qualification depth correlates with governing framework. MDB tenders (WB, ADB) have the most comprehensive and standardised qualification structures for E&S dimensions, E&S management system, SEA/SH prevention plan, past E&S performance declarations, dedicated E&S personnel. EU tenders rely on European single procurement document (ESPD) self-declaration.

The evidence requirements for each dimension reference internationally-recognised standards and frameworks — including ISO standards, IFC Performance Standards, or ISSB disclosure frameworks, which are introduced in the context of award criteria design in Phase 3. At pre-qualification stage they serve as recognised proxies for demonstrated capability, not as scored quality criteria.

Table 5.6. Minimum selection criteria for BDN-aligned pre-qualification: capability dimensions and evidence requirements

Capability dimension	Minimum requirement	Evidence required
Technical & environmental capacity BDN 4, 8	Demonstrated experience with environmental impact assessment, climate risk analysis, and lifecycle carbon management on projects of comparable scale and sector.	Case studies (minimum 2 projects); environmental management system certification (ISO 14001 or equivalent); key personnel CVs with relevant qualifications.
Social and labour standards BDN 8, 10	Demonstrated compliance with ILO core labour conventions across direct workforce and first-tier supply chain. Evidence of collective bargaining frameworks or global framework agreements where applicable.	Labour compliance declaration; social audit reports from previous projects; supplier code of conduct; grievance mechanism documentation.
Financial management & transparency BDN 2, 3, 7	Demonstrated capacity for open-book accounting, ESG reporting aligned with recognised frameworks (ISSB, EU Taxonomy, or equivalent), and independent audit compliance.	Audited financial statements (3 years); ESG reporting sample; audit compliance certificate; evidence of open-book accounting on previous projects.
Anti-corruption & integrity systems BDN 7	Demonstrated compliance with applicable anti-corruption frameworks. No convictions or ongoing proceedings related to fraud, bribery, or corruption in the preceding 5 years.	Integrity declaration; anti-corruption policy; code of conduct; beneficial ownership disclosure; evidence of anti-corruption training programme.
Local capacity building track record BDN 6	Demonstrated commitment to local employment, skills transfer, and supply chain development on comparable projects.	Local content reporting from previous projects; training programme documentation; local supplier partnership evidence.
Quality infrastructure track record All BDN elements	Evidence of previous projects demonstrating capacity to deliver across the relevant BDN dimensions. BDN certification for previous projects constitutes strong evidence.	Project references with client contact details; performance reporting from previous projects; any BDN or equivalent certifications obtained.

Contracting authorities should calibrate evidence requirements to the scale of the project and provide alternative pathways for demonstrating capability (e.g. consortium bidding or subcontracting arrangements with capacity-

building provisions) to avoid systematically excluding local contractors and SMEs from BDN-aligned tenders, particularly in emerging markets.

5.3.2. Shortlisting approach

Where the pre-qualification process generates more qualified bidders than the contracting authority wishes to invite to tender — typically more than five or six for complex infrastructure projects — a shortlisting step may be required. Shortlisting criteria should be drawn from the same capability dimensions as pre-qualification requirements but applied on a comparative rather than pass/fail basis.

For BDN-aligned procurement, shortlisting scores should weight quality track record — including previous BDN-aligned or equivalent project delivery — at least as heavily as financial capacity and technical scale. A bidder with a strong track record of quality delivery on smaller projects may be preferable, from a BDN alignment perspective to a large contractor with a poor sustainability record.

5.3.3. Integration with BDN certification process

The pre-qualification submission should include key documentation necessary for BDN certification such as company policies such as Anti-corruption Policy, Human Rights Policy, Employment Policy, etc. If these are corporate policies, there should be a firm commitment that these policies will apply to the project and be extended to its sub-contractors. The absence of such policies or inadequate policies should trigger a disqualification or, as a minimum, a requirement for the bidder to present those documents as part of the eventual bid package if they are admitted to the next stage.

5.3.4. Preparations for Phase 2.

Before advancing to tender design, contracting authorities should confirm that the pre-qualification process has been properly structured and documented. The checklist below consolidates the key actions from Phase 2.

Table 5.7. Pre-qualification checklist — Phase 2

✓	Pre-qualification Checklist — Phase 2
☐	Pre-qualification questionnaire (PQQ) designed with BDN capability dimensions as primary criteria
☐	Minimum threshold requirements defined as pass/fail (not scored) for each capability dimension
☐	Evidence requirements specified clearly and proportionately for each criterion
☐	Beneficial ownership disclosure required for all applicants
☐	Exclusion grounds defined and aligned with BDN Element 7 requirements
☐	Shortlisting methodology documented and approved before PQQ issuance
☐	Evaluation panel trained on BDN capability assessment
☐	Debrief process designed to provide constructive feedback to unsuccessful applicants
☐	Market diversity assessed: SME participation provisions included where appropriate

5.4. Phase 3 Tender design: translating BDN elements into evaluation criteria

The tender document is where quality ambition becomes operational. Every design choice — the selection of evaluation criteria, their relative weights, the methodology for assessing proposals, the contractual model specified — determines what the market will invest in. A tender that prioritises the lowest bid price will generate infrastructure that minimises upfront cost. A tender that weights BDN-aligned quality criteria will generate infrastructure that maximises long-term public value.

The translation of BDN elements into evaluation criteria requires three interdependent design choices: what to evaluate, how much it counts, and how it will be assessed. These choices must be made consistently — criteria that are important but poorly weighted, or well-weighted but difficult to assess objectively, will not produce the intended outcomes.

5.4.1. What to evaluate?

Table 5.8. Award criteria for BDN-aligned procurement: evaluation dimensions, scoring basis, and evidence requirements.

Award criteria dimension	Scoring basis	Evidence required
Environmental performance & carbon management BDN 4, 8a	Quality and credibility of the construction-phase Environmental and Social Management Plan (ESMP). Quantified GHG reduction targets and measurement methodology. Commitments to low-carbon materials, biodiversity protection, and waste minimisation.	Draft ESMP with clearly defined targets and baseline methodology. Material-level carbon data or EPDs for principal construction inputs. Evidence of lifecycle carbon accounting approach (PAS 2080 or equivalent).
Climate resilience & adaptation BDN 4	Quality of climate vulnerability screening and adaptation measures embedded in proposed methodology. Alignment with recognised resilience frameworks.	Climate risk assessment aligned with ISO 14090, or equivalent. Design or construction methodology demonstrating specific adaptation measures. Evidence of resilience considerations in material and method selection.
Social value & inclusive employment BDN 6, 10	Quantified commitments to local employment, skills development, and targeted inclusion of underrepresented groups. Credibility of delivery plan for gender equity, indigenous peoples, and persons with disabilities where project context makes these material.	Workforce inclusion plan with quantified targets by group. Training and skills development programme with measurable outputs. Subcontractor and supply chain inclusion commitments. Monitoring and reporting methodology.
Labour rights & supply chain standards BDN 8b	Robustness of supply chain management approach for monitoring subcontractor compliance. Living wage commitments and freedom of association protections across full supply chain, not only direct employees.	Supply chain labour compliance monitoring protocol. Supplier code of conduct with ILO core convention alignment. Grievance mechanism accessible to workers at all tiers. Evidence of living wage commitments beyond statutory minimum where applicable.
Innovation & sustainable delivery methodology BDN 5	Quality of proposed technical approach with respect to innovation, value engineering for sustainability outcomes, and knowledge or technology transfer.	Innovation & sustainable delivery methodology

5.4.2. Award criteria design principles

The following principles guide the design of BDN-aligned award criteria:

Define scoring methodologies transparently. Each criterion should have a clearly defined scoring matrix that specifies what a proposal must demonstrate to achieve each score level. Transparency in scoring methodology reduces legal challenge risk, increases bidder confidence, and improves the quality of proposals by clarifying exactly what the contracting authority values.

Balance ambition with market realism. Criteria that the market cannot credibly meet will reduce competition or generate proposals that overstate capability. Early market engagement findings (Phase 1) should inform the calibration of award criteria to ensure they are genuinely achievable while maintaining meaningful quality differentiation.

5.4.3. *Weighting framework*

The allocation of weights between quality and price dimensions is the single most important signal a contracting authority sends to the market. For infrastructure projects seeking BDN alignment, price or cost should not exceed 40% of the total award score.

5.4.4. *Outcome-oriented criteria and lifecycle costing:*

Expressing criteria as outcomes, not inputs

When a tender document asks a bidder whether they have an environmental management system, the answer is binary.

An example of **input criterion**: The company with a certification scores the maximum. The company with a more rigorous but uncertified system may score less. And, most importantly, neither has committed to anything about what the project will actually achieve in environmental terms. This is an input criterion: it measures whether a capability exists, not whether that capability will be used to deliver a specific result on this project.

An **outcome criterion** works differently. It asks: how many tonnes of CO₂e will you emit per kilometre of road constructed, and how will you achieve it? Now the bidder must think, design, and commit. The contractor who proposes low-carbon concrete, integrated waste management from the design stage, and renewable energy on site is not demonstrating compliance, they are competing on quality.

The procurement process has become a mechanism for driving genuine innovation rather than rewarding the minimum acceptable response.

The distinction matters because it determines what the market optimises for. Input criteria create incentives to accumulate certificates and accreditations.

Outcome criteria create incentives to invest in the technical and managerial capabilities that actually deliver better infrastructure. The difference in the quality of proposals received — and in the long-term performance of the asset delivered — can be substantial.

Box 5.5 provides examples illustrating how the same quality objective produces fundamentally different tender requirements depending on whether it is expressed as an input or an outcome.

Box 5.5. Example projects

Example 1 — Energy infrastructure: power transmission line

Input criterion (commonly found in tender documents): "The tenderer shall demonstrate possession of an environmental management system certified to ISO 14001 or equivalent, with a scope encompassing energy infrastructure projects."

What this achieves: every major contractor has ISO 14001. The criterion does not differentiate between bidders, generates no innovation, and commits no concrete environmental result for this project. The winner could build the transmission line with the same emissions and the same ecosystem impact as if the criterion did not exist.

Outcome criterion (what the criterion should require): "Tenderers shall submit a Project Carbon Footprint Plan specifying total lifecycle emissions in tCO₂e for the construction and operational phases, disaggregated by category (materials, transport, machinery, line losses). Proposals will be scored on the declared carbon intensity (tCO₂e per kilometre of line constructed and per GWh transmitted annually), with independent verification required before works commence. The carbon budget committed in the tender submission shall become a binding contractual obligation."

What this achieves: the contractor who has invested in low-carbon steel sourcing, who knows the embodied carbon of their concrete suppliers, who has optimised construction logistics, who has designed towers with recycled-content materials, gains a direct competitive advantage. Innovation has economic value because it translates into evaluation score. And at the end of the process, the contracting authority holds a verifiable commitment, not a statement of intent.

Example 2 — Water and sanitation: urban supply concession

Input criterion: "The tenderer shall submit an Environmental Management Plan including water efficiency measures and aquifer protection measures, prepared by a qualified engineer."

What this achieves: This criterion generates documents. In some cases, good documents. But it commits nothing about how much water will actually be consumed, what percentage of network losses will be reduced, or what effluent quality will be maintained during the operational phase. The plan may be excellent on paper and mediocre in execution — and the tender has created no mechanism for distinguishing between the two.

Outcome criterion: "Proposals shall be evaluated against the following water efficiency metrics: (a) Non-Revenue Water (NRW) index committed at the end of year 3 of operation, expressed as a percentage of volume injected into the network — proposals committing to NRW below 15% shall be awarded 5 points; between 15% and 25%, 3 points; between 25% and 35%, 1 point; (b) Energy consumption per cubic metre produced and distributed, expressed in kWh/m³. Committed values shall be incorporated as contractual KPIs linked to the payment mechanism."

What this achieves: the contractor who has invested in AI-assisted leak detection, who knows how to pressurise the network efficiently, who has installed smart meters in other systems, can offer an NRW of 12% and win the contract because their proposal has quantifiable value. The contractor who has not made that investment cannot compete on that criterion, regardless of how technically accomplished their management plan may be.

Example 3 — Transport: road concession

Input criterion: "The tenderer shall demonstrate experience in managing biodiversity impacts on linear infrastructure projects, providing a minimum of two reference projects in the preceding ten years."

What this achieves: This verifies that the company knows how to do the work. It commits nothing about what they will do on this project, in this corridor, with these species and these habitats.

Outcome criterion: "Proposals shall include a Biodiversity Compensation Plan quantifying net impact on corridor habitats using the Biodiversity Net Gain (BNG) methodology or recognised equivalent. The plan shall demonstrate a net positive outcome of at least +10% above baseline, measured in habitat units. Scoring shall reflect the ambition of the commitment: +10% = 3 points; +20% = 4 points; +30% or more = 5 points. The committed outcome shall be verified annually during the first five years of operation by an independent ecologist."

What this achieves: the contractor who has designed wildlife crossings, restored riparian areas, reintroduced native species, and reconnected fragmented habitats has a direct competitive advantage. Biodiversity ceases to be a compliance cost and becomes a dimension of differentiation in which genuine innovation pays.

Box 5.6. The compliance minimalism trap

A consistent finding across OECD research on strategic procurement is that input-oriented criteria create what might be called compliance minimalism: bidders invest in demonstrating that they meet the minimum threshold, rather than in developing the capabilities that would allow them to exceed it. The result is a procurement market where the most sophisticated, best-resourced bidders focus their competitive energy on credential accumulation rather than on delivering better outcomes for the public.

The antidote is not to eliminate minimum requirements — pass/fail thresholds for fundamental capabilities remain essential — but to ensure that the scored evaluation criteria focus exclusively on outcomes: what will be achieved, by when, measured how, and with what consequences for non-delivery. A procurement process that awards points for having an environmental management system and points for committing to specific carbon reductions is providing a weaker incentive for performance than one that awards points only for the latter. The minimum system requirement belongs in the pre-qualification stage, not in the award criteria.

Requiring lifecycle costing as a standard evaluation methodology

The lifecycle cost of an infrastructure asset is the sum of all costs it generates from design through to demolition or renewal. It includes the construction cost — which is what procurement processes typically evaluate — but also the cost of operation, routine and major maintenance, periodic rehabilitation, end-of-life management, and the monetised cost of the environmental externalities the infrastructure generates throughout its operational life.

The fundamental problem with evaluating infrastructure on initial price is that it creates a well-documented perverse incentive: the contractor who wins by offering the lowest construction price is not necessarily the one who builds best — they are the one who is most skilled at minimising CAPEX, even if that means using lower-durability materials, reducing thermal insulation, simplifying the drainage system, or designing structures that will require early and costly rehabilitation.

The public authority pays less at contract signature and substantially more over the following twenty years.

This is not a hypothetical concern. Operating and maintenance costs over the life of an infrastructure asset routinely exceed its initial capital cost by a substantial multiple, so a saving secured at the award stage by selecting on lowest price is frequently outweighed by higher costs incurred across the asset's service life. Assets procured primarily on lowest price therefore tend to carry higher lifecycle costs than those procured using quality-weighted, lifecycle-based criteria.

Lifecycle costing (LCC) resolves this problem by making the full cost of the procurement decision visible at the point when the decision is made.

5.4.5. Integration with BDN certification process

The tender design phase is the appropriate moment for translating BDN criteria into tender criteria, thereby shaping, on the one hand, the process and the contracting authority's aspirations, and, on the other hand, the contractor performance with a view to developing quality infrastructure (i.e. procurer versus contractor-facing).

In addition, the tender documents should specify the responsibilities of the contractor with respect to either obtaining and/or maintaining the BDN certification. These could then be incorporated into the draft contract. Contractors should be requested to provide the necessary assurances in their bids.

5.4.6. Examples of model clauses.

The following model clauses illustrate how BDN alignment is expressed in tender language for three elements that appear consistently across infrastructure project types regardless of sector or contractual model: environmental sustainability and net-zero alignment (Element 4), value for money and lifecycle cost (Element 5), and anti-corruption and transparency (Element 7).

Model clauses are provided as reference. All clauses must be reviewed by legal advisors for compatibility with the applicable procurement regulatory framework.

Model Clause — Environmental Sustainability & Net-Zero Alignment (BDN Element 4)

Bidders shall submit a Carbon Management Plan covering the full project lifecycle (design, construction, operation, and decommissioning).

The Plan shall include:

(a) A carbon budget expressed in tCO₂e, covering both CAPEX-phase and OPEX-phase emissions, based on a lifecycle assessment methodology consistent with PAS 2080 plus the applicable LCA/whole-life carbon standard or national methodology, including lifecycle modules, boundaries and emission-factor rules.

(b) Demonstration of alignment with the net-zero emissions pathway required to limit global temperature rise to 1.5°C, with reference to the IEA Net Zero Scenario or equivalent recognised pathway;

(c) Specific emissions reduction measures, with quantified reduction targets at defined project milestones;

(d) Proposals for the use of nature-based solutions, renewable energy, or circular economy principles were technically and economically feasible.

The carbon budget submitted shall become a contractual commitment upon award. Carbon performance against the agreed budget shall be reported annually and verified by an independent third party.

Model Clause — Value for Money / Lifecycle Cost (BDN Element 5)

Bidders shall submit a Whole-Life Cost Analysis (WLCA) using the Lifecycle Cost Template provided in Appendix [X] to this tender document. The WLCA shall encompass the following cost categories:

(a) Capital expenditure (design, construction, commissioning);

(b) Operational expenditure over the full contract period (energy, maintenance, staffing, insurance, regulatory compliance);

(c) Major rehabilitation and refurbishment costs at defined intervals;

(d) End-of-life or decommissioning costs;

(e) The monetised cost of environmental externalities, including carbon emissions priced at [EUR X] per tCO₂e (consistent with [applicable national carbon pricing framework or shadow carbon price]).

The WLCA shall be based on a discount rate of [X]% and an asset lifecycle assumption of [X] years as specified in the Lifecycle Cost Template. Bids that do not complete the Template in full shall be excluded from evaluation.

Model Clause — Anti-Corruption & Transparency (BDN Element 7)

Bidders shall submit a Procurement Integrity Plan that includes, at minimum:

- (a) A beneficial ownership declaration identifying all persons or entities owning or controlling more than [5]% of the bidding entity or any consortium member;
- (b) An anti-corruption compliance programme covering the full project lifecycle, with designated responsibility at senior management level;
- (c) A supply chain transparency framework covering first-tier and second-tier subcontractors, including anti-corruption obligations in subcontract agreements;
- (d) A confidential whistleblower mechanism accessible to project workers and community members, independent of the contractor's commercial management structure;
- (e) Commitments to open-book accounting for the duration of the contract, with independent audit access rights as specified in the draft contract.

The Procurement Integrity Plan shall be reviewed and updated annually throughout the contract period. Material changes shall be notified to the contracting authority within 30 days of occurrence.

5.4.7. Preparations for Phase 4

Before advancing to bid evaluation, contracting authorities should confirm that the tender has been structured consistently with the quality ambition established in Phase 1.

Table 5.9. Tender design checklist — Phase 3

✓	Tender Design Checklist. Phase 3
☐	Award criteria designed as outcome requirements, not prescriptive technical inputs
☐	Weighting framework calibrated to project-specific BDN priorities and regulatory requirements
☐	Lifecycle cost template prepared and included in tender documentation
☐	Scoring matrices published for each scored criterion, specifying evidence required at each score level
☐	Model contract included in tender documentation with BDN-aligned clause framework
☐	Environmental and social minimum requirements aligned with BDN material mapping exercise
☐	Evaluation methodology reviewed by legal advisors for compatibility with applicable procurement law
Dependent on specific materiality mapping	
☐	Carbon budget requirements specified with shadow carbon price and recognised methodology
☐	Community grievance mechanism requirements included as mandatory deliverable

5.5. Phase 4: Bid evaluation: applying criteria consistently and defensibly

The evaluation phase translates the quality ambition of the tender design into a procurement decision. Its twin imperatives are consistency — all bids assessed against the same criteria, using the same methodology, by an appropriately constituted panel — and defensibility — a documented evaluation process that can withstand legal challenge and public scrutiny.

For BDN-aligned procurement, bid evaluation presents specific challenges: quality criteria are more complex to assess than price, require specialist expertise, and involve more judgment than algorithmic calculation. The governance of the evaluation process must be designed to manage these challenges while maintaining the integrity and transparency that BDN Element 7 requires.

5.5.1. Independent expert knowledge participation

Participation of experts in the evaluation for a BDN-aligned procurement is good practice for relevant quality dimensions. Expert composition, external or public servant from other disciplines, should reflect the nature and weighting of award criteria — e.g. if environmental sustainability accounts for 20% of the total score, environmental expertise should be proportionately represented.

Table 5.10 sets out the recommended expert knowledge for a BDN-aligned evaluation, mapping each specialist role to the quality dimensions and BDN elements they are responsible for assessing.

Table 5.10. Experts' participation: specialist roles and responsibilities

Panel member	Expertise required	Role in BDN evaluation
Lead evaluator / procurement officer	Procurement law; process governance; evaluation methodology	Manages process integrity; documents decisions; ensures consistency
Technical specialist	Engineering; infrastructure design; relevant sector expertise	Evaluates technical proposals; assesses feasibility of performance commitments
Environmental & climate specialist	Climate risk; carbon accounting; environmental impact assessment; biodiversity	Evaluates BDN Elements 4 and 8; assesses carbon budget credibility; reviews ESMP quality
Social & inclusion specialist	Community engagement; social impact assessment; labour rights; gender & inclusion	Evaluates BDN Elements 1, 6, 9, and 10; assesses stakeholder engagement, community benefit and inclusion plans
Financial specialist	Project finance; lifecycle costing; value for money assessment; debt sustainability	Evaluates BDN Elements 2, 3, and 5; assesses WLCAs and financial model robustness
Integrity & governance specialist	Anti-corruption; procurement integrity; beneficial ownership; ESG disclosure	Evaluates BDN Element 7; reviews Procurement Integrity Plans; assesses transparency commitments
Independent observer (optional but recommended)	Procurement oversight; governance	Observes evaluation process; certifies procedural compliance; provides credibility assurance

5.5.2. Scoring methodology

The methods for scoring the different criteria were described in Section 2.5.2. The choice of scoring methodology is among one of the key decisions a contracting authority makes when designing award criteria for sustainability. The methodology determines how much discretion evaluators exercise, how clearly bidders understand what they need to commit to in order to score competitively, and how legally defensible the evaluation process will be. The recommendation is that methodology selection should follow criterion maturity, i.e. the degree to which a specific sustainability dimension can be pre-specified as a measurable target and independently verified (Table 5.11).

Note on criterion type and methodology alignment: documentary scoring (certification-based) is most appropriately deployed at pre-qualification as a pass/fail eligibility gate rather than as a scored award criterion. Where it appears in the award stage mapping, it should be combined with a judgment-based criterion to ensure that certification evidence is linked to project-specific delivery intent rather than credential accumulation alone.

Table 5.11. Criterion type to scoring methodology mapping for BDN-aligned award criteria.

Criterion type	Illustrative BDN themes	Recommended methodology	Rationale	Maturity condition
Quantifiable environmental target	Carbon / GHG reduction Waste reduction targets Renewable energy use	Threshold / table-based	Creates clear competitive incentive; bidder knows precisely what commitment achieves each score band	Contracting authority must define credible, ambitious performance bands prior to tender issue
Quantifiable social target	Local employment rate Women in workforce Apprenticeships / training	Threshold / table-based	Measurable commitments enable post-award monitoring; scoring bands reward higher ambition	Local labour market baseline data needed to set realistic band thresholds
Plan quality — environmental	ESMP quality Biodiversity management plan Climate adaptation approach	Judgment-based	Complexity and context-specificity cannot be pre-specified as a target without losing ability to assess genuine quality	Evaluation committee must have environmental expertise; scoring indicators must be defined with sufficient specificity

Plan quality — social	Gender inclusion plan Indigenous peoples engagement Community H&S plan	Judgment-based	Social plans require qualitative assessment of approach credibility, community knowledge, and delivery realism	Scoring indicators should distinguish between generic policy statements and project-specific delivery mechanisms
Certification / accreditation	ISO 14001 / ISO 37001 Gender equality certification SA 8000 labour standards	Documentary — preferably at pre-qualification, not award	Rewards credential accumulation rather than project-specific performance ambition; stronger as a pass/fail gate than a scored criterion	If used at award stage, combine with plan quality criterion to ensure certification reflects delivery intent
Price transformed. Carbon as price-equivalent variable	Lifecycle carbon GHG deduction from bid sum Monetised carbon pricing	Formula-based	Fully deterministic; makes environmental performance a direct competitive variable equivalent to price; highest legal robustness	Requires verified carbon baseline, standardised calculation methodology, and independent verification protocol — significant pre-tender investment

5.5.3. Moderation and consistency assurance

Individual evaluators should score each bid independently before any panel discussion. Scores should then be moderated — that is, discussed by the panel, to resolve significant divergences and reach a consensus score — before being finalised. The moderation process should be documented, with the rationale for any changes from initial individual scores recorded.

The following procedural safeguards are recommended for BDN-aligned bid evaluation:

- Conflict of interest declarations from all panel members before evaluation begins, with recusal provisions for any material conflicts.
- Independent scoring by each panel member before moderation discussions.
- Documented rationale for all consensus scores, particularly where initial scores diverge by more than one point.
- Panel scoring summary reviewed by the lead evaluator and legal advisor before the evaluation report is finalised.
- Evaluation report retained as a permanent procurement record, available for disclosure in the event of legal challenge.

5.5.4. Clarification and best and final offer processes

Where permitted by the applicable procurement framework, clarification requests and Best and Final Offer (BAFO) processes can be used to refine proposals before the final evaluation decision. For BDN-aligned procurement, clarification requests should focus on genuine ambiguities in quality commitments — not on price — to maintain the primacy of quality in the evaluation.

BAFO processes, where used, should invite bidders to improve their proposals across all quality dimensions — not only on price. A BAFO process that focuses solely on price reduction will undermine the quality weighting established in the tender design.

5.5.5. Preparations for Phase 5

Before proceeding to contract award, contracting authorities should confirm that the evaluation has been conducted consistently, documented fully, and reviewed for legal defensibility. The checklist below consolidates the key governance requirements for Phase 4.

Table 5.12. Bid evaluation checklist — Phase 4

✓	Bid Evaluation Checklist — Phase 4
☐	Evaluation panel constituted with expertise across all major BDN quality dimensions
☐	Conflict of interest declarations obtained from all panel members
☐	Scoring matrices prepared for each scored criterion before evaluation begins
☐	Independent individual scoring conducted before moderation discussions
☐	All moderation decisions documented with rationale
☐	Lifecycle cost analyses reviewed by financial specialist for methodology consistency
☐	Carbon budget assessments reviewed by environmental specialist for credibility
☐	Procurement Integrity Plans reviewed against minimum BDN Element 7 requirements
☐	Evaluation report prepared, reviewed by legal advisor, and approved before award decision
☐	Debrief process designed to provide meaningful feedback to unsuccessful bidders

5.6. Phase 5: Contract management: closing the loop between commitments and outcomes.

The contract management phase is where procurement ambition becomes infrastructure reality — or does not. A fundamental risk in infrastructure procurement is the discontinuity between the quality commitments made during competitive evaluation and the obligations enforced during contract execution.

Quality criteria that drive bid design but are not translated into binding contractual obligations — with measurable indicators, monitoring mechanisms, and financial consequences for non-performance — will not reliably produce quality outcomes.

Effective contract management for BDN-aligned infrastructure projects requires three integrated systems: i) a contractual architecture that makes quality commitments legally binding; ii) a monitoring system that makes performance visible in real time; and iii) a consequence framework that makes non-performance financially consequential.

5.6.1. Contractual architecture: making commitments binding

The transition from tender to contract must preserve the quality commitments established through the procurement process. Every commitment that was scored and weighted in bid evaluation must become a binding contractual obligation — with clear specifications, measurable deliverables, and explicit consequences for non-delivery.

Table 5.12 provides the reference framework for this translation across all ten BDN elements, specifying mandatory requirements, performance targets, and reporting obligations at the level of granularity needed for contract drafting.

Table 5.13. Contractual architecture for BDN alignment: mandatory requirements, performance targets and reporting obligations by element

BDN element	Mandatory requirements	Performance targets	Reporting obligations
1. Sustainable & inclusive growth	Local employment minimum thresholds; community benefit plan as mandatory deliverable	% local workforce; number of beneficiaries; economic multiplier indicators	Annual community impact report; local procurement disclosure
2. Market-driven investment	Transparent public-private risk allocation (risk matrix); market capacity/sounding assessment; demonstrated stable funding/revenue	Private finance mobilised as % of total financing (public finance <50%); revenue coverage ratio from user fees; share of project risk transferred	Financing structure and leverage disclosure; risk allocation register; competition oversight evidence

BDN element	Mandatory requirements	Performance targets	Reporting obligations
	basis		
3. Public financial management	Debt transparency disclosure; fiscal risk reporting; anti-corruption compliance	Debt sustainability indicators; fiscal risk metrics	Quarterly financial reporting; independent audit
4. Climate resilience & net-zero	Climate risk stress-test at design stage; net-zero pathway alignment; adaptive design provisions	tCO ₂ e per service unit; climate stress-test compliance; renewable energy share	Annual carbon report; climate risk update at 5-year intervals
5. Value for money / lifecycle	Lifecycle cost methodology compliance; major rehabilitation plan; end-of-life provisions	Lifecycle cost per unit of service; cost overrun vs baseline; asset productivity	Annual lifecycle cost tracking report; asset condition assessment
6. Local capacity building	Skills transfer programme as mandatory deliverable; technology transfer obligations	% workforce trained; local skills certification rates; procurement % from local suppliers	Annual training and capacity report
7. Anti-corruption & transparency	Procurement integrity commitments; beneficial ownership disclosure; whistleblower mechanism	Audit compliance rate; disclosure completeness score	Quarterly integrity report; independent audit access
8. Environmental & social safeguards	ESMP as mandatory deliverable aligned with IFC PS; labour rights compliance; community grievance mechanism	Environmental compliance rate; incident response time; biodiversity net gain; waste reduction; water consumption	Monthly ESMP progress report; annual E&S audit
9. Non-discriminatory access	Universal access plan; affordability provisions; service standard for all user groups	% population served; affordability ratio; accessibility compliance rate	Annual access and affordability report
10. Inclusion of marginalised groups	Gender and inclusion plan as mandatory deliverable; disability accessibility standards	% women in workforce; inclusion indicator compliance	Annual inclusion report; third-party verification

The contractual architecture established in Table 5.13 defines what is required and what will be reported. The KPI framework translates those obligations into measurable, independently verifiable indicators — the operational layer that makes contractual commitments enforceable in practice.

5.6.2. KPI framework and monitoring system

Performance indicators are the operational core of BDN-aligned contract management. They translate quality commitments into measurable, verifiable outcomes — and they provide the evidence base that BDN certification requires. Indicators must be outcome-oriented (measuring what is achieved, not what activities have occurred), independently verifiable, and matched to the appropriate monitoring frequency for each dimension.

Table 5.14. Example KPI framework for BDN-aligned contract monitoring: indicators, units, frequency and verification

Dimension	KPI	Unit	Frequency	Verification
Environmental sustainability	Carbon emissions intensity	tCO ₂ e / service unit	Annual	Independent audit
	Recycled / reused materials	% of total materials	Annual	Contractor report + spot audit
	Water consumption efficiency	m ³ / service unit	Quarterly	Automated metering
	Biodiversity net gain	Score vs baseline	Annual	Independent ecological survey
Climate resilience	Service availability	% uptime	Monthly	Automated reporting
	Recovery time after disruption	Hours	Per event	Incident report
	Climate stress-test compliance	Pass / fail	At design review milestones	Independent engineering review
Economic efficiency	Lifecycle cost vs baseline	% variance	Annual	Open-book accounting review
	Asset productivity	€ / output unit	Annual	Financial audit
	Local workforce share	% of total FTE	Quarterly	Payroll audit

Social impact	Beneficiaries served	Number	Annual	Survey + administrative data
	Affordability ratio	Service cost / household income	Annual	Regulatory review
Transparency & governance	Disclosure completeness	% of required disclosures	Quarterly	Documentation review
	Grievances resolved on time	% within SLA	Monthly	Grievance register
Performance & service quality	Service availability	%	Monthly	Automated + user survey
	Reliability / failure rate	Events per period	Monthly	Technical reporting
	User satisfaction	Score (0–10)	Annual	Independent survey
Inclusion	Women in workforce	%	Annual	Payroll audit
	Accessibility compliance	% of infrastructure	Annual	Independent accessibility audit

5.6.3. *Payment mechanisms and incentive design*

The most powerful tool for aligning private sector behaviour with public quality objectives is the payment mechanism. The following payment architecture principles are recommended for BDN-aligned infrastructure contracts.

Availability-based payments

For long-duration service contracts (PPP, DBOM, concession), availability-based payment mechanisms create the strongest incentive alignment. The contractor receives full payment only when the infrastructure is available and performing to the specified service standard. Revenue loss during downtime falls on the operator — creating a direct financial incentive for resilience investment, preventive maintenance, and rapid recovery from disruption.

Availability thresholds should be specified separately for planned and unplanned downtime, with different payment deduction rates for each. Planned maintenance downtime within agreed windows should not trigger deductions; unplanned downtime should trigger proportionate deductions from the periodic payment.

Milestone payments linked to BDN deliverables

For the construction phase, payment milestones should be linked to both physical completion milestones and the delivery of mandatory BDN-aligned outputs: Environmental and Social Management Plan submissions, climate risk assessments, community consultation reports, workforce training programme commencement.

This ensures that quality management activities are not deferred or skipped under construction schedule pressure. A payment milestone withheld pending ESMP submission is a more effective incentive than a contractual obligation to submit without a financial consequence.

Bonus/malus mechanisms

Performance-based payment adjustments — bonuses for exceeding KPI targets and deductions for underperformance — create financial incentives for continuous improvement beyond minimum contractual requirements.

Bonus/malus mechanisms should be calibrated to be financially meaningful: large enough to influence contractor behaviour, but not so large as to create perverse incentives to game measurement systems. A range of 5–15% of the periodic payment is typical in well-designed performance contracts.

The mechanism must be symmetric: bonuses for outperformance should be at least as prominent as deductions for underperformance, to avoid a contractual climate of adversarial minimalism.

Retention linked to long-term environmental outcomes

For environmental performance dimensions where consequences only become apparent over long time horizons — particularly biodiversity outcomes and climate resilience — retention clauses can provide a sustained financial incentive beyond the construction period.

A percentage of the final contract payment — typically 2–5% — retained pending achievement of defined environmental outcomes at a specified point in the operational phase is an effective mechanism for this purpose.

Extended retention periods should be calibrated against contractors' cash-flow capacity, and accompanied by transparent, time-bound release conditions to ensure that retention does not become a source of financial distress rather than a performance incentive.

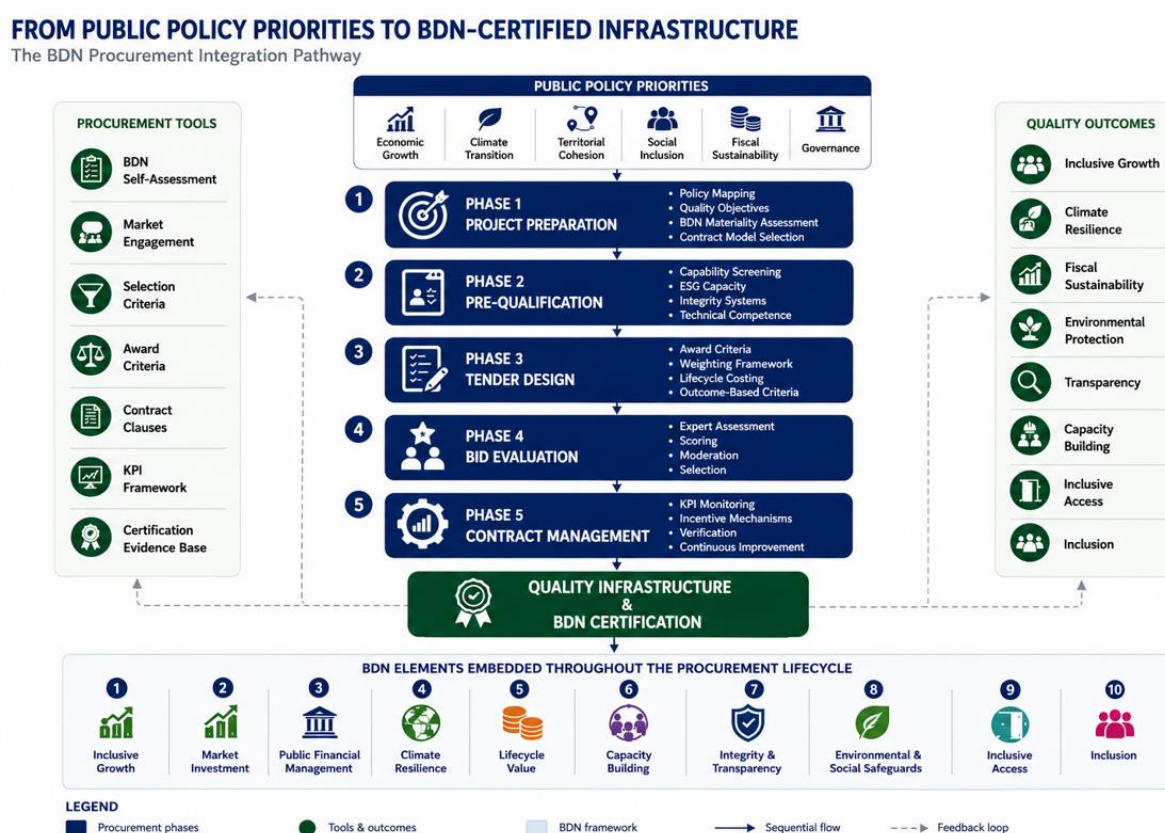
5.6.4. Integration with BDN certification process

The contract is the mechanism for translating BDN criteria into binding obligations that are enforceable. The contract can also serve to transfer responsibility for obtaining and/or maintaining the certification to a contractor.

The BDN annual monitoring process which is performed by an independent certification entity serves to monitor the contractor's implementation of BDN requirements. By timing this process to coincide with annual reporting required under the contract, the exercise could generate synergies and reduce the overall reporting burden.

Figure 5.1 provides an overview of the full process.

Figure 5.1. Overview of procurement phases and key tools for BDN integration



5.6.5. Preparations

Before the contract management system is declared operational, contracting authorities should confirm that all quality commitments have been translated into binding obligations and that the monitoring infrastructure is in place. The checklist below consolidates the key requirements for Phase 5.

Table 5.15. Contract management checklist — Phase 5

✓	Contract Management Checklist — Phase 5
☐	All bid evaluation commitments translated into binding contractual obligations with measurable targets
☐	KPI framework implemented with data collection systems operational before contract start
☐	Payment mechanism designed with availability thresholds, milestone conditions, and bonus/malus calibrated
☐	Contract management team trained on BDN elements and monitoring requirements
☐	Environmental and Social Management Plan submitted and approved before construction commences
☐	Community Grievance Mechanism operational before construction commences
☐	Open-book accounting system and independent audit access rights established
☐	Annual reporting format aligned with BDN self-assessment template and ESG disclosure frameworks
☐	Independent third-party verification engaged for environmental, social, and financial reporting
☐	Annual monitoring of implementation of BDN requirements
☐	
☐	Adaptive design review process scheduled at 5-year intervals throughout contract period

Part III: Results and recommendations

6. Enabling quality infrastructure outcomes

Parts I and II show how Blue Dot Network (BDN) criteria can be translated into procurement requirements, evaluation methods and contractual obligations. This illustrates how BDN quality criteria can be integrated in a public tender, so as to combine price, quality, sustainability and performance. The practical value of integrating BDN elements across the procurement cycle depends on the wider governance conditions in which procurement takes place.

Quality infrastructure is the product of connected decisions across the full infrastructure lifecycle. Strategic planning, project selection, appraisal, budgeting, permitting, procurement, regulation, delivery, operation and maintenance all influence whether an asset provides reliable services and lasting public value. Procurement is a critical link in this chain, but it cannot by itself correct an unaffordable, insufficiently prepared or poorly governed project.

The OECD Recommendation of the Council on the Governance of Infrastructure provides the overarching public governance framework for these conditions (OECD, 2020). It calls for infrastructure decisions to be grounded in a long-term strategic vision, fiscal sustainability, affordability and value for money, efficient and effective procurement, systematic stakeholder participation, coherent regulatory arrangements, integrity and evidence-informed decision making throughout the asset lifecycle. The BDN certification framework operates at a complementary, project-specific level: it helps translate relevant quality objectives into requirements, evidence and performance commitments that can be incorporated into project preparation, procurement, delivery and operation.

Within this broader governance framework, BDN can provide a common language for public authorities, investors, contractors, operators, regulators and affected communities. It can help make quality objectives explicit, link them to evidence and performance, and maintain continuity between project preparation, procurement, implementation and operation. Used in this way, certification can support public decision making and market confidence rather than operating as a separate compliance exercise.

The implementation approach should therefore be proportionate, context-sensitive and neutral between public and private delivery options. Public authorities retain responsibility for defining the public need, affordability, regulatory conditions and accountability arrangements. Private actors can contribute finance, technical expertise, innovation and delivery capacity where the project and contractual structure create workable incentives. The objective is to combine these contributions in a way that offers the strongest value for money for the project concerned.

In the following section, critical elements relating to how infrastructure governance support quality infrastructure are discussed in greater detail, showcasing the interdependencies between project-level quality assurance (offered by the BDN certification) and the broader implementation context.

6.1. From procurement criteria to infrastructure outcomes

The practices documented in this report demonstrate that quality and sustainability can be incorporated at different stages of procurement: as minimum requirements, qualification conditions, award criteria, contractual obligations and performance indicators. The appropriate combination depends on the materiality of the objective, the evidence available and the authority's ability to evaluate and manage the resulting commitment.

The central implementation task is to maintain a clear line of sight from public policy priorities to asset and service outcomes. Each material objective should be translated into a requirement that is sufficiently precise for the market to understand, for evaluators to assess consistently and for the contract manager to verify after award. Commitments that are rewarded during evaluation should normally be reflected in the contract, with an identified data source, responsible party and consequence for non-performance.

Proportionality is essential. A limited number of well-designed criteria tied to the project's principal outcomes will generally be more effective than a large set of weakly differentiated requirements. Authorities should consider the administrative cost imposed on bidders, the availability of credible baselines and the cost of verification. Requirements that cannot be assessed or enforced reliably may create reporting without improving infrastructure performance.

In integrating relevant BDN criteria into procurement and project delivery, contracting authorities should draw, as far as possible, on evidence already generated through project appraisal, environmental and social assessment, financing, regulatory approvals, procurement and asset management. Mapping the evidence needed to demonstrate alignment with relevant BDN criteria – and, where certification is pursued, to support the certification process – to existing information systems can reduce duplication and create a coherent record of project performance over time.

This approach is consistent with the OECD Recommendation of the Council on Public Procurement, which treats procurement as an integrated cycle extending from needs assessment and market engagement through competition, award, contract management, monitoring and evaluation (OECD, 2015^[30]). When incorporating relevant BDN criteria into this cycle, contracting authorities should preserve transparency, integrity, fair access and effective competition; use requirements and evidence that are proportionate to the contract and market; invest in the capacity needed to evaluate and manage qualitative commitments; and identify and manage risks throughout procurement and implementation. Where procurement is used to advance wider environmental, social or economic objectives, these objectives should be balanced with the primary procurement objective and their contribution to project outcomes should be measured.

For BDN-aligned procurement, the practical implication is that quality criteria should not be treated as stand-alone additions to tender documentation. They should form part of a coherent procurement strategy, be evaluated through methods that are transparent and defensible, be translated into contractual obligations where relevant, and be monitored through the same accountability and performance-management arrangements that govern the contract as a whole.

6.2. Project readiness across the infrastructure lifecycle

Quality procurement begins with project readiness. Before launching a tender, the contracting authority should establish that the project responds to a demonstrated need, is aligned with strategic and territorial priorities, has been compared with feasible alternatives and is affordable over its lifecycle. The scope, service requirements and expected benefits should be sufficiently clear to support an informed procurement strategy (OECD, 2020^[45]; Ruiz Rivadeneira, 2023^[46]).

Decision gates can help preserve this discipline. At key stages, the project owner should test the strategic case, costs and benefits, affordability, fiscal exposure, design maturity, delivery schedule, principal risks and

readiness to proceed. Independent review or assurance may be justified for major or novel projects. These checks should be proportionate to project scale and complexity and should support timely decisions rather than add procedural delay.

Adequate preparation also requires realistic budgets and timetables. Technical studies, site investigations, demand and revenue analysis, environmental and social assessment, land arrangements, utility interfaces and market testing should be completed to the level needed for the chosen allocation of responsibility. Unrealistic deadlines can undermine quality as directly as unrealistic cost targets by reducing design development, limiting competition and transferring unresolved uncertainty into claims and contract changes.

Permitting and approvals are a core part of project readiness. Infrastructure projects often depend on decisions by several authorities and levels of government. The project owner should identify the required approvals early, map their sequence and interdependencies, clarify information requirements and incorporate the permitting critical path into the delivery schedule. Predictable processes support investment and competition; unresolved or opaque processes increase financing costs and weaken the credibility of the tender (OECD, 2023^[47]; OECD, 2025^[48]).

Co-ordination mechanisms can improve the operation of permitting systems without weakening environmental, safety or participation safeguards. Depending on the jurisdiction, these may include a designated lead authority, a single point of information, interoperable digital systems, parallel processing where legally possible, published service standards and escalation arrangements for inter-agency issues. One-stop arrangements can simplify the user interface, but they should be supported by clear roles, lawful decision-making powers and adequate administrative capacity (OECD, 2020^[49]; OECD, 2025^[48]).

The allocation of permitting responsibilities should reflect control. A contractor may reasonably be responsible for preparing applications and securing approvals linked to its detailed design or methods. Risks arising from sovereign decisions, land acquisition, changes in policy or approvals controlled by public bodies should not be transferred mechanically to the contractor. Where procurement begins before all approvals are secured, the tender should state the assumptions, dependencies, relief events and change mechanisms clearly.

Project readiness should include the operational phase. Maintenance needs, asset information, staffing, renewal cycles, climate exposure and end-of-life requirements should inform the design and affordability assessment from the outset. A project that is affordable to build but not to operate, maintain or adapt cannot provide sustained value for money (González, 2026^[50]).

6.3. Value for money and procurement strategy

Value for money is the organising principle for choosing how infrastructure should be delivered. It concerns the best combination of costs, quality, timing, risk, service performance and wider economic, environmental and social outcomes over the relevant lifecycle, subject to affordability and fiscal sustainability. It is not synonymous with the lowest initial price, the use of private finance, lifecycle costing alone or the transfer of the greatest possible volume of risk (OECD, 2020^[45]; OECD, 2021^[21]; OECD, 2026, forthcoming^[51]).

BDN criteria can strengthen value-for-money analysis by making dimensions such as resilience, environmental performance, inclusion, transparency and long-term service quality visible in decision making. Their contribution should be assessed alongside capital and operating costs, delivery risk, financing implications and the authority's ability to enforce the proposed commitments. Quality objectives create value when they are material to the project and supported by credible implementation arrangements.

The value-for-money case should be revisited as the project develops. Material changes in scope, cost, schedule, demand, regulation, financing conditions or risk allocation may alter the relative merits of the selected approach. Reassessment at defined decision gates helps ensure that an option chosen during early preparation remains justified before contract award and following major changes during implementation.

The procurement strategy provides the bridge between project preparation and the formal procurement process. It should determine how the project is divided into work packages, which activities should be performed internally or outsourced, which packages should be combined, how interfaces will be managed, what contractual relationships and payment mechanisms are appropriate, how competition will be preserved and what capability the public buyer must retain.

The OECD Support Tool for Effective Procurement Strategies (STEPS) offers a structured method for developing these choices for bespoke assets and projects. It builds an evidence base on the project, work packages, uncertainty, asset specificity, market capabilities and buyer capacity, before comparing packaging, make-or-buy and delivery-model options. The method makes trade-offs explicit and supports a procurement strategy tailored to the characteristics of the project rather than to a preferred model (OECD, 2021^[21]; OECD, 2025^[22]).

Different delivery models can support quality infrastructure under the right conditions. Traditional design and construction arrangements may offer strong value where the design is mature and the authority can manage interfaces. Integrated design-build or engineering, procurement and construction contracts may improve co-ordination and schedule certainty. Long-term performance contracts, concessions and public-private partnerships can create lifecycle incentives where outputs are measurable and fiscal, revenue and regulatory arrangements are credible. Collaborative models can support joint problem-solving where uncertainty is high. Each option also carries different transaction, financing, governance and contract-management costs.

Private finance should be considered where it provides value for money and remains compatible with affordability, fiscal transparency and the project's risk profile. Comparisons with public delivery should be based on total expected costs and risks, rather than headline borrowing rates alone. Lower public financing costs do not imply risk-free public delivery, just as higher private financing costs do not by themselves indicate inefficiency. The key question is whether the efficiency, incentive, innovation and delivery benefits of private participation outweigh the cost of transferring and pricing risk. This assessment should capture the full cost to users or taxpayers, including any risk premiums embedded in construction prices, contingencies, reduced competition, exclusions, claims and subsequent renegotiations. The same approach should apply to publicly financed delivery where lower financing costs should not be treated as compensation for weak project preparation, ineffective incentives or poor contract management.

Where a public-private partnership or concession is being considered, the OECD Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships provides additional safeguards (OECD, 2012^[52]). It calls for a clear, predictable and legitimate institutional framework supported by competent and adequately resourced authorities; selection of the PPP model on the basis of value for money; and transparent treatment of long-term commitments and fiscal risks through the budget process. Responsibilities among the contracting authority, central budget authority, PPP unit, sector regulator, audit institutions and other relevant bodies should be clear, with effective accountability throughout project preparation, procurement and contract implementation.

BDN criteria can strengthen the comparison of delivery options by making lifecycle service quality, resilience, environmental and social performance, transparency and institutional capacity more visible. They do not, however, determine which delivery model should be selected. A PPP may support BDN objectives where outputs can be specified and monitored, risks can be allocated effectively, fiscal commitments are affordable and transparent, and the public authority can manage a complex long-term relationship. Where these conditions are not present, another delivery approach may provide stronger value for money. Integration of relevant BDN criteria should therefore follow, rather than predetermine, the evidence-based choice of delivery model.

Box 6.1. Questions for value-for-money and procurement strategy

- What service outcomes and public-policy objectives must the project deliver?
- How mature are the scope and design, and which uncertainties remain?
- Which work packages and interfaces should be combined or separated?
- What capabilities exist in the supply market, and what package size will sustain effective competition?
- Which functions should the public authority retain to remain an informed and accountable owner?
- Which risks can each party control, mitigate and absorb, and how will retained risks be funded?
- Do the expected benefits of the proposed model exceed its procurement, financing, governance and monitoring costs?
- How will performance, change and long-term asset condition be measured and governed?

Source: (OECD, 2020^[45]; OECD, 2021^[21]; OECD, 2026, forthcoming^[51])

6.4. Mature public infrastructure buyers

For the purposes of these guidelines, a public infrastructure procuring organisation is a public authority or publicly controlled entity responsible for commissioning or procuring an infrastructure asset or associated service. This includes infrastructure delivered through conventional public procurement, public-private partnerships and concessions. It does not encompass infrastructure that is privately initiated and procured without a public contracting or granting authority. In such cases, the relevant public-sector capabilities may lie principally with regulatory, planning, licensing or competition authorities and fall outside the scope of this section.

Public infrastructure procurement forms part of a wider infrastructure-governance system. Responsibilities for planning, appraisal, financing, budgeting, procurement, regulation, delivery and asset management may be distributed across several organisations rather than concentrated in a single “buyer”. Accordingly, capability should be considered both within the procuring organisation and across the institutional arrangements through which the project is governed. Relevant institutions should have clear and consistent mandates, adequate decision-making powers, appropriate skills and competences, sufficient resources and effective mechanisms for co-ordination (OECD, 2020; (Ruiz Rivadeneira, 2023^[53]))

The effectiveness of sophisticated procurement approaches depends on the capability of the procuring organisation and the wider project-governance arrangements. For the purposes of these guidelines, capability refers to the organisational ability to define intended outcomes, prepare and appraise projects, understand supplier and financing markets, assess alternative delivery models, develop an appropriate procurement strategy, manage advisers and suppliers, make timely and evidence-based decisions, and safeguard public value throughout the infrastructure lifecycle. This reflects the OECD Recommendation on the Governance of Infrastructure, which links effective infrastructure procurement to delivery-model assessment, risk allocation, market understanding, workforce capability and lifecycle management (OECD, 2020).

The capabilities required should be proportionate to the characteristics and complexity of the project and the proposed delivery model. Delivery through a PPP, concession or collaborative contracting arrangement does not remove the need for capable public-sector involvement. Rather, it changes the capabilities required, including the ability to structure and allocate risks, assess financing and commercial arrangements, manage interfaces, monitor performance and manage the contract over the long term. Conversely, the procuring

organisation's existing and realistically attainable capabilities should inform the choice of delivery and contracting model. The OECD's Support Tool for Effective Procurement Strategies places assessment of the procuring organisation's capabilities at the beginning of procurement-strategy development, before decisions on packaging and contract form are made (OECD, 2021^[21]; OECD, 2025^[48]).

This capability extends beyond the procurement function. Major infrastructure projects require technical, economic, financial, commercial, legal, environmental, social, regulatory, data and project-management expertise. These functions may sit within the procuring organisation or be distributed across government. The procuring organisation should nevertheless retain sufficient internal knowledge and authority to integrate the relevant perspectives, challenge external advice, understand trade-offs and remain an effective counterparty throughout contract execution. This is consistent with the OECD's whole-of-government approach to infrastructure governance and its recognition that multiple institutions may hold complementary or overlapping responsibilities across the infrastructure lifecycle (OECD, 2020;) (Ruiz Rivadeneira, 2023^[53]).

External advisers can supplement specialist expertise and provide independent challenge, but they do not replace an accountable public authority. The procuring organisation should establish clear ownership, decision rights, assurance arrangements and escalation routes, and identify the information, knowledge and capabilities that must be retained within the public sector. Continuity is also important: frequent turnover and fragmented responsibilities can weaken institutional memory, impede accountability and create excessive dependence on contractors or advisers.

Capable procuring organisations manage individual projects as part of a wider programme or portfolio where appropriate. Common methods, comparable cost and performance data, consistent data definitions, communities of practice and ex post reviews allow evidence and lessons from one procurement to inform subsequent decisions. A credible project pipeline can also give public authorities and suppliers greater scope to invest in skills, technology and delivery capacity. The OECD Recommendation similarly calls for infrastructure planning linked to budgets and financing, systematic use of infrastructure data, monitoring of asset performance and incorporation of ex post evaluation into subsequent decision making (OECD, 2020).

The complexity of BDN integration should therefore be matched to the capabilities of the procuring organisation and the wider governance arrangements. Organisations with limited data or specialist capacity may begin with clear minimum standards, standard clauses, transparent pass/fail requirements and a small set of verifiable outcomes. More advanced approaches, such as benchmarked lifecycle models, carbon budgets, adaptive incentives or collaborative delivery, require stronger baselines, commercial and technical capability, cost assurance, performance data and long-term contract-management capacity. This graduated approach should not be understood as accepting permanently lower ambition; identified capability gaps should inform project support, capability-building and, where appropriate, the design of the procurement and delivery model.

Oversight and assurance should support sound judgement as well as legal and procedural compliance. Clear requirements concerning evidence, proportionality, evaluation records, conflicts of interest, risk allocation and contract changes can give decision makers greater confidence in using qualitative and outcome-based approaches. For high-value, complex or innovative projects, early engagement with budget, legal, audit and assurance functions can identify concerns before the procurement strategy and specifications are fixed, while preserving the respective responsibilities and independence of those functions.

This capability extends beyond the procurement function. Major projects require technical, financial, commercial, legal, environmental, social, regulatory, data and project-management expertise. The public buyer must be able to integrate these perspectives and retain sufficient knowledge to challenge advice, understand trade-offs and remain an effective counterparty after contract award.

Table 6.1. Dimensions of public infrastructure buyer maturity

Dimension	What capability enables
Institutional roles and co-ordination	Identify the public bodies responsible for planning, appraisal, budgeting, procurement, regulation, delivery and asset management; establish clear mandates, ownership, interfaces and escalation routes.
Strategic and portfolio capability	Connect projects to long-term plans, policy objectives and budgets; prioritise investments; maintain a credible pipeline; apply evidence and lessons across projects.
Project preparation and appraisal capability	Define intended outcomes; commission and challenge technical, economic, financial, environmental and social analysis; establish realistic scope, cost, schedule, risks and readiness.
Delivery-model and commercial capability	Assess delivery and financing options without bias; understand supplier and financing markets; determine packaging and contract form; allocate risks and design incentives.
Procurement capability	Undertake transparent market engagement; develop specifications and award criteria; protect competition; conduct robust evaluation and retain an auditable rationale for decisions.
Decision, oversight and assurance capability	Establish decision rights, assurance arrangements and escalation routes; manage conflicts of interest; support proportionate, evidence-based decisions and changes.
Delivery and contract-management capability	Manage interfaces, supplier relationships, performance, risks, claims, changes and information throughout contract execution and, where relevant, operation.
Data, asset-management and learning capability	Use comparable cost, schedule, risk and performance data; monitor outcomes and asset performance; conduct ex post reviews; retain institutional knowledge.

Source: OECD (2020).

6.5. Predictable permitting and regulatory governance

Infrastructure delivery depends on a regulatory framework that is coherent, predictable and capable of adapting to changing circumstances. Permitting authorities and economic regulators influence entry, investment, tariffs, access, service quality, environmental protection and the distribution of risks between users, taxpayers and providers. Their decisions therefore form part of the project's delivery and value-for-money environment, not a separate administrative layer (OECD, 2017^[54]; OECD, 2023^[47])

Good regulatory governance starts with role clarity. The mandates of ministries, contracting authorities, asset owners, permitting bodies and economic regulators should be clear and mutually consistent. Where the state is simultaneously policy maker, owner, purchaser and regulator, governance arrangements should manage conflicts of interest and preserve the objectivity of regulatory decisions.

Economic regulators require sufficient independence, capability, information and resources to apply their mandates consistently. Independence should be accompanied by accountability, transparent procedures, reasoned decisions, consultation and appropriate review. Co-ordination with government is necessary, but should not undermine regulatory integrity or create uncertainty about who is responsible for particular outcomes (OECD, 2014^[55]; OECD, 2016^[56])

The regulatory regime, procurement strategy and contract should be designed as a coherent system. Tariff rules, service standards, access obligations, subsidy arrangements, investment requirements and performance incentives can materially affect project revenues and obligations. Misalignment between regulatory decisions and contractual commitments may undermine bankability, create disputes or shift costs unexpectedly to users or the public budget.

Predictability does not require regulatory rigidity. Long-lived infrastructure must operate under changing technology, climate, demand and policy conditions. The legal and contractual framework should distinguish between risks that can be priced at award and changes that require review, adjustment or compensation. Transparent processes for regulatory change can preserve adaptability while giving investors and operators a credible basis for decision making.

Permitting reform should pursue timely and predictable decisions while maintaining the substantive protections for which approvals exist. Risk-based requirements, better sequencing, co-ordinated information requests, early stakeholder engagement and clear appeal mechanisms can reduce avoidable delay without lowering environmental, social, safety or community standards (OECD, 2025^[48]).

6.6. Balanced risk allocation and viable markets

Risk allocation is a central element of procurement strategy and value for money. Risks should be allocated to the party best able to assess, control, mitigate and bear them at least cost. This does not imply maximising risk transfer to the private sector. Risks that cannot be priced efficiently or managed effectively by the receiving party are likely to result in higher prices, contractual exclusions, reduced competition, claims, delays or financial distress.

A project risk register should identify the source, probability, impact, owner, mitigation measures, contractual treatment and financial provision for each material risk. It should cover not only construction risks but also design maturity, interfaces, land and utilities, permitting, demand, revenue, inflation, exchange rates, supply chains, climate and natural hazards, technology, change in law, political decisions, force majeure and long-term asset condition. The register should be updated as the project and market evidence develop (OECD, 2023^[57]).

Public authorities should pay particular attention to risks that arise from their own actions or from fragmented government responsibilities. Delayed land access, inconsistent approvals, changes to scope, late decisions and unpredictable payment can be costly for suppliers to price and impossible for them to control. Clear public-sector obligations, timely governance and budget provision for retained risks can improve competition and reduce the risk premium embedded in bids.

Cost escalation and supply-chain disruption require explicit treatment. Project estimates and affordability assessments should reflect current market conditions, uncertainty and the availability of key materials, equipment and skills. Price-adjustment mechanisms may be appropriate for long-duration or volatile inputs, provided that the index, thresholds, sharing arrangements and exclusions are transparent. A balanced mechanism can preserve competition and delivery capacity while retaining incentives for efficient purchasing and risk management.

Market capacity should influence the ambition and design of the procurement. Large packages, extensive qualification requirements and costly bid submissions can narrow competition, particularly for smaller and local firms. Authorities should test package size and scope, evidence requirements, liability terms and bid costs against the actual supplier market. Collaborative features may be incorporated into different delivery and contracting arrangements where closer integration between the authority, designers, contractors and suppliers is expected to improve BDN outcomes. Their suitability should be assessed as part of the procurement strategy, taking account of project complexity, uncertainty, interfaces, market capability and the authority's capacity to manage the arrangement. Where used, they should be supported by clear roles and decision rights, transparent performance and cost information, appropriate commercial incentives, independent assurance and effective integrity controls. Collaboration should complement, rather than weaken, competition, accountability and appropriate risk allocation.

Market engagement helps authorities understand capability, innovation, commercial constraints and likely pricing. It should begin early enough to influence the procurement strategy and should be conducted transparently and in accordance with the applicable legal framework. Open requests for information, industry briefings, published questionnaires and consultation on draft requirements can promote broad access to tender opportunities. Bilateral engagement, where permitted, should be documented and material information should be made available to all potential bidders.

Collaborative delivery models can be useful where uncertainty is high, and joint problem-solving has clear value. Their success depends on a capable public owner, reliable cost information, transparent target-setting, independent cost assurance, clear decision rights and strong integrity controls. These conditions allow collaboration to complement, rather than displace, competition and accountability.

6.7. Contract implementation, asset performance and learning

Contract award is the beginning of delivery, not the end of procurement. The contracting authority should establish a contract-management plan, named responsibilities, delegated authority, reporting arrangements, access to specialist advice and continuity of key personnel before implementation begins. The resources devoted to contract management should reflect the value, risk and duration of the contract.

Performance frameworks should concentrate on a limited set of outcomes that are material, measurable and useful for decisions. These may include availability, reliability, safety, affordability, user experience, asset condition, carbon performance, resource efficiency, resilience, local economic outcomes and grievance resolution. Each indicator should have a baseline, data source, frequency, verification method, responsibility and response to underperformance (OECD, 2023^[18]).

Payment mechanisms, bonuses, deductions, retention and other incentives can reinforce performance where the contractor can influence the outcome. They should be calibrated to the project and tested for unintended effects. Not every obligation requires a financial incentive: corrective plans, independent review, step-in rights, disclosure, warranty remedies or termination may be more appropriate for some risks.

Contract change is unavoidable in many long-lived and complex projects. Change-control arrangements should distinguish legitimate adaptation from avoidable scope drift. Material changes should be supported by evidence on cost, schedule, risk and value for money; approved at the appropriate level; recorded in an auditable form; and disclosed where required. Early-warning, issue-resolution and dispute-avoidance mechanisms can reduce escalation while preserving formal accountability.

Whole-life carbon and resilience should be managed as performance and value considerations where they are material. Carbon budgets can link design, construction, operation, maintenance and end-of-life emissions using a consistent methodology. Resilience requirements can address identified hazards, redundancy, recoverability, access to critical inputs and recovery times. Their value lies in protecting service continuity, reducing disruption and avoiding future reconstruction and adaptation costs (OECD, 2024^[15]).

Maintenance and renewal should be planned, funded and monitored from the outset. Contracts and asset-management plans should define information requirements, preventive and corrective maintenance, condition assessment, renewal responsibilities, handback standards and the treatment of deferred maintenance. This discipline is required under public operation as well as under long-term private contracts (González, 2026^[50]).

Digital systems can improve traceability where they serve defined governance needs. Common data environments, cost and schedule systems, asset registers, performance dashboards and certification evidence registers can support a continuous record from preparation to operation. Data requirements should be interoperable and proportionate, with clear ownership, access, quality assurance and cybersecurity arrangements.

BDN monitoring should be aligned, where possible, with contractual reporting, regulatory information, environmental and social monitoring, financing covenants and public asset-management systems. Independent assurance can strengthen confidence in the evidence, but certification does not replace the public owner's responsibility to manage the contract, evaluate performance and respond to emerging risks.

Ex post evaluation closes the lifecycle. Authorities should assess whether the project delivered the expected service, cost, schedule, quality and wider outcomes, and whether the selected procurement and risk allocation

performed as intended. Findings should inform future project appraisal, cost benchmarks, procurement strategies, standard contracts and buyer capability development.

6.8. Recommendations for implementation

The recommendations below apply three complementary levels of OECD guidance to the specific context addressed by these guidelines. The Recommendation on the Governance of Infrastructure provides the whole-of-lifecycle governance framework; the Recommendation on Public Procurement establishes the principles governing the procurement system and procurement cycle; and the Recommendation on Principles for Public Governance of Public-Private Partnerships provides additional safeguards where PPPs or concessions are considered. BDN contributes project-level criteria and an evidence framework for demonstrating quality. Integrating these elements can help contracting authorities pursue BDN alignment and, where appropriate, certification through established planning, fiscal, procurement, regulatory and contract-management systems rather than through a parallel process.

The analysis in this report supports the following recommendations for contracting authorities, infrastructure owners, policy makers, regulators, development partners and BDN stakeholders.

- **1. Integrate relevant BDN criteria across the infrastructure lifecycle.** Use relevant BDN criteria to connect strategic planning, project appraisal, procurement, regulation, delivery and asset management, consistent with the OECD Recommendation on the Governance of Infrastructure. Build on evidence already required at each stage rather than creating a parallel compliance process.
- **2. Establish project readiness before procurement.** Confirm the strategic case, affordability, design maturity, land and utility arrangements, environmental and social preparation, permitting pathway, operational needs and realistic schedule before fixing the procurement approach.
- **3. Apply a project-specific value-for-money test.** Assess lifecycle costs, quality, timing, fiscal effects, risks and wider public outcomes. Revisit the assessment at key decision gates and following material changes.
- **4. Develop an evidence-based procurement strategy.** In line with the OECD Recommendation on Public Procurement, use STEPS or an equivalent structured approach to determine packaging, make-or-buy choices, market engagement, delivery models, contractual relationships, payment mechanisms and measures to preserve effective competition.
- **5. Ground the choice of PPPs and other delivery models in value for money.** Apply a neutral comparison of feasible delivery options. Where a PPP or concession is considered, ensure that institutional responsibilities, risk allocation, affordability, fiscal commitments, procurement integrity and long-term contract-management requirements are addressed in accordance with the OECD Recommendation on Principles for Public Governance of Public-Private Partnerships.
- **6. Invest in mature public infrastructure buyers.** Build multidisciplinary capability in preparation, commercial strategy, market analysis, decision governance, contract management, asset management and data. Retain an informed public owner even where external advisers are used.
- **7. Strengthen permitting and regulatory governance.** Provide clear mandates, predictable procedures, capable and accountable regulators, co-ordinated approvals and transparent mechanisms for consultation, review and adaptation, without weakening substantive safeguards.
- **8. Protect viable competition and market capacity.** Test requirements, package sizes, risk terms and bid costs against market evidence. Use proportionate qualification and evidence requirements and conduct transparent, law-compliant market engagement.

- **9. Manage contracts for long-term outcomes.** Translate evaluated commitments into enforceable obligations, focus monitoring on material outcomes, govern changes and claims, and plan for carbon, resilience, maintenance, renewal and asset handback.
- **10. Use performance evidence to improve future delivery.** Align BDN monitoring with existing reporting systems, evaluate implementation costs and project outcomes, and feed lessons into future appraisal, procurement strategies, standard methods and public buyer development.

Applied in this way, BDN framework can reinforce the governance conditions that allow quality infrastructure principles to be delivered in practice. Its contribution is strongest when public authorities and private partners operate within a credible project framework: objectives are clear, approvals and regulation are predictable, procurement choices are evidence-based, risks are workable, and performance remains accountable throughout the life of the asset.

References

- ADB (2026), *Value for Money in Procurement Financed by Multilateral Development Banks: An Assessment Framework*, <https://www.adb.org/sites/default/files/publication/1137316/value-money-procurement-mdbs.pdf>. [24]
- Aschauer, D. (1989), "Is Public Expenditure Productive?", *Journal of Monetary Economics*, [https://doi.org/10.1016/0304-3932\(89\)90047-0](https://doi.org/10.1016/0304-3932(89)90047-0). [1]
- BDN ECG (forthcoming), *State of the Art Report*. [23]
- Bulus, D. (2025), "Impact of Public Procurement on the Transparency of Third World Countries", https://www.researchgate.net/publication/398646578_IMPACT_OF_PUBLIC_PROCUREMENT_ON_THE_TRANSPARENCY_OF_THIRD_WORLD_COUNTRIES. [29]
- European Commission (2025), "Making Public Procurement Work for Green, Digital, and Social Goals", https://green-forum.ec.europa.eu/news/making-public-procurement-work-green-digital-and-social-goals-2025-12-17_en. [38]
- G20 Japan Presidency (2019), *G20 Principles for Quality Infrastructure Investment*, <http://www.mof.gov.cn/en/Cooperation/mulid/202011/P020201104580715919242.pdf>. [10]
- Gelderman, S. (2024), "Sustainability requirements in public tenders - an embedded case study at the Dutch Department of Public Works", <https://doi.org/10.1590/1806-9649-2024v31e6424>. [44]
- GI Club (2019), *Global Infrastructure Outlook*, <https://cdn.gihub.org/outlook/live/methodology/Global+Infrastructure+Outlook+-+July+2017.pdf>. [13]
- GI Hub (2020), *Fiscal Multiplier Effect of Infrastructure Investment*, <https://www.gihub.org/infrastructure-monitor/insights/fiscal-multiplier-effect-of-infrastructure-investment/>. [6]
- González, S. (2026), *Management of assets throughout their life cycle: Evidence from the Infrastructure Governance Indicators*, <https://doi.org/10.1787/86ce92d8-en>. [50]
- IFC (2012), *Performance Standards on Environmental and Social Sustainability*, <https://www.ifc.org/en/insights-reports/2012/ifc-performance-standards>. [17]
- IISD (2015), "Why Infrastructure is Key to the Success of the SDGs", <https://www.iisd.org/articles/insight/why-infrastructure-key-success-sdgs>. [9]
- IMF (2025), *IMF Annual Report 2025, Getting to Growth in an Age of Uncertainty*, <https://www.imf.org/external/pubs/ft/ar/2025/>. [12]
- Losos, Fetter (2022), *Building a Common Approach: Global Infrastructure Standards*, [25]

<https://nicholasinstitute.duke.edu/publications/building-common-approach-global-infrastructure-standards>.

- McKinsey (2025), *The infrastructure moment*, <https://www.mckinsey.com/industries/infrastructure/our-insights/the-infrastructure-moment>. [5]
- MLIT (2018), *Infrastructure Maintenance Information*. [16]
- Monteiro, B. (2024), *Public procurement for public sector innovation: Facilitating innovators' access to innovation procurement*, <https://doi.org/10.1787/9aad76b7-en>. [20]
- OECD (2026), *Anti-Corruption and Integrity Outlook 2026: Harnessing the Integrity Advantage*, <https://doi.org/10.1787/16708b78-en>. [28]
- OECD (2026), *Public procurement in Costa Rica: Manual to strengthen market engagement and advance technological neutrality and competition*, <https://doi.org/10.1787/d94a03ac-en>. [32]
- OECD (2025), *Best practice principles for licensing and permitting: How to manage risks while supporting growth*, <https://doi.org/10.1787/5f63586d-en>. [48]
- OECD (2025), *Implementing the OECD Recommendation on Public Procurement in OECD and Partner Countries: 2020-2024 Report*, <https://doi.org/10.1787/02a46a58-en>. [39]
- OECD (2025), *Infrastructure Anti-Corruption Toolbox: Handbook*, <https://www.oecd.org/content/dam/oecd/en/networks/galvanizing-the-private-sector/Infrastructure-Anti-Corruption-Toolbox-Handbook.pdf>. [26]
- OECD (2025), *Support Tool for Effective Procurement Strategies (STEPS)*, <https://www.oecd.org/en/about/projects/support-tool-for-effective-procurement-strategies-steps.html>. [41]
- OECD (2025), *The Procurement Strategy for the German Federal Criminal Police Campus: Applying the STEPS Methodology to Infrastructure*, <https://doi.org/10.1787/cd9b9a4e-en>. [22]
- OECD (2024), *Good Practices for Procuring Computers and Laptops in Latin America: Fostering Neutrality and Market Engagement*, <https://doi.org/10.1787/cdf11f4d-en>. [33]
- OECD (2024), *Harnessing Public Procurement for the Green Transition: Good Practices in OECD Countries*, <https://doi.org/10.1787/e551f448-en>. [19]
- OECD (2024), *Infrastructure for a Climate-Resilient Future*, <https://doi.org/10.1787/a74a45b0-en>. [15]
- OECD (2023), *Government at a Glance 2023*, <https://doi.org/10.1787/3d5c5d31-en>. [47]
- OECD (2023), *Managing risks in the public procurement of goods, services and infrastructure*, <https://doi.org/10.1787/45667d2f-en>. [57]
- OECD (2023), *Public procurement performance: A framework for measuring efficiency, compliance and strategic goals*, <https://doi.org/10.1787/0dde73f4-en>. [18]
- OECD (2023), *Strategic public procurement*, <https://www.oecd.org/en/topics/strategic-public-procurement.html>. [35]
- OECD (2023), *Toolkit for Mainstreaming and Implementing Gender Equality 2023*, <https://doi.org/10.1787/3ddef555-en>. [40]

- OECD (2022), *Life-Cycle Costing in Public Procurement in Hungary: Stocktaking of Good Practices*, [31]
<https://doi.org/10.1787/8d90f627-en>.
- OECD (2021), *OECD Implementation Handbook for Quality Infrastructure Investment*, [14]
<https://doi.org/10.1787/479131b2-en>.
- OECD (2021), *Procurement strategy in major infrastructure projects: Piloting a new approach in Norway*, [21]
<https://doi.org/10.1787/38996343-en>.
- OECD (2020), *Integrating Responsible Business Conduct in Public Procurement*, [43]
<https://doi.org/10.1787/02682b01-en>.
- OECD (2020), *One-Stop Shops for Citizens and Business*, [49]
<https://doi.org/10.1787/b0b0924e-en>.
- OECD (2020), *Recommendation of the Council on the Governance of Infrastructure*, [45]
<https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0460>.
- OECD (2019), *Reforming Public Procurement: Progress in Implementing the 2015 OECD Recommendation*, [34]
<https://doi.org/10.1787/1de41738-en>.
- OECD (2017), *The Role of Economic Regulators in the Governance of Infrastructure*, [54]
<https://doi.org/10.1787/9789264272804-en>.
- OECD (2016), *Governance of Regulators' Practices: Accountability, Transparency and Co-ordination*, [56]
<https://doi.org/10.1787/9789264255388-en>.
- OECD (2015), *Recommendation of the Council on Public Procurement*, [30]
<https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0411/>.
- OECD (2014), *The Governance of Regulators*, [55]
<https://doi.org/10.1787/9789264209015-en>.
- OECD (2012), *Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships*, [52]
<https://legalinstruments.oecd.org/en/instruments/oecd-legal-0392>.
- OECD (2026, forthcoming), *How to make private investment in infrastructure work?*. [51]
- Ruiz Rivadeneira, A. (2023), *Mapping institutional arrangements for infrastructure governance in OECD countries*, [53]
<https://doi.org/10.1787/31825d0d-en>.
- Ruiz Rivadeneira, A. (2023), *OECD Infrastructure Governance Indicators: Conceptual framework, design, methodology and preliminary results*, [46]
<https://doi.org/10.1787/95c2cef2-en>.
- Straub, E. (2026), *Infrastructure Foundations: From Current Assets to Future Growth*, [4]
<https://doi.org/10.1596/978-1-4648-2311-4>.
- Straub, S. (2011), "Infrastructure and Development: A Critical Appraisal of the Macro-Level Literature", [2]
Journal of Development Studies, <https://doi.org/10.1080/00220388.2010.509785>.
- Straub, S. (2008), "Infrastructure and Growth in Developing Countries : Recent Advances and Research Challenges", [3]
<https://doi.org/10.1596/1813-9450-4460>.
- Tátrai T., E. (2024), "Transparency and Monitoring of Public Procurement Contract Performance", [27]
<https://doi.org/10.24193/tras.71E.5>.
- UN (2025), *The Sustainable Development Goals Report 2025*, [11]

<https://unstats.un.org/sdgs/report/2025/The-Sustainable-Development-Goals-Report-2025.pdf>.

- UNDP (2018), *SDGs Goal 9: Industry, Innovation and Infrastructure*, <https://www.undp.org/sustainable-development-goals/industry-innovation-and-infrastructure>. [8]
- Uysal, E. (2024), "Sustainability Clauses in 'Public' Contracts", *European Review of Contract Law*, <https://doi.org/10.1515/ercl-2024-2004>. [42]
- World Bank (2025), *Procurement Guidance : Evaluating Bids and Proposals - Including Use of Rated Criteria for Procurement of Goods, Works, and Non-Consulting Services*, <http://documents.worldbank.org/curated/en/099325208202512194>. [37]
- World Bank (2025), *The World Bank Procurement Regulations for IPF Borrowers : Procurement in Investment Project Financing - Goods, Works, Non-Consulting and Consulting Services - Sixth Edition*, <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099120102072534901>. [36]
- World Bank (2020), *What Have We Learned about the Effectiveness of Infrastructure Investment as a Fiscal Stimulus?*, <https://doi.org/10.1596/1813-9450-9796>. [7]