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MAGAZINE

10 COMPETENCIES
Every PPP Leader Must Master

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FEATURES:

CASE STUDY
Brusque, Brazil: how a mid-sized city reinvented public services

GOVERNANCE
Humanizing dispute resolution across the PPP lifecycle

WEBINAR SUMMARIES
Voices from the Chapters: WAPPP's Global Community

WAPPP

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WAPPP THEMES

2024 Small-Scale PPPs → 2025 Blended Finance → 2026 National Infrastructure Financing Institutions

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01 From the Editor

BUILDING CAPACITY, FORGING PARTNERSHIPS

WAPPP is happy to present you our spring issue.

At the time this issue is being published, we have a thought for our many members embroiled in the Middle East conflicts.

We are convinced that PPPs will have a strong role to play not only in the inevitable reconstruction in the region but also in building economic ties between nations that will consolidate peace and help bring prosperity. For this reason, an organization like WAPPP is more needed than ever.

With that conviction in mind, this issue opens with our featured article—a deep dive by our President into the core competencies that underpin successful PPPs.

From there, our PPP corner travels to Kazakhstan, with a candid interview of the country successes and challenges, while Henrique Nascimento shows how the mid-sized Brazilian city of Brusque is rewiring public services through innovative local partnerships.

On the financial front, Eiad Omeish addresses the critical need to strengthen Fiscal commitments and contingent liabilities (FCCL) management to support sustainable financing and economic viability.

JC Barth, our Executive Director, then offers a vital perspective on humanizing dispute resolution across the PPP lifecycle.

Raymond Saner and I propose a new framework for the challenges of large scale infrastructure projects. Finally, we invite you to join our three-part webinar series on AI and digital transformation in healthcare, a fascinating journey in how technology is currently reshaping the sector.

We hope this edition offers both insight and inspiration as we continue to build bridges, strengthen systems, and work toward a more resilient future.

Thibaut Mourgues

Editor-in-Chief

02
10 Competencies Every PPP Leader Must Master

COVER FEATURE

Article by Ziad-Alexandre Hayek

President of WAPPP, Strategy Advisor to Paxon Group and HyperCycle AI, and board member of several organizations.

He was previously a candidate for the Presidency of the World Bank, Vice Chair of the UNECE Working Party on PPP, and Secretary General of Lebanon's High Council for Privatization and PPP. His background is in international affairs and investment banking in the fields of infrastructure, telecom and technology.

Introduction

This article examines the essential competencies required of PPP professionals, with particular attention to those who lead PPP units within government. Rather than outlining a checklist to be completed, it presents a landscape to be explored — a professional terrain the serious PPP practitioner commits to navigating throughout a career.

Competency Wheel

10 Competencies Every PPP Leader

- Political Acumen
- Policy Awareness
- Technical Versatility
- Financial Expertise
- Legal Knowledge
- ESIA Understanding
- Public Procurement Practice
- Investor Relations
- Public Relations
- Project Management

Public-Private Partnerships are among the most complex tools in governance, intersecting public policy, commerce, politics, finance, law, engineering, and diplomacy. Leading a PPP unit requires an exceptionally broad range of skills. While no single professional can fully master every field, effective PPP leaders build knowledge across disciplines — skilled enough to engage meaningfully with experts in finance, engineering, and law, ensuring projects remain on track.

"The best PPP professionals are not necessarily the most technically brilliant in any one domain. They are the ones who understand enough about everything to ask the right questions — and to recognise when they are not getting the right answers."

- Ziad-Alexandre Hayek, WAPPP President

PPP INTERSECTS

Public Policy **Commerce**

Politics **Engineering**

Finance **Law**

Diplomacy

01 Political Acumen

Infrastructure projects live and die by political will. A technically perfect PPP transaction that lacks political champions will never reach financial close. A contract that has not been explained well to the political leadership may be blocked, delayed, or reversed later. The ability to navigate political environments is key. PPP leaders must be able to read rooms, build coalitions, and translate complex commercial arrangements into plain language that elected officials can defend to their constituents. This is perhaps the single most underappreciated competency in the PPP field.

Working With Political Decision-Makers

PPP professionals operating within government must understand that politicians operate on different timescales and with different incentive structures than financiers or engineers. A minister may need to announce a project before an election cycle, regardless of whether due diligence is complete. A cabinet colleague may oppose a transaction that competes with a rival ministry for budget allocations. A head of state may become personally attached to a project design that is financially unviable.

Effective PPP leaders navigate these pressures without compromising the integrity of the process. This requires building relationships of trust with political principals before a crisis emerges — not scrambling to explain a controversial transaction after it has already attracted negative headlines.

It means developing the skill of honest, accessible communication: briefing a minister in 15 minutes on the key risks of a 30-year project.It is no wonder that politically appointed PPP heads usually achieve more than career bureaucrats. They have both the ear and trust of a president or prime minister. Career bureaucrats rarely enjoy this advantage, and are often seen as less capable—especially without private-sector experience or if they rank two levels below minister, as is often the case in many countries.

Parliamentary Engagement

Parliaments and legislatures play a critical role in the PPP ecosystem. They may need to approve enabling legislation, ratify large contracts, authorise contingent liabilities, or scrutinise government commitments through public accounts committees. PPP professionals who dismiss parliament as a nuisance rather than a legitimate accountability mechanism invariably create problems downstream.Best practice involves proactive parliamentary engagement. This includes briefing relevant committee chairs early in PPP programme development, ensuring fiscal commitments are transparently reported in budget documents, and developing a clear narrative of value for money that can withstand opposition scrutiny.

COUNTRIES WITH STRONG PPP PARLIAMENTARY LITERACY

South Korea

Colombia

United Kingdom

Chile

02 Policy Awareness

Political will alone does not produce bankable projects. Behind every successful PPP programme is a robust policy architecture — a coherent framework that defines how partnerships will be structured, what sectors are eligible, how value for money will be assessed, how fiscal risks will be managed, and how contracts will be enforced. Developing and maintaining this framework is a core responsibility of those leading PPP units, and it demands genuine policy expertise.

Developing PPP Frameworks

A national PPP framework typically includes legislation or regulation that authorises the use of the instrument. It also covers institutional arrangements that define roles and responsibilities across government. Technical guidelines standardise project preparation and procurement. Fiscal management rules govern how PPP commitments are disclosed and controlled. Getting this architecture right matters greatly. Countries with weak frameworks attract fewer investors, suffer more project failures, and accumulate contingent fiscal liabilities they may not fully understand.

Integration with National Development Plans

PPP is not an end in itself. It is a tool for delivering infrastructure and services that support national development objectives.

The most effective PPP programmes are embedded within broader development planning frameworks. These programmes draw on a pipeline of projects identified in national infrastructure plans. They are aligned with sector strategies developed by line ministries and are assessed against national priorities, not just investor preferences.

PPP professionals must engage substantively with national planning processes. They should contribute to the development of national infrastructure plans. They must advise sector ministries on which projects are suitable for PPPs. They also need to ensure that projects entering the PPP pipeline are grounded in genuine public-sector need, not just opportunistic private-sector marketing.

Project Programs

While the PPP field has largely developed around large infrastructure projects, the global PPP community is increasingly aware of the need to develop project programs, especially for implementing small-scale PPPs. The PPP leader needs to understand the importance of such project programs and give them the priority they deserve. This activity will require the PPP leader to develop the necessary experience in dealing with local authorities who know little about PPP but must be brought on board for such project programs to succeed.

KEY PRINCIPLE

Countries with weak frameworks attract fewer investors, suffer more project failures, and accumulate contingent fiscal liabilities they may not fully understand.

03 Technical Versatility

PPP transactions span an enormous range of infrastructure sectors: roads, bridges, ports, airports, power generation and transmission, water supply and sanitation, hospitals, schools, prisons, railways, urban transit, telecommunications, and social housing, among others. Each sector has its own technical characteristics, regulatory environment, performance metrics, and risk profile. The PPP professional who confines themselves to one or two sectors will find their career options limited and their analytical judgement impaired when cross-sectoral comparisons are needed.

Multi-Sector Awareness

Technical versatility does not mean engineering competence. PPP professionals are not expected to design bridges or specify hospital equipment. They are expected to understand the technical parameters that drive project economics, performance standards for private partners, and warning signs of a technically misconceived project. This requires ongoing investment in technical literacy. Attending engineering briefings, reading sector studies, and building relationships with trusted technical specialists all help.

A PPP professional reviewing a water treatment plant concession should understand throughput-based payment mechanisms, the implications of non-revenue water on operator incentives, and why the choice of treatment technology matters for long-term maintenance costs. They do not need to know how to operate a filtration system. But they need to know enough to ask the right questions of the engineer who does.

Working Effectively With Engineers

Effective collaboration with technical specialists is a skill in itself. Engineers often communicate in a language of standards, tolerances, and specifications that can feel remote from the commercial and contractual world of PPP. The PPP professional who dismisses technical detail as irrelevant, or who cannot follow a technical briefing at any level, risks making or endorsing commercial decisions that are technically uninformed. The most productive working relationships between PPP professionals and engineers are those built on mutual respect and clear communication. The PPP professional should be willing to spend time understanding the technical fundamentals of a project, and should be explicit with technical colleagues about what information they need and in what form. Engineers, in turn, benefit from understanding how their technical recommendations interact with financial models, risk allocations, and contract structures.

04 Financial Expertise

At its core, a PPP is a financial transaction. A private party commits capital and expertise in exchange for a long-term revenue stream, whether from user charges or government payments. The economics of this exchange — the cost of capital, the structure of debt and equity, the distribution of financial risks, and the fiscal implications for government — are central to whether a PPP delivers value for money or merely transfers cost from one balance sheet to another.

Financial Modelling

Financial modelling is the lingua franca of PPP transactions. The financial model translates the technical and commercial parameters of a project into projected cash flows, calculates the return on equity and the debt service coverage ratios that will attract or deter investors, and allows the parties to stress-test assumptions about traffic growth, construction cost overruns, or currency movements.PPP professionals who cannot read and interrogate a financial model are operating with a fundamental handicap.

This does not mean that PPP professionals must be able to build complex models from scratch — that is the role of financial advisors and transaction consultants.

But they must understand the key drivers of a model: what is the appropriate discount rate to use for the net present value calculation, how the debt-to-equity ratio affects the cost of capital, what a sensitivity analysis is telling them about project risk, and how realistic the assumptions are embedded in a base case scenario. The ability to challenge a financial model intelligently — to ask why traffic growth of 5 percent per annum has been assumed when historical data suggests 3 percent — is a competency that separates effective PPP professionals from passive process managers.

Capital Structures

Modern PPP transactions employ a range of capital structures that the PPP professional must understand. Project finance is the predominant financing model for large infrastructure PPPs. But within this structure, there is significant variation: the proportion of senior debt to mezzanine finance and equity, the use of bond financing versus bank lending, the role of development finance institutions in providing concessional capital, and the increasingly common deployment of blended finance structures in developing country contexts.

Each of these structural choices carries implications for project economics, risk allocation, and the flexibility available to governments in the event of project distress.

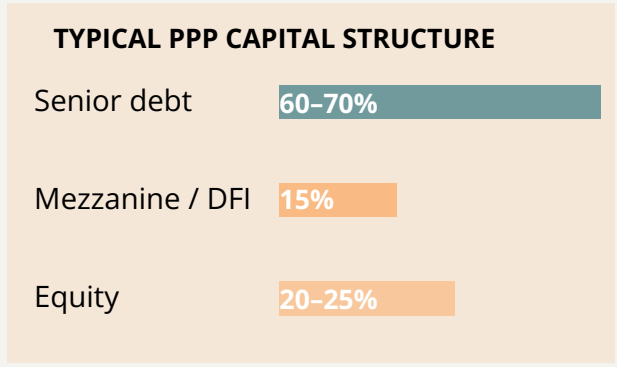
The PPP professional who can engage substantively with these choices will be a more effective partner to both government and investors.

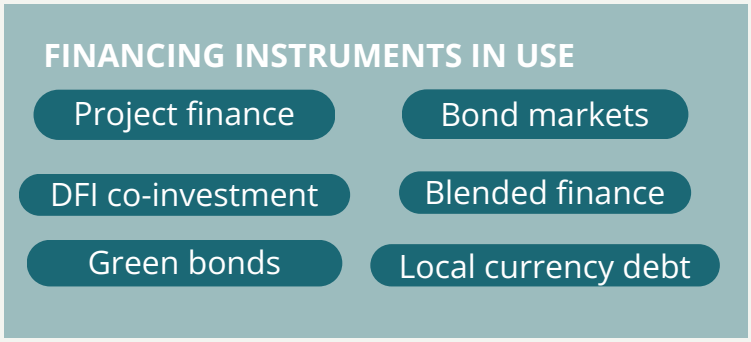
Market Financing Options and Investor Expectations

The financing landscape for infrastructure PPPs is constantly evolving. Since the global financial crisis, bank lending for long-term infrastructure projects has become more constrained, driving greater use of capital markets, where they might exist. Institutional investors — pension funds, insurance companies, and infrastructure funds — are significant participants in infrastructure financing, attracted by long-term, inflation-linked cash flows that match their liability profiles.

Green bonds and sustainability-linked instruments have opened new financing channels for projects with strong environmental credentials. Yet what applies in a developed market will almost certainly not apply in an emerging market.

Understanding the context and which instruments are available and could be used most practically and efficiently is essential knowledge.Understanding how these different capital sources work — what returns they require, what risk they will and will not accept, what reporting and governance standards they impose — is essential for designing PPP structures that can be financed at competitive terms. A government that structures a PPP in a way that is incompatible with investor requirements will either fail to attract competitive bids or pay a premium that erodes the value-for-money case for the partnership.





05 Legal Knowledge

A PPP contract is the foundation of everything. It is the instrument through which risks are allocated, obligations are defined, performance standards are established, and disputes are resolved. It will govern a relationship that may span twenty, thirty, or even fifty years — through changes of government, economic cycles, technological disruption, and unforeseen events. Getting the legal architecture right at the outset is one of the most consequential tasks in the PPP lifecycle.

PPP Legislation and Regulation

Before any individual project can be procured, the legal environment for PPP must be established. Where such legislation does not exist or is inadequate, the PPP professional may need to lead the process of legal reform — working with legislative counsel, engaging with parliament, and drawing on international best practice.

Beyond the enabling framework, there is a complex web of sector-specific regulations that govern the terms under which private partners may operate infrastructure. Electricity tariff regulation, water pricing frameworks, road toll approval processes, telecommunications licensing regimes — all of these interact with the terms of PPP contracts in ways that can create value or destroy it. The PPP professional must understand how this regulatory environment operates and how it may change over the life of a project.

Contract Negotiation

PPP contract negotiation is a specialist skill that sits at the intersection of legal knowledge, commercial judgement, and interpersonal effectiveness. Experienced PPP professionals do not outsource this entirely to lawyers. They sit at the negotiating table with a clear understanding of which contractual terms are critical to the project's viability, which are important but negotiable, and which are genuinely secondary. They can explain to a minister why a change-in-law provision matters, or why a force majeure clause that extends to routine weather events is commercially unreasonable.

This requires not just legal literacy but practical contract experience — exposure to the standard terms of PPP agreements in the relevant sector, familiarity with how disputes have arisen and been resolved in comparable projects, and an understanding of the market norms around risk allocation that experienced investors will use as their reference point.

Governments that approach PPP contract negotiation without this knowledge tend to accept terms that are either excessively burdensome or insufficiently protective — sometimes both simultaneously.

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Every PPP contract is also a political document. Its terms will be scrutinised by auditors, opposition politicians, and civil society groups for decades. The PPP professional must ensure that the contract is not only commercially sound but also defensible in public — that its risk allocations can be explained, its obligations justified, and its value demonstrated.

PPP CONTRACT LIFE CYCLE

LEGAL FRAMEWORK ESTABLISHED
Enabling legislation, sector regulation, and institutional roles defined

CONTRACT NEGOTIATION
Identifying critical vs negotiable terms; change-in-law provisions; force majeure

FINANCIAL CLOSE & AWARD
Contract signed; private partner commits capital.

20–50 YEAR OPERATIONAL PERIOD
Contract management, dispute resolution, and renegotiation as needed

06 ESIA Understanding

The failure to identify, assess, and mitigate environmental and social impact is not merely an ethical failing — it is a commercial and financial risk of the first order. Projects that encounter sustained community opposition, that are blocked by environmental litigation, or that attract adverse international media attention will find their financing costs rising, their timelines extending, and their political support eroding.

Environmental and Social Impact Assessments (ESIAs)

ESIAs are a standard component of PPP project preparation, required by national legislation in most jurisdictions and mandated by all major development finance institutions as a condition of their participation. The PPP professional must understand what a well-conducted ESIA looks like, what mitigation measures are realistic and credible, and how ESIA findings interact with project design, timing, and financial structure.

This requires more than a passing familiarity with the process. It requires understanding the difference between mitigation, compensation, and resettlement — and when each is appropriate.

It requires knowing the international standards against which major development finance institutions will assess environmental and social performance: the IFC Performance Standards, the Equator Principles, and the World Bank Environmental and Social Framework. It requires an appreciation of free, prior, and informed consent processes in contexts where indigenous peoples' rights are engaged.

Stakeholder Engagement

Effective stakeholder engagement is not a box-ticking exercise conducted at the end of project preparation. It is a continuous process that begins in the earliest stages of project development and continues throughout the project lifecycle.

PPP professionals must have the integrity needed to resist the temptation to treat community engagement as a compliance cost to be minimised. Communities that feel ignored or disrespected have many means of resistance, from formal legal challenges to physical obstruction of construction activities. The cost of inadequate stakeholder engagement, measured in delays and reputational damage, routinely exceeds the cost of doing it properly.

KEY PRINCIPLE

Communities that feel ignored have many means of resistance — from legal challenges to physical obstruction. The cost of inadequate engagement routinely exceeds the cost of doing it properly.

INTERNATIONAL STANDARDS PPP LEADERS MUST KNOW

- **IFC Performance Standards** — the benchmark for environmental and social risk management in private sector projects
- **The Equator Principles** — adopted by financial institutions for determining, assessing, and managing social and environmental risk
- **World Bank Environmental & Social Framework** — governs all World Bank-financed projects

07 Procurement Practice

The PPP leader must be intimately familiar with all aspects of PPP public procurement relevant to their project within their regulatory environment. The procurement process is the gateway through which private partners enter the PPP relationship.

A well-designed procurement process attracts competitive bids, selects the most capable and committed partners, establishes clear contractual obligations, and creates a foundation

A poorly designed process — whether too complex, too opaque, too rushed, or too open to manipulation — can corrupt the entire transaction, regardless of how well the project was prepared.

PPP Tender Processes and Bidding Mechanisms

PPP procurement typically employs a competitive dialogue or request-for-proposals process that is considerably more complex than standard public procurement. While traditional public procurement fixes all variables except price, which serves as the basis for contract award, PPP procurement leaves most (if not all) variables open and lets private bidders determine them. The process must balance the need for competition — which requires transparency and standardisation — with the need for dialogue, which requires flexibility and confidentiality. Bid evaluation criteria must reward quality and long-term capability, not just the lowest price. Pre-qualification requirements must be stringent enough to ensure competent bidders without being so restrictive as to limit competition.The design of bidding mechanisms requires careful thought. Single-criterion auctions are simple and transparent, but can yield unsustainable bids. Multi-criterion evaluations that weight technical quality, financial capacity, and commercial terms provide a more nuanced assessment but require more sophisticated evaluation committees and create greater scope for subjective judgment. The PPP professional must understand the trade-offs involved and design processes appropriate to the project and market context.

Managing the Bidding Process

Beyond process design, the PPP professional must manage the bidding process itself — responding to bidder queries, managing information disclosure, handling requests for extensions or changes to bid documents, and maintaining the integrity of a process that is under constant pressure from interested parties. This requires meticulous attention to detail, rigorous documentation, and procedural discipline that may feel bureaucratic but is essential for legal defensibility.

The management of unsolicited proposals deserves particular attention. Private developers frequently approach governments with project proposals that they have originated, requesting direct negotiation or preferential treatment in any competitive process.

Handling these approaches requires a clear policy framework, a consistent application of that framework, and the political resilience to resist pressure from sponsors with strong government connections. Unsolicited proposals that are poorly managed are a significant source of PPP failure and reputational damage.

Unsolicited proposals that are poorly managed are a significant source of PPP failure and reputational damage.

PPP TENDER PROCESS — KEY STAGES

1. **PRE-QUALIFICATION**
   Stringent enough for competence; not so restrictive it limits competition
2. **COMPETITIVE DIALOGUE / RFP**
   Balance transparency with flexibility; manage confidentiality carefully
3. **BID EVALUATION**
   Multi-criterion: technical quality, financial capacity, commercial terms
4. **PREFERRED BIDDER & CLOSE**
   Meticulous documentation; legal defensibility throughout

KEY PRINCIPLE

Procedural discipline may feel bureaucratic — but it is essential for legal defensibility and long-term public trust in the process.

08 Investor Relations

A PPP program without private sector interest is no program at all. Governments that have developed sophisticated PPP frameworks and prepared well-structured projects have sometimes been disappointed by weak investor response — not because the projects were unattractive, but because the government had failed to communicate effectively with the investor community. Investor relations is a strategic function, not a peripheral activity, and it demands the same professionalism that the private sector brings to its own capital-raising activities.

Engaging Local and International Investors

The investor landscape for infrastructure PPPs is genuinely global. Major institutional investors manage capital that is actively seeking long-term infrastructure returns.

Multilateral development banks and bilateral development finance institutions actively co-invest and co-guarantee in developing country markets. Domestic financial sectors in many middle-income countries are increasingly capable of financing infrastructure through local capital markets, local infrastructure financial institutions, and local currency instruments.

Effective investor relations require understanding what each investor category is looking for and tailoring the project and procurement design accordingly. It requires maintaining a credible, up-to-date pipeline of projects that can be marketed internationally. It requires hosting investor days and roadshows that allow potential bidders to conduct early-stage due diligence and raise concerns about project structure before formal procurement begins.

Reputation and Credibility

Perhaps the most important aspects of investor relations are reputation and credibility, both of the government and of the PPP leader themselves. Investors have long memories. Governments that have renegotiated contracts under political pressure, failed to honor payment obligations, subjected foreign investors to arbitrary regulatory changes, or allowed disputes to fester unresolved will find it difficult and expensive to attract competitive bids in future transactions. PPP professionals have a responsibility not just to close individual transactions but to protect and enhance their government's reputation as a reliable partner.

THE INFRASTRUCTURE INVESTOR LANDSCAPE

Pension & insurance funds
Seek long-term inflation-linked cash flows matching liability profiles

Development finance institutions
Co-invest and co-guarantee in developing country markets

Infrastructure funds
Actively seek long-duration, stable-yield infrastructure assets

Domestic capital markets
Increasingly capable in middle-income countries; local currency advantage

09 Public Relations

A PPP leader needs to have (or develop) the ability to communicate with the public at large. Speeches at universities and conferences, radio and television appearances, newspaper and magazine articles, social media, and all other forms of communication are essential for promoting PPP policies, programs, and projects. Garnering support is a key ingredient of the success of a PPP initiative. Such support needs to come not only from the affected community or potential users. It also needs to come from the general public because every PPP undertaking is a political undertaking. It will attract supporters and detractors alike. Dealing with the latter is an important skill that the PPP leader must have.

Communication channels

10 Project Management

A PPP transaction is not complete at financial close. It is the beginning of a long-term operational relationship that will require active management for decades. The preparation of a PPP project is itself a complex project management challenge, involving multiple workstreams, advisors, and government stakeholders, all subject to political and commercial deadlines that may not align with technical requirements.

Managing the Project Development Process

Effective project management in the PPP context requires the ability to coordinate across multiple workstreams simultaneously. Technical feasibility studies must be completed before financial models can be calibrated. Legal due diligence must be completed before procurement documents can be finalised. Environmental and social impact assessments must be completed before the procurement process begins, because their findings may materially affect project design. Managing these interdependencies, maintaining momentum without cutting corners, and keeping political principals informed without alarming them, is a genuine management challenge.

Countries with mature PPP programmes have typically developed standardised tools and templates that reduce the time and cost of project preparation while improving consistency and quality. The PPP professional should advocate for the development of these tools where they do not exist and ensure that they are properly used where they do.

Contract Management

The post-financial-close phase of a PPP project is where many governments are weakest. Having invested considerable effort in structuring and closing a transaction, there is a temptation to declare victory and move on. But a PPP contract is only as good as its management. Payment obligations must be tracked. Performance standards must be monitored. Change-in-circumstances provisions must be properly documented. Disputes must be managed before they escalate to formal arbitration.

While the day-to-day management of contracts typically falls on the contracting authority, PPP units continue to be involved, whether as part of the project management team or at least as monitors of the contract execution. Effective contract management requires dedicated capacity within the PPP unit — staff who understand contract terms, have systems for tracking compliance, and have the authority and confidence to hold private partners to account. It requires the PPP unit to maintain relationships with line ministries that own the contracts, providing technical support for contract management without duplicating the contracting authority's responsibilities.

The Integrated Professional

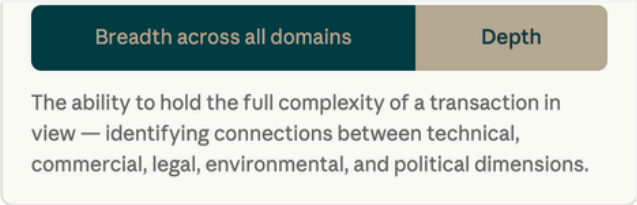
It would be easy, reading this account of the competencies required of PPP professionals, to conclude that the demands are impossible — that no individual could realistically develop meaningful expertise across all these dimensions while also managing the day-to-day pressures of a demanding public-sector role. That conclusion would be both understandable and mistaken.

The argument is not that every PPP professional must be an expert in all of these areas simultaneously. It is that the most effective PPP leaders are those who invest continuously in expanding their competency across the full landscape of the field, who bring genuine curiosity to domains outside their primary training, who build teams that collectively cover the ground they cannot cover individually, and who maintain the intellectual humility to recognise the limits of their

own knowledge while refusing to be intimidated by the knowledge of specialists.

This integrated mindset is what distinguishes the PPP professional from the infrastructure lawyer, the project finance banker, or the transport economist who happens to work on PPP transactions. Those specialists bring invaluable technical depth. The PPP professional brings breadth — the ability to hold the full complexity of a transaction in view, to identify the connections between technical, commercial, legal, environmental, and political dimensions, and to make judgements that balance competing considerations rather than optimising within a single discipline.

WHAT SETS THE PPP PROFESSIONAL APART



Conclusion

The PPP field rewards professionals who are genuinely interested in development policy and infrastructure. PPPs represent one of the most demanding and consequential applications of public sector professional expertise.

They engage with the full complexity of modern governance under intense scrutiny from investors, communities, parliaments, and auditors, each with different, sometimes conflicting, interests.

The professionals who lead PPP units within government bear a particular responsibility. They are the custodians of the public interest in these transactions. Their effectiveness depends not only on technical competence, though that is indispensable, but also on political judgment, ethical commitment, and the ability to maintain a clear view of the public purposes that PPP is meant to serve.

No professional embodies all of the competencies described in this article to the same degree, and none should be expected to. But the aspiration to cultivate expertise across the full landscape of PPP practice — to be more than a narrow specialist, to bring genuine breadth to a field that demands it — is one that separates the truly effective PPP professional from the merely competent one. That aspiration, pursued with rigour and intellectual honesty throughout a career, is what the field requires and what the public interest deserves.

2026 WORKSHOP SERIES ON
PUBLIC-PRIVATE PARTNERSHIP HOT TOPICS

May – July 2026 | Virtual

MCDF MULTILATERAL COOPERATION CENTER FOR DEVELOPMENT FINANCE · ADB ASIAN DEVELOPMENT BANK · CAF DEVELOPMENT BANK OF LATIN AMERICA AND THE CARIBBEAN · Eurasian Development Bank · PPIAF Enabling Infrastructure Investment · WAPPP

ABOUT THE SERIES

Public-Private Partnerships (PPPs) enable governments to procure and deliver public infrastructure leveraging the resources and expertise of the private sector. When properly designed and executed, they can generate efficiency gains and offer innovation in project design and access to new sources of capital.

Conversely, poorly designed and executed PPPs can fail to deliver these promises and create additional risks.

Building on the success of the 2024 and 2025 PPP Hot Topic Workshop Series that attracted 665 participants from 73 countries, MCDF and its partners are launching the 2026 Series to continue to help developing countries ensure that the benefits of PPPs are harnessed and risks mitigated.

WHY ATTEND?

If you are working on PPPs in any role (government, financier, developer, consultant, contractor) and in any region of the world, this is essential for you to attend for the following reasons:

- Enhance understanding of the latest “frontier issues” in PPPs, including developments in PPP capacity building, PPP transaction design, and data center PPPs.
- Learn and collaborate with leading International Financial Institutions (IFIs), with co-organizers sharing their latest thinking and tools.
- Gain insights from experienced PPP units in developing countries, sharing practical approaches to addressing common challenges.
- Strengthen professional networks in the workshops.

Participants attending the workshop series will receive a **certificate** for each session upon completion of the feedback form.

THREE-PART WORKSHOP PROGRAMME

Workshop 1:	Workshop 2	Workshop 3
	Innovations in PPP Transaction Design (Virtual) Wednesday, 17 June 2026	Data Center PPPs (Hybrid) Wednesday, 22 July 2026 Location: Nairobi, Kenya

SCHEDULE

11:00–13:00 GMT
07:00–09:00 DC, **Panama, Kingston** (EST)
14:00–16:00 **Nairobi, Riyadh** (EAT, AST)
19:00–21:00 **Beijing, Manila** (CST)

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STRAHAN SPENCER
Head of Platform Team
Multilateral Cooperation Center for Development Finance (MCDF)

"**The 2026 Public-Private Partnership Hot Topics Workshop Series** offers professionals from across the PPP ecosystem lessons and insights on the latest fronter issues in PPPs, such as **PPP capacity building, transaction design, and data centers**.

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03
Thought Leadership

The Lead Contractor as Governance Intermediary:
Mastering multi-layered realities in large-scale infrastructure PPPs

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Introduction: Two Central Objectives

Large-scale Public–Private Partnerships (PPPs) are typically managed through the narrow lenses of contractual design, risk allocation, and financial structuring. Standard international guidance—such as the World Bank's PPP Reference Guide (2024), the Guidance on PPP Contractual Provisions (2019), and the EIB/EPEC Guide to PPPs (2015)—provides indispensable frameworks for structuring value-for-money propositions and enforceable agreements.

However, for the lead contractor—the "contract leader"—the formal concession agreement represents only one layer of a complex and often volatile governance architecture.

This article addresses two related but distinct dimensions of leadership in large-scale PPPs that are frequently overlooked in standard competency frameworks.

"Together, these objectives call for a reconceptualization of the lead contractor not merely as a technical executor, but as a governance intermediary embedded in layered institutional systems."

The first is conceptual: to demonstrate that the actual workload of a lead contractor extends well beyond the activities formally stipulated in the concession agreement. Tasks such as negotiating with state-owned electricity providers, securing land access from customary authorities, and managing relations with displaced communities are critical to project success yet often appear nowhere in the PPP contract.

"In Developing Countries (DCs) and Least Developed Countries (LDCs), effective leadership requires systematic monitoring of the macroeconomic and institutional environment."

The second objective is contextual: to show that in Developing Countries (DCs) and Least Developed Countries (LDCs), effective leadership requires systematic monitoring of the macroeconomic and institutional environment. Sovereign debt trajectories, IMF interventions, and World Bank conditionalities can fundamentally alter the conditions under which a PPP operates, irrespective of contractual protections.

Together, these objectives call for a reconceptualization of the lead contractor not merely as a technical executor, but as a governance intermediary embedded in layered institutional systems.

2. The Four-Layer Governance Model

To understand these complexities, a four-layer governance model—covering micro, meso, macro, and meta levels—better reflects the operational reality than traditional contract management models.

2.1 Micro-Level: Internal Execution and Technical Foundation

At its core, the lead contractor must demonstrate engineering excellence and financial probity. This "non-negotiable foundation" includes robust internal management and conservative demand forecasting. Furthermore, a lead contractor must employ dynamic risk modeling to counter "optimism bias" and ensure Environmental, Social, and Governance (ESG) compliance to satisfy institutional investors. While essential, micro-level competence alone is insufficient to prevent project failure in complex LDC environments.

2.2 Meso-Level: Managing the Coalition

Large-scale PPPs are delivered by consortia—temporary coalitions of firms with disparate corporate cultures and risk appetites. A construction firm may focus on immediate completion, while an operator is concerned with thirty-year lifecycle costs.

2.3 Macro-Level: The Sovereign Interface and Hidden Liabilities

This layer involves the formal interface with the host state and its regulators. However, the contractor must look beyond signed clauses. In fiscally constrained economies, the state's ability to honor its payment obligations is a live variable, not a guarantee. As the IMF's 2023 Article IV consultation on Djibouti highlights, extensive infrastructure investment can increase public debt to a point of extreme fiscal vulnerability.

A lead contractor must recognize that the State is not a monolithic entity. They must navigate between disparate ministries (Finance vs. Infrastructure) and regulators whose political influence and capacity vary widely. For example, a delay by a land authority in securing rights-of-way can kill a project, yet it is rarely covered by standard force majeure clauses.

2.4 Meta-Level: The Broader Stakeholder and Geopolitical Ecosystem

The meta-layer represents the most significant expansion of the contractor's role, encompassing cross-sector dependencies and systemic risks.

Cross-Sector Dependencies: A highway or hydroelectric project requires stable power and functional telecoms for construction and eventual operation. Because the PPP contract often assigns energy supply risk to the contractor without specifying how to negotiate access, the lead contractor must broker service-level agreements with state-owned utilities that are not party to the primary contract. For instance, the Success of the **Moroccan Noor Ouarzazate renewable energy project** required the lead contractor to integrate with the Moroccan Agency for Sustainable Energy (MASEN) while managing dependencies on water infrastructure for cooling and high-voltage transmission lines managed by separate entities.

Geopolitical and Macro-Economic Exposure: Infrastructure projects in strategic locations are embedded in regional politics. For instance, a toll road in Djibouti is entirely dependent on trade volumes from Ethiopia; thus, an economic crisis in Addis Ababa directly impacts project revenues. Furthermore, the nationality of the contractor can become a geopolitical liability in regions where global powers are in strategic competition. For example, Djibouti hosts military bases from the U.S., China, France, Japan, and Italy. A Lead Contractor building a highway connecting ports to Ethiopia must realize that the "nationality" of their funding or their subcontractors has a geopolitical dimension. If a project is perceived as favoring one global power, it may face diplomatic hurdles or financing roadblocks from rival-aligned institutions.

3. The Hidden Workload: What the Contract Does Not Contain

Standard guidance frameworks are indispensable for risk allocation, but they fail to capture the "parallel governance maze" that contractors must navigate.

3.1 Electricity and Utility Negotiations

In the Democratic Republic of Congo (DRC), the Grand Inga hydroelectric project illustrates this challenge. The complexity of the state utility (SNEL)—which is chronically underfunded and politically managed—means that any developer must conduct bilateral negotiations entirely outside the formal PPP framework to ensure stable power for construction camps and equipment.

3.2 Land Access and Customary Rights

In Morocco's renewable energy program —specifically the Noor solar complex and the Tarfaya wind farm—land negotiations were not a simple matter of state handovers.

They involved multiple ministries, tribal authorities, and customary rights holders. The developer, structured through MASEN (the Moroccan Agency for Sustainable Energy), had to coordinate with these actors proactively, despite them existing outside the contractual perimeter.

3.3 Regulatory Gaps and Licensing

Environmental permits, water rights, and zoning approvals often involve provincial or specialized agencies that are not party to the concession. In the DRC, limited coordination between the Ministry of Hydraulic Resources and the Ministry of Environment complicates the contract leader's role.

4. Macroeconomic Monitoring: A Requirement, Not an Option

In DCs and LDCs, macroeconomic dynamics can fundamentally alter the conditions of a PPP, regardless of legal protections.

4.1 Sovereign Debt and Fiscal Duress

Many LDCs are managing elevated levels of sovereign debt. When a state's fiscal position deteriorates, government-backed payment obligations under availability-based PPPs become uncertain. In extreme cases, debt restructuring leads to "renegotiation under fiscal duress," where commitments are unilaterally modified. In the DRC, where external debt exceeds USD 9 billion in 2026, an Inga developer must monitor the state's fiscal trajectory; debt service obligations may eventually crowd out infrastructure payments.

4.2 IMF Interventions and Financial Disruptions

IMF interventions represent perhaps the most disruptive macro-level variable. Programs like the 2023 Extended Credit Facility for Zambia or the 2022 program with Ghana impose fiscal consolidation requirements. These may legally constrain a government from issuing new guarantees, making availability payments in foreign currency, or honoring feed-in tariffs.

Furthermore, high inflation—prevalent across Sub-Saharan Africa since 2022 — can erode project economics within months if indexation clauses are inadequate. Currency crises in Egypt and Ghana have also shown that the ability to repatriate dividends or pay foreign suppliers can be suspended at short notice. The contract leader must therefore develop contingency protocols, including multi-currency payment mechanisms and early warning indicators tied to central bank reserve data.

4.3 World Bank Conditionalities

When a project involves World Bank financing or the host country is under a structural adjustment operation, conditionalities may directly affect project parameters. These might include requirements for tariff liberalization, privatization of adjacent utilities, or limits on government guarantees. A leader who fails to track these intersections risks being surprised by regulatory shifts that alter the project's financial architecture.

5. Concrete Case Illustrations

5.1 Grand Inga Dam (DRC)

The Grand Inga project has repeatedly stalled because developers often focus on sound technical plans while underestimating the required political economy navigation.

- **Macro-Level:** Contractors must negotiate with a government facing transparency challenges, necessitating World Bank partial risk guarantees to ensure payment security.
- **Meta-Level:** The project depends on complex cross-border off-take agreements with mining companies and neighboring nations. Failure to engage effectively with international NGOs on resettlement can lead to global campaigns that deter financiers.

5.2 Moroccan Renewable Energy (NOOR Complex)

Morocco's success is attributed to developers operating across all four governance layers.

- Meso/Meta-Level: The lead contractor had to coordinate with the national grid operator (ONEE) for evacuation infrastructure, a separate entity from the contracting agency.
- Stakeholder Engagement: Location in a semi-arid region required deep engagement with local communities regarding water usage and employment—activities far beyond standard contractual obligations.

5.3 Djibouti Transport Corridor

A hypothetical highway PPP in Djibouti crystallizes the integrated challenge.

- **Fiscal Reality:** Any macro-level contract must be scrutinized against the country's high debt-to-GDP ratio, as documented by the IMF.
- **Regional Monitoring:** Revenues depend on the stability of Ethiopia, requiring the contractor to act as a regional political analyst. In this context, the lead contractor is simultaneously a builder, financier, regional analyst, and diplomat.

6. Conclusion: From Contract Manager to Governance Intermediary

The traditional view of the lead contractor as a mere contract manager is obsolete. In the complex environments of large-scale infrastructure PPPs in DCs and LDCs, the role has evolved into that of a governance intermediary. Success requires integrating competencies across four interacting layers: technical and financial excellence at the micro level; alliance stewardship at the meso level; fiscal diplomacy at the macro level; and ecosystem stewardship and geopolitical sensitivity at the meta level.

Contractual literacy is a necessary starting point, but it is not sufficient. The most critical challenges—negotiating with non-party utilities, managing the fallout of an IMF program, or navigating land tenure systems—lie outside the formal perimeter of the concession.

Future PPP competency frameworks and training programs must reflect this dual scope: operational breadth beyond the contract and macroeconomic vigilance within the host country. Recognizing that a PPP is a layered governance process rather than a static contract is the first step toward long-term project viability.

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04
In conversation: Kazakhstan

INTERVIEW

A candid conversation with Aidos Kobetov on legislative evolution, landmark projects, professional standards, and the role of AI in public-private partnership

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The History of PPP in Kazakhstan

Question: *What is Kazakhstan's experience with PPP mechanisms?*

Answer: To date, the Republic of Kazakhstan has concluded 1,257 PPP agreements totaling 7.4 billion US dollars. These figures are the result of many years of work, during which the country has accumulated substantial experience implementing projects across various sectors — from social areas such as education and healthcare to complex transport infrastructure.
From an evolutionary standpoint, the development of PPP in the country can be broadly divided into several stages.

The first stage involved the formation of a basic regulatory framework. In 2006, the Law of the Republic of Kazakhstan "On Concessions" was adopted, primarily focused on the implementation of large infrastructure projects. Among the first concession initiatives were projects for the construction of the inter-regional power transmission linethe construction of the inter-regional power transmission line "Northern Kazakhstan — Aktobe Region,"

A new passenger terminal at the Aktau International Airport, and the "Shar Station — Ust-Kamenogorsk" railway line. These projects laid the foundation for the further development of partnership mechanisms.
A qualitative leap in market development occurred in 2015 with the adoption of the Law of the Republic of Kazakhstan "On Public-Private Partnership." This law made it possible to apply PPP mechanisms across a broader range of sectors and created the legal foundation for scaling projects, including at the regional level. It was during this period that a significant increase in the number of initiatives was observed, along with active engagement from the private sector.

In 2025, the regulation of concession mechanisms was integrated into the general PPP regulatory framework, and the separate Law "On Concessions" was consequently repealed. This made it possible to ensure a unified approach to project implementation and simplify the regulatory architecture.

BAKAD as a Key Project in the Development of PPP

Question: *Can the Big Almaty Ring Road (BAKAD) project be considered a turning point for Kazakhstan?*

Answer: Absolutely — the BAKAD project can be regarded as a turning point for the development of PPP in Kazakhstan and, to a certain extent, in the Central Asian region.

It was within this project that the modern model for implementing large-scale PPP infrastructure projects was refined. Key legislative changes in 2014–2016 were developed in parallel with the project's preparation, which made it possible to introduce a number of tools that were fundamentally new to the market.

In particular, mechanisms such as international arbitration, direct agreements with lenders, and more complex tender procedures — including two-stage selection — were institutionalized. Particular attention was paid to the allocation of currency and other project risks.

This project was the first to be supported by an international financial organization — the IFC. BAKAD also became the first example of a full-fledged application of the availability payment model, which provides for compensation of investment and operational costs as well as a management fee for operating the facility. In effect, the project served as the testing ground for risk allocation and financial structuring approaches that subsequently became the market benchmark.

The project's significance is further underscored by its financial architecture. Leading international financial institutions participated in its implementation — the EBRD, EADB, and the Islamic Development Bank. The participation of an international consortium from Turkey and the Republic of Korea also demonstrated that Kazakhstan is capable of implementing complex infrastructure projects to international standards. The road was launched ahead of schedule and has been operating successfully in toll mode since 2023.

Of course, such projects yield not only results, but also an enormous amount of practical experience.

The BAKAD implementation practice made an important contribution to the development of risk allocation and structuring approaches for large infrastructure projects. It is through such cases that institutional maturity in the market is built.

The Role of JSC "Kazakhstan PPP Center"

Question: *What is the role of the PPP Center that you represent?*

Answer: The Kazakhstan PPP Center, established in 2008, has undergone substantial transformation over the years and today operates as a full-fledged development institution in the field of public-private partnership.

Today, the Center performs several key functions covering both the project preparation stage and the implementation stage.

First, the Center fulfills a methodological function — developing approaches to project structuring and preparing expert-analytical recommendations for authorized state bodies on improving the regulation and practice of PPP project implementation.

Second, the Center conducts expert review of projects at the planning stage. This includes analysis of tender documentation and project solutions from the perspective of their soundness, financial viability, and the correctness of risk allocation.

Third, a separate function is the assessment of ongoing PPP projects. It is aimed at analyzing the actual performance of projects in accordance with the terms of the concluded agreements, as well as identifying potential risks for the parties and preparing recommendations for their timely resolution.

In addition, the Center participates in developing the professional PPP community — encompassing representatives of state bodies, business, and the expert environment — through training and professional development of specialists.

A separate line of activity for the Center was established in 2025 with the launch of a category of PPP projects of special significance, implemented with the participation of international financial institutions.

Within this framework, the Center participates in their coordination and conducts project assessments at early stages of preparation — prior to the launch of competitive procedures. This allows for improved quality of project development and reduced implementation timelines.

In this way, the PPP Center plays a system-forming role, ensuring the quality of project preparation and implementation, as well as the sustainable development of the entire institution of public-private partnership.

Direct Negotiations and Their Impact on PPP Development

Question: Is it true that in the early years of PPP practice in Kazakhstan, private initiative projects awarded through direct negotiations predominated? How do you assess that practice?

Answer:I would describe that stage as a natural one for the early development of the market: it gave the system an important impetus, but at the same time exposed limitations that subsequently required greater transparency and competitive procedures.

At the initial stage, the private initiative mechanism was precisely what brought new projects and solutions onto the agenda — ones that the state was not always yet ready to formulate on its own at that time. Private partners took the initiative, bore preparation costs, and proposed projects that met genuine state needs. In this sense, private initiative became one of the drivers of the market's early development and contributed to the faster introduction of new approaches.

A telling example is the project for video recording of traffic violations in Astana. At the time, simpler solutions were mainly used on the roads, primarily related to photo recording. The continuous video surveillance system proposed by the private partner made it possible to record not only speeding but also a wider range of traffic violations. This was a clear example of how private initiative opened access for the state to new technological approaches at the urban level.

A similar role, but at the national level, was played by the Kundelik.kz project. It can be counted among the early private initiative projects in Kazakhstan. The practical significance of this project was particularly evident later, during the pandemic, when the existence of a digital educational platform became an important factor in sustaining the educational process.

At the same time, this model had obvious limitations. A significant portion of projects were implemented through direct negotiations, which over time raised questions about the comparability of proposals, the quality of competitive selection, and the overall level of procedural transparency.

Consequently, the subsequent evolution of the regulatory framework was largely aimed at preserving the advantages of private initiative while simultaneously strengthening competitive mechanisms and institutional requirements for project preparation.

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Thus, in 2022, taking into account recommendations from the Asian Development Bank, the private initiative mechanism itself was

significantly revised. Legislation began to orient it not toward direct award, but toward a more transparent model — the so-called Swiss challenge. Under this scheme, a potential private partner may propose a project meeting the state's socio-economic objectives and prepare the necessary documentation. But the project is then put out to tender regardless, and the private partner is determined based on the tender results. In this way, the system retained business initiative while strengthening the competitiveness of the selection process.

As for direct negotiations, today they are only possible in exceptional cases — by decision of the Government of the Republic of Kazakhstan, and only in relation to projects involving the creation and operation of unique facilities that include technology transfer.

Digitalization of PPP Procurement

Question: *How are PPP tenders conducted today? Are digital procurement platforms used?*

Answer: Yes, today competitive procedures for PPP projects in Kazakhstan have been transferred to an electronic format.The transition to this model was driven by the very nature of PPP. Unlike standard public procurement, such projects require more complex competitive logic, a significant volume of documentation, and special application review and decision-making procedures. That is precisely why, with the support of the Eurasian Development Bank, a dedicated PPP platform and information system was created.

This was an important step from the perspective of formalizing and increasing the transparency of procedures. The electronic format made it possible to build a more systematic approach to conducting tenders and made the process itself more structured.

At the same time, like any new digital infrastructure, this system required practical fine-tuning. During the application phase, certain procedural and organizational rough edges emerged that market participants encountered. Therefore, in this case it is more accurate to speak not of a finished model, but of a developing tool that has already played an important role in increasing transparency, yet still requires further improvement.

Projects of Special Significance and Work with IFIs

Question: *How relevant is cooperation with International Financial Institutions for Kazakhstan in terms of preparing and implementing PPP projects?*

Answer: Cooperation with international financial institutions remains a strategically important priority for Kazakhstan. The focus here is less on the financing itself and more on access to high international standards of project preparation and implementation.

Engagement with institutions such as the ADB, EDB, IFC, and EBRD has given Kazakhstan an enormous amount of practical experience. Today, even though we have accumulated our own serious competencies in PPP, the international agenda does not lose its relevance. On the contrary: projects are becoming technically more complex, and it is important for us to use proven global experience, adapting it to our legal system, rather than "reinventing the wheel" each time from scratch.

It was precisely with this logic in mind that a separate category was identified — PPP projects of special significance, developed jointly with international financial institutions.

Today there are seven priority projects on this list, and their composition clearly shows where the country's main efforts are currently focused. First and foremost, it is the social sphere: four projects are for modern university hospitals in Karaganda, Almaty, Semey, and Aktobe. The remaining three address other critical needs:

the construction of a desalination plant in Mangistau Region, student dormitories in Almaty, and the Almaty — Issyk-Kul highway.

It is important to emphasize that this list is not a rigid structure. It is open and will be expanded as new technically complex and socially significant tasks emerge that meet the established criteria.

Programmatic PPP: Successes and Challenges

Question: *At the same time, the country has a separate mechanism not only for large projects, but also for small-scale PPP?*

Answer: For such projects in Kazakhstan, the most applicable mechanism is the so-called programmatic PPP, which was introduced into legislation as a tool for small, replicable projects.

Its primary logic is maximum simplification. The central government body prepares a "packaged" solution in advance: standardized rules, a model contract, a ready-made financial model, and clear parameters of state support. This is critically important for small facilities that can be launched on a mass basis — it simply makes no sense to go through the full and complex cycle of individual preparation each time.

A telling example here is the organization of school meals. Thanks to clear rules of the game, it was possible to attract investment in modern catering facility equipment in more than 400 schools. A long-term contract gives businesses guarantees of return on their investments and stable revenue, and schools receive a quality service.

However, it should be acknowledged that programmatic PPP has yet to achieve widespread application and has so far been developed in only a limited number of areas. Therefore, the potential of programmatic PPP in Kazakhstan remains significant, but its further development will depend largely on strengthening the institutional and methodological competency at the level of sectoral state bodies.

Turnkey Construction and State Agencies' Reluctance to Embrace PPP

Question: *What is "turnkey construction"? As we understand it, this model has been frequently applied in Kazakhstan of late for creating infrastructure facilities. Is this model an alternative to PPP?*

Answer: It is important to distinguish between these concepts. EPCF is a legitimate and quite workable tool that as a type of state investment project,
and quite workable tool that, as a type of state investment project, became established in our system with the adoption of the new Budget Code. It is effective when the task is to attract private financing for the rapid construction of a complex facility.
The problem arises when such models begin to be positioned as a full replacement for PPP.
In classical PPP, the value lies not only in the act of construction, but in the subsequent management of the facility. The private partner does not simply hand over the keys and walk away — they remain on the project for 15–20 years. They are motivated to build to a high quality, because they themselves will be handling the technical operation. In the turnkey model, this incentive disappears: once the ribbon is cut and the facility is transferred to the state's balance sheet, all the risks of breakdowns and inefficient management fall back on the budget. I am of course simplifying somewhat, but that is essentially how it works.
Why do state bodies choose this path? Because PPP is always a "long game." It requires more complex preparation, serious institutional accountability, and a high level of competency. It is easier to opt for a

familiar construction contract than to build a relationship spanning decades.
However, when choosing EPCF over PPP, we must recognize: we are solving the problem of a budget shortfall today, but forgoing professional management (facility management) tomorrow. In essence, we are losing the very "lifecycle" effect for which the PPP mechanism was originally created.

Private Sector Innovation and the Demonstration Effect

Question: It would be a shame if, for these reasons, it proves impossible to fully apply the advantages of the private sector in managing lifecycle costs and operating assets.

Answer: Absolutely. That is one of the main values of PPP: the private sector brings not only investment, but also different approaches to design, equipment, and the very organization of infrastructure.

A vivid example here is school projects. For Kazakhstan, this is a critically important topic due to fairly high birth rates and a shortage of student places. PPP made it possible not only to build facilities, but also to offer entirely new quality standards.

In traditional budget-funded construction, schools are often delivered using a fairly conservative approach

In PPP projects, private partners have proposed modern technical solutions — for example, developing project documentation for five-story buildings, allowing more effective use of urban space. This was clearly demonstrated in the first Binom schools in Astana.

This experience subsequently gained traction at the state level. In effect, the success of these PPP projects laid the foundation for the development and rollout across the entire country of the so-called "comfort schools."

This is how the demonstration effect of PPP manifests itself. It functions as a mechanism for testing new solutions that can then be adopted and scaled by the state.

Accreditation of Consultants and CP3P

Question: In essence, the lack of competencies in PPP is a "bottleneck" for wider application of the private sector's potential in creating and managing infrastructure. How does the Kazakhstan PPP Center contribute to resolving this problem?

Answer:I agree with that assessment. Practice has shown: the main problem in the market is not the absence of procedures, but the quality of documentation preparation. Where planning was thorough, projects were

implemented successfully. Where documentation was weak, systemic problems arose — up to and including contract terminations. And for PPP, this is critical: every such termination undermines investor confidence in the entire market.

Initially, we considered creating a national testing system based on knowledge of the law. But we quickly realized: knowledge of regulatory norms is only part of the equation. The law provides an algorithm, but not the skills of structuring. Those skills come either from real experience or from quality training.

Therefore, the state decided to rely on a recognized global standard — the CP3P qualification (Certified PPP Professional), developed by APMG on behalf of leading international development banks. I myself was among the first in Kazakhstan to receive this certification.

Introducing this standard to the market was not straightforward. But the approach was fairly simple: if a consulting company undertakes to develop or assess PPP projects, it must have certified specialists on staff. This became the basic requirement for accreditation.

Today, training programs under the CP3P standard are actively being implemented in Kazakhstan.

This allows for the systematic cultivation of a pool of qualified personnel — both among consultants and among civil servants — providing the market with the level of professionalism necessary for implementing technically complex projects.

Personnel Training: Universities and the PPP Academy

Question: In addition to this, there is a PPP Academy within the Center's structure, and academic programs on PPP topics are also supported — is that correct?

Answer: That is correct. We structure our work on two levels.

The first level is universities. We have been actively introducing PPP topics into master's programs, since deep professional specialization is important here. One of the most recent and large-scale examples is our collaboration with the L.N. Gumilyov Eurasian National University named. With the support of the EDB, the university's teaching staff are currently undergoing serious training to international standards, so that they can subsequently develop next-generation curricula independently. I was once very impressed by the experience of colleagues from Armenia I participated in one of the international sessions as a lecturer and witnessed how

systematically they approach the issue: instructors went through all three levels of international certification in order to subsequently launch a full-fledged PPP department at their university. And at that time, they did not yet even have a national PPP center. This example finally convinced me that building a knowledge base through the academic environment is the most correct "long-distance run."

The second level is the PPP Academy at our Center. It is focused on applied training for civil servants. These are not theoretical lectures, but intensive modules on specific disciplines: legislation, financial modeling, the public sector comparator, and others.

This year we have significantly strengthened this direction. In the first few months alone, more than one hundred people completed in-person training in Astana. This format is especially important for specialists from the regions — it allows them to fully immerse themselves in the subject matter, analyze real cases, and return to work with a clear understanding of how to structure a quality project.

Kazakhstan and Its Neighbors

Question: You mentioned Armenia. How do you view the implementation of PPP in your Central Asian neighbors?

Answer: Kazakhstan remains the most mature market in the region, but it must be acknowledged that the neighbors are moving very quickly. Uzbekistan in particular has made an especially impressive leap in PPP development. Kyrgyzstan has also noticeably stepped up its activity — despite different starting conditions and economic scale, it is finding effective solutions for implementing its initiatives.

This regional context leads us to an important conclusion. The pace of PPP development is determined not only by the availability of quality legislation, digital platforms, or advanced training programs. All of that is, of course, a necessary foundation, to which we in Kazakhstan devote enormous attention.

But in the end, the decisive factor for success remains the readiness of local state bodies to take on responsibility and systematically drive projects forward.

Artificial Intelligence and PPP

Question: How do you assess the impact of artificial intelligence on the development of PPP?

Answer: The potential here is substantial, but it must be approached with caution. In Kazakhstan, within the framework of sectoral digital

transformation, provision has already been made for the use of AI in the expert review and assessment of PPP project implementation. This is an early stage, but the direction of movement is clear.

We have had experience working with international digital solutions. This experience revealed enormous opportunities, but also exposed the difficulties of adapting global tools to our national legislation and internal information systems. It is critically important for us that any AI-enabled platforms operate within a unified logic aligned with state regulations. Working on a project in a digital environment must not lead to duplication of effort — where documentation is prepared separately "for the system" and separately "in accordance with regulatory requirements."

At the same time, we are already seeing the other side of the coin. Solutions are now appearing — a kind of "overlay" on top of large language models (LLMs) — using which project documents are generated from templates. As a result, materials sometimes arrive for expert review containing errors characteristic of AI output. In the complex legal and financial structures of PPP, such errors can be critical.

The desire to speed up and reduce the cost of the process is understandable, but in our field this is a significant risk. Therefore, at the current stage, AI can be a useful assistant, but by no means a replacement for a professional. In PPP, too much depends on context, practical experience, and the depth of expert assessment. The human factor remains irreplaceable for now.

Conclusion

Question: Thank you for the interview!

Answer: Likewise — I was glad to share my perspective.

Kazakhstan PPP Center — At a glance

Established in **2008**, the Center performs methodological guidance, expert review of PPP documentation, monitoring of active projects, and professional training under the internationally recognised **CP3P standard**. In 2025 a new category of **PPP projects of special significance** was launched in partnership with international financial institutions.

05
Brusque's PPP Portfolio

CASE STUDY

How a mid-sized Brazilian city is rewiring public services through partnerships

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In emerging markets, the PPP debate is still disproportionately shaped by national megaprojects and central-level institutions. Yet a parallel movement is gaining practical relevance: mid-sized municipalities using partnerships not only to mobilize investment, but to shift the operating logic of service delivery toward outcomes, lifecycle accountability, and auditable performance regimes.

ABOUT BRUSQUE

Brusque is a fast-growing municipality in Santa Catarina, Southern Brazil. The latest census recorded 141,385 inhabitants (2022), while local reporting on IBGE estimates indicates a current population above 155,000, supporting the municipality's planning assumption of a near-term trajectory toward ~160,000+ residents. Economically, Brusque ranks among Santa Catarina's top-10 municipal
economies, with GDP around R$ 11.1 billion (2023).

The municipality has also been recognized at state level for Health and Well-Being (Prêmio Band Cidades Excelentes, 2025), has pursued a results-oriented governance model through annual Management Contracts (2025-2028 cycle), and has accelerated administrative transformation via Brusque+Digital.

Brusque has advanced a portfolio-based PPP agenda with precisely this intent. Over the last year, the municipality consolidated a multi-sector pipeline exceeding R$ 2.2 billion under the SPCC agenda. The first wave comprises three flagship projects already structured and in advanced preparation or transaction stages: sanitation, public transport, and smart cities. A second wave is now in design:cemetery and funeral services, social housing lease, and education infrastructure.

Political sponsorship was treated as a prerequisite. From the outset, the municipality's top leadership aligned around the premise that PPPs are legitimate tools for solving priority public problems, and that the portfolio would be governed as a long-term performance program through preparation, procurement, and the early years of contract mobilization.

A portfolio approach matters at the municipal tier because the binding

constraint is rarely the identification of needs. The recurring bottlenecks are institutional: converting needs into bankable projects, sustaining procurement credibility, and governing long-term performance after signature.

Brusque's recent progress illustrates both the acceleration of a structuring pipeline and the rising importance of contract management capability as the next institutional frontier.

> "Structuring creates transactions; contract management protects outcomes."

PORTFOLIO-AT-A-GLANCE

Wave 1, structured and advanced stages

Sanitation - 35-year PPP: ~R$ 1.5 billion contract; ~R$ 700 million invested in the first eight years; targeting 90% sewage treatment and universalization ambition aligned to Brazil's sanitation framework by 2033.

Public transport - 20-year concession: ~R$ 350 million contract; new lines, fleet renewal, four new transfer terminals, and network redesign (from radial to more circular logic).

Smart cities - 25-year PPP: ~R$ 345-357 million; step-change in lighting efficiency, connectivity, data, and public safety capabilities.

Wave 2, in design and preparation

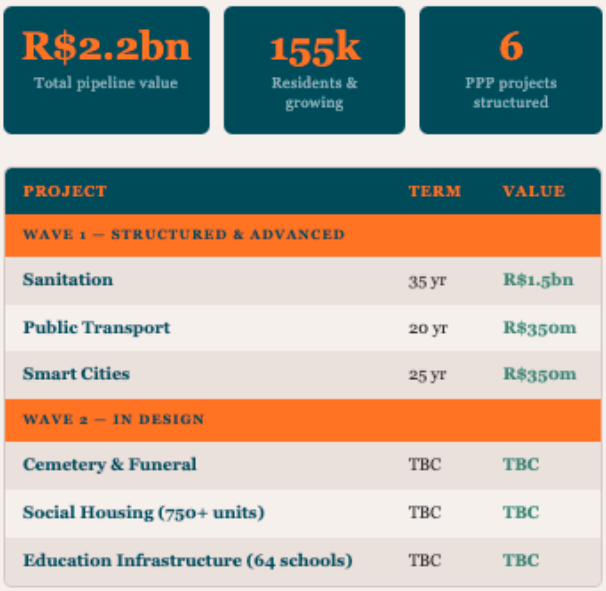
Cemetery and funeral services - capacity expansion, service standards, data governance, and replacement of emergency contracting.

Social housing lease - at least 750 units to expand supply under lifecycle maintenance and service levels.

Education infrastructure - 64 schools, including 12 leased facilities; modernization, planned maintenance, and availability standards.

Parallel track, public assets

Arena, events pavilion, and botanical zoo assessed for concessions, PPP variants, performance-based management contracts, and/or naming rights arrangements.



MUNICIPAL CONTEXT: WHY INSTITUTIONAL CAPACITY STRENGTHENS PPP EXECUTION

PPP portfolios do not thrive on structuring quality alone. They depend on the municipality's ability to set targets, verify delivery, disclose results, and sustain enforcement routines throughout the contract life.

In practice, a city's delivery capacity becomes a risk variable in every long-duration contract.Brusque has been reinforcing these preconditions through three reinforcing tracks.

First, the municipality formalized annual Management Contracts between the Mayor and municipal secretaries, with indicators, targets, and a monitoring cadence for the 2025-2028 cycle. This instrument helps institutionalize a performance culture inside government, directly compatible with PPP logic: targets, KPIs, accountability and monitoring.

Second, Brusque has advanced a digital-by-design approach through Brusque+Digital, emphasizing process redesign and standardization to reduce queues, rework, and administrative friction. For PPP governance, digitalization functions as infrastructure: it improves auditability, data integrity, contract reporting, and KPI verification.

Third, the city's trajectory includes governance and service signals that reinforce credibility for long-duration contracting. These signals do not replace PPP fundamentals, but they reduce execution risk by strengthening the municipality's institutional posture: clearer accountability, stronger reporting routines, and greater predictability in decision-making.

WHY MUNICIPAL PPPS TEND TO STALL AND WHAT PORTFOLIO DISCIPLINE CHANGES

Municipal PPPs typically stall when structuring is treated as a one-off exercise: inconsistent templates, weak sequencing, limited standardization, and unstable procurement signaling. Even when procurement succeeds, a second failure mode often follows: under-resourced contract management that erodes value for money over time.

Portfolio discipline addresses both problems. It moves the municipality from project-by-project action to repeatable governance: prioritization, standardized preparation, procurement predictability, and a coherent narrative to market and society.

It also makes contract management an explicit program component rather than an afterthought.

WAVE 1: THREE FLAGSHIP PPPS STRUCTURED AND UNDERWAY

1) Sanitation: from universal water to zero sewage treatment - finally unlocking delivery at scale

Brusque is a stark example of how service baselines define the challenge. The municipality has already universalized water abstraction, treatment, and distribution, with strong service quality. At the same time, sewage collection and treatment is effectively zero: Brusque has no sewage treatment plant and no functioning sewage treatment system. For more than three decades, the municipality attempted to solve the problem through different routes - municipal investment, financing, and federal programs - without reaching a scalable solution.

The PPP reframes the problem as an outcome-based delivery program backed by bankable investment sequencing. Brusque's sanitation PPP is structured as a 35-year contract of approximately R$ 1.5 billion, with around R$ 700 million in investments in the first eight years, targeting rapid expansion of collection networks and treatment capacity. The trajectory is designed to align with Brazil's sanitation policy ambition for 90% sewage treatment and universalization by 2033, shifting the municipality from repeated attempts to enforceable obligations tied to performance and lifecycle responsibility.

Practitioner lens: this is a baseline discontinuity PPP - moving from a service baseline of zero to a regulated, auditable performance regime. The governing discipline is not construction alone; it is the system of milestones, treatment performance standards, continuity requirements, and verification routines that sustain delivery over time.

SDG alignment:
SDG 6, SDG 3, SDG 11, with environmental spillovers aligned to SDG 14 and SDG 15.

2) Public transport: ending emergency contracting and redesigning the network as a service system

Public transport in many Brazilian municipalities has been trapped in a cycle of emergency arrangements - short-term instruments that, in practice, dilute incentives for modernization and weaken service standards. In Brusque, this pattern persisted for roughly 15 years under emergency contracting, a high-friction and high-risk model in the Brazilian bureaucratic environment.

The new concession breaks that cycle. Brusque's public transport project is structured as a 20-year contract of approximately R$ 350 million, combining modernization and network redesign with explicit service delivery commitments. The model includes new lines, fleet renewal with new buses, and four new transfer terminals. Operationally, it replaces a predominantly radial network with a more optimized circular logic, improving connectivity between neighborhoods, reducing inefficiencies, and strengthening system reliability.

Practitioner lens: the value proposition is to contractualize reliability and modernization, not merely continuity. A long-duration concession allows enforceable service levels, auditable

reporting, and disciplined change control - enabling the municipality to govern mobility as a service platform rather than a recurring crisis.

SDG ALIGNMENT:
SDG 11, SDG 9, SDG 10, SDG 13.

3) Smart cities: a 25-year service platform for lighting, connectivity, data, and safer streets

Smart city programs often underperform when framed as technology acquisition. Brusque's model is structured as a long-term service platform, combining modernized public lighting with an integrated layer of urban intelligence: connectivity, monitoring, and data-enabled operations.

The Smart Brusque project is structured as a 25-year PPP with a contract value in the range of R$345-357 million, as presented in the project material. The scope is comprehensive and outcome-oriented, including, among other components: (i) a fully efficient lighting park with 20,000+ points, (ii) 55-73 km of fiber optic backbone (as presented), (iii) 463 cameras combining urban monitoring and digital perimeter controls, and (iv) connectivity across 126 public buildings plus public Wi-Fi points.

Practitioner lens: the contract's strategic role is to institutionalize service levels for an integrated urban platform - availability, response times, uptime, reporting integrity, and measurable safety and operational outcomes - rather than to simply procure equipment.

SDG ALIGNMENT:
SDG 9, SDG 11, SDG 16, SDG 17.

WAVE 2: PROJECTS IN DESIGN WHERE PPPS CONFRONT HARD MUNICIPAL PROBLEMS

Brusque's second wave targets domains that municipalities often postpone due to sensitivity, institutional informality, or chronic under-investment. The common thread across these three projects is straightforward: each combines a visible service problem with a structural governance gap, and each benefits from a model that can front-load investment, professionalize operations, and enforce service levels over time.

Cemetery and funeral services: capacity exhaustion and legal insecurity under emergency contracting

Brusque operates a municipal public cemetery that is already above 92% occupancy, placing the city on the edge of a capacity and service continuity problem. In parallel, funeral services are currently governed by an emergency contract, a model that produces persistent legal insecurity for both the public sector and the private operator. This combination - rapidly diminishing capacity and fragile contractual foundations - creates a high-risk environment for planning, investment, and service quality. The project now in design aims to address the problem as a service system: expanding and modernizing capacity, improving operational standards, strengthening data governance and transparency, and replacing emergency arrangements with a stable, bankable long-term regime. In this domain, the value of a partnership is less about outsourcing and more about restoring predictability, enforceability, and dignity through clear service obligations and lifecycle responsibility.

Education infrastructure: restoring the education mission by treating infrastructure as a managed service

Brusque's education network comprises 64 schools, and 12 of them operate in leased facilities. A significant portion of the building stock is over 20 years old, with recurring infrastructure issues that consume management attention and institutional energy. In practice, school directors and coordinators are frequently pulled into structural problem-solving rather than focusing on their core mission: learning outcomes and pedagogy.

The education infrastructure partnership under design is intended to invert this logic. By treating infrastructure as a continuously managed service - with planned maintenance, availability standards, and predictable lifecycle investment - the model seeks to protect the pedagogical focus of the education system.

Social housing lease: managing rapid population growth and correcting a market response gap

Brusque is growing at an accelerated pace, placing sustained pressure on public services and urban infrastructure. This demographic trajectory amplifies a central constraint: the mismatch between housing demand and the supply of affordable units.

While the public sector has updated or is updating core planning instruments, the private market response has not progressed at the same speed. The social housing lease project under design seeks to use an outcome-based mechanism to inject supply capacity into the market.

The model is being structured to deliver at least 750 housing units, with lifecycle maintenance and service standards embedded, creating a predictable pipeline of units aligned with public policy goals.

SDG ALIGNMENT FOR WAVE 2:
SDG 1, SDG 4, SDG 10, SDG 11, SDG 16

A PARALLEL TRACK: OPTIMIZING LANDMARK PUBLIC ASSETS THROUGH CONCESSIONS AND NAMING RIGHTS

Alongside the Wave 1 and Wave 2 pipeline, Brusque is advancing a parallel track focused on strategic public assets: large, high-visibility facilities that are valuable to citizens but structurally expensive to operate and maintain. These assets have strong potential for operational optimization and revenue-generation mechanisms, particularly when the objective is to preserve public access while improving lifecycle maintenance, programming capacity, and financial sustainability.

The city currently manages a 5,000-seat arena, a large events pavilion with capacity above 20,000 people, and a botanical zoo. Their architectural identity - German-inspired structures in the 'Chaimel' style - adds cultural value, but also reinforces the need for qualified operations, preservation standards, and professional facility management.

These assets are being assessed under a portfolio of possible partnership instruments - concessions or PPP variants focused on operation, maintenance, and programming; performance-based management

contracts; and the sale of naming rights and other commercial rights - creating structured channels for more active private participation without compromising public purpose.

This parallel track reinforces a broader portfolio lesson: municipalities need a diversified toolbox. PPPs are one instrument among several, and high-performing cities match the instrument to the problem profile - risk, revenue potential, service criticality, and the level of lifecycle responsibility required.

REPLICABILITY FACTORS: WHAT OTHER MID-SIZED CITIES NEED

Brusque's experience suggests practical conditions for replication. The starting point is not technical; it
is political. A portfolio of long-duration, performance-based partnerships requires explicit sponsorship
from the municipality's top political leadership, sustained over the full cycle of project preparation,
procurement, and early contract mobilization.

- Political sponsorship as day zero: clear alignment from the Mayor and top leadership that the PPP agenda matters, will be defended publicly, and is a legitimate instrument to solve priority public problems rather than an exceptional transaction.

- A visible portfolio owner with mandate: a dedicated unit with authority to prioritize, structure,procure, and coordinate oversight across departments.

- Data-driven diagnosis and problem definition: robust baselines grounded in data on demand, service levels, asset condition, lifecycle costs, and user experience - enabling realistic KPIs.

- PPP as one instrument among several: particularly suited to front-loaded investment, specialized operational capability, and lifecycle accountability, paid over time under enforceable performance regimes.

- Standardization and procurement predictability: common templates, sequencing, and review gates.

- Contract management as a program: staffing, monitoring protocols, enforcement routines, data governance, and disciplined change control from day one.

THE INSTITUTIONAL INFLECTION POINT: FROM STRUCTURING CAPABILITY TO CONTRACT MANAGEMENT CAPABILITY

After a year of portfolio consolidation, the decisive frontier becomes contract management capacity. As the ability to prioritize and structure projects matures, the binding constraint shifts to governing outcomes across decades: KPI verification, service-level enforcement, disciplined variations, transparent reporting, and resilience across political cycles. Structuring creates transactions; contract management protects outcomes.

CONCLUSION

Brusque's PPP agenda challenges the assumption that sophisticated partnership portfolios belong only to large cities or higher tiers of government. A mid-sized municipality can treat PPPs as a municipal operating system if it couples project preparation with repeatable governance and invests deliberately
in contract management capability. The next phase is therefore less about expanding the list of projects and more about institutionalizing long-term performance governance.

Contract management capability must be designed into the program from the beginning, because strong KPIs and enforceable service regimes are built on robust baseline diagnostics, reliable data, and governance routines that sustain verification and enforcement
over time.

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06
Humanizing Dispute Resolution for the PPP Life Cycle

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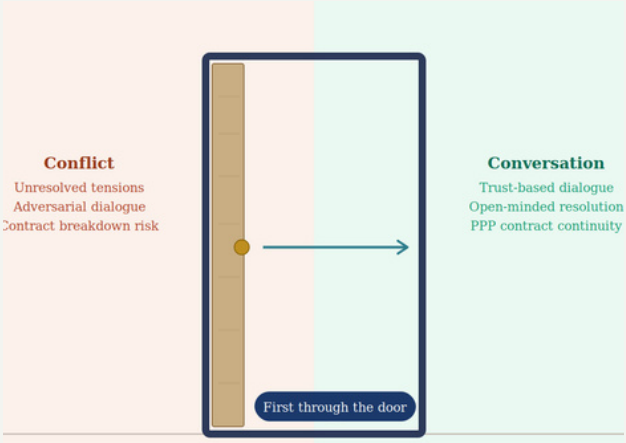
Closing the huge public infrastructure gap is a massive challenge and concessional (user paid) Public-Private Partnerships (PPPs) are a strategic tool to attract private capital, thereby avoiding debt traps or excessive burdens on public budgets. The World Association of PPP Units and Professionals (WAPPP) serves as the global home of public-private partnership professionals and has a technical assistance arm for capacity building. In this context, a Dispute Avoidance and Mediation Advisory Centre (DAMAC) has been created. We often see that mediation is perceived as an 'alternate' mode of dispute resolution. DAMAC aims to contradict this perception by establishing mediation as the first avenue through the door when differences arise, especially those involving multiple stakeholders.

At DAMAC, we strongly believe that more conversational and trust-based methods like mediation that promote open-mindedness, non-violent communication and active listening must be first-in-line when it comes to tackling differences between parties to a complex PPP contract. We intend to have experts in the fields of mediation and PPP management ever-present on the expert roster, who are always available to guide our members through difficult situations and help them navigate what would otherwise be a confrontational dialogue in a non-adversarial manner. We operate on a system built on trust, awareness and education, thereby, equipping our member PPP units and professionals with all the logistical tools needed to approach their differences in an amicable way.



"DAMAC aims to establish mediation as the first avenue through the **door** when differences arise — not the last resort."

We believe that low-stress dialogue through mediation sets our members up for success as it promotes honesty, accountability and transparency and addresses the underlying emotions and expectations, along with the numbers and contracts.

Our aim is to use this principle to build an ecosystem where mediation is used as a powerful tool that not only resolves disputes on a micro-scale, but also contributes on the macro-level by preventing cancellation of PPP contracts.

Early detection of tensions

A major part of the ecosystem we are attempting to build revolves around the phase before a dispute even arises between the parties. We believe that the periods before and after mediation are equally important in delivering a successful resolution service. We like to call our early detection mechanisms the 'Dispute Avoidance' or the 'Conflict Prevention' Phase, which make a significant part of our overall project.

A constant chain of communication is to be maintained between the stakeholders of a PPP contract so that any friction is detected before it escalates. In this manner, we aim to ensure that differences are smoothed out in every phase of the contract and de-escalate issues before they reach a stage where dispute resolution intervention is required. This can be achieved by employing a range of methods like engagement of cross-functional PPP teams, redesigning structures and stakeholder dialogue frameworks.

We also aspire to help the members visualize contracts in unconventional and understandable ways in order to ensure that the prospect of these contracts does not feel as intimidating or difficult to understand.

> A constant chain of communication is to be maintained between stakeholders so that any friction is detected before it escalates."

Our goal is to ease every step of the process by implementing creative models like Legal UX Design and collaborative contracting to help the members navigate the waters with far more comfort. For this, we take inspiration from successful contracting systems created by NEC, EIC, CICA and the FIDIC Dispute Avoidance and Adjudication Framework. With the help of these models to guide us, we attempt to create a similar ecosystem for PPP units that is truly winsome.

Eradicating siloed approach to dispute prevention - especially in long-term infrastructure projects, like PPPs

Overcoming organizational silos becomes extremely important when ensuring that there are no disruptions by unresolved conflicts. A range of departments within an entity are involved in the realization of a PPP project. This significantly increases the number of stakeholders, and as a result, the epicenters of differences also become equally exponential.

We firmly believe that these small origination points of friction need to be noted in order to nip the problem at the bud before a formal dispute resolution track is established. If we are to proactively address potential conflicts within a system, we must distribute our attention to every player involved in the project. Segregating departments and isolating their functions detaches crucial perspectives and positions which are important to understand the entirety of the conflict.

Therefore, an important part of our services would be to ensure that all actors in a PPP contract are sufficiently incorporated into the dispute prevention ecosystem so that all concerns are identified in a timely fashion and resolved accordingly.

They all will be made to feel equally a part of the process with a meaningful say in what affects them.

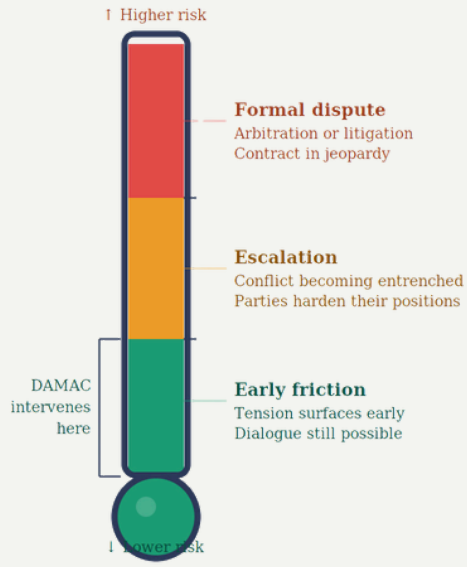
Collaboration with dispute resolution boards

A very powerful collaboration that we plan on creating is with dispute resolution boards. Dispute resolution boards are an important tool that could play an influential role in preventing cancellation of long-term infrastructure projects. Most long-term and PPP contracts often envision dispute resolution boards as a possible mode of dispute resolution at the very outset of the relationship. We aspire to adjoin mediation alongside this vision and leverage this powerful partnership to generate meaningful options for our members so they can visualise their outcomes and choose what is best for them. Our relationship with the Dispute Resolution Board Foundation (DRBF) is a step in the right direction to realise this aspiration.

Mediation windows & Post-mediation follow throughs

One of the most important parts of a successful mediation process is ensuring that the resolutions and discussions are followed through once a session is completed. This heavily depends on engaging with the stakeholders and taking their feedback seriously. Consulting with the community plays a really important role in the kind of results that we wish to achieve. We treat these consultations not just as obligations arising out of a mediation, but as a crucial process that ensures transparency, fairness and participation.

A disconnect could develop between the parties at any given point during the mediation windows. Parties often find themselves in highly stressful and emotionally charged situations, which need to be de-escalated not just in the



mediation room, but also through the communications conducted outside of it. We aim to use mediation to create a structured system where the stakeholders can express their concerns and expectations. We want to take this information, pair this with our expertise and produce solutions and conversations that hold the capacity to keep the parties at ease and realise the ultimate goal that they have in mind. This dialogue will be uncomplicated and lack the pressure of formal communication pathways. This is how we aspire to build a strong foundation for open-minded and healthy communication.

07
Strengthening the Efficiency of FCCL Management for PPPs to Support Sustainable Financing & Improve Economic Viability

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Why FCCL Governance Matters for Sustainable Infrastructure Financing

Public–Private Partnerships (PPPs) have become one of the most widely used tools for governments seeking to deliver infrastructure and public services without placing immediate pressure on public budgets. Around the world, PPP models are used to finance projects ranging from highways and hospitals to energy and water systems.

By partnering with the private sector, governments can mobilize investment, introduce innovation, and improve service delivery. However, while PPPs offer clear advantages, they also introduce long-term financial commitments that can quietly accumulate and create fiscal risks if not properly managed.
At the center of this challenge is a concept that has become increasingly important in public financial management: Fiscal Commitments and Contingent Liabilities (FCCL).

> "The actual workload of a lead contractor extends well beyond the activities formally stipulated in the concession agreement."

Understanding and managing FCCL effectively is essential if governments want PPP programs to remain financially sustainable over the long term. Recent research examining the institutional role of PPP Units and the governance of FCCL provides valuable insights into how countries are approaching this challenge —and where gaps still remain.

Beyond Financial Calculations: FCCL as a Governance Tool

Although FCCL analysis is often viewed as a technical exercise, it is fundamentally a governance issue. Effective FCCL management requires governments to establish institutional frameworks capable of:

- Identifying fiscal commitments early in project preparation,
- Evaluating contingent risks,
- Integrating fiscal impacts into budget planning, and
- Monitoring commitments throughout the project lifecycle.
- Without such systems, governments risk underestimating the long-term financial implications of PPP projects. Modern fiscal theory increasingly recognizes that long-term commitments, whether direct or contingent, function much like public debt if they are not properly controlled. As a result, managing FCCL has become a key component of responsible public financial management.

The Institutional Role of PPP Units

One of the most important institutional actors in PPP governance is the PPP Unit. These specialized government entities typically support the development and implementation of PPP projects by providing technical expertise, reviewing project proposals, and ensuring value for money.

Research based on a survey of PPP professionals shows that PPP Units often play a central role in the management of FCCL—especially in countries where dedicated fiscal risk units do not exist.

In practice, PPP Units frequently contribute to FCCL management by:

- Reviewing financial models for PPP projects,
- Identifying potential government payment obligations,
- Coordinating with ministries of finance and sectoral ministries, and
- ·Supporting the preparation of fiscal commitment reports.
- However, the study also reveals that institutional arrangements for FCCL management vary widely across countries. In some cases, PPP Units take the lead in fiscal risk analysis, while in others responsibility is shared with ministries of finance or other government departments. This lack of a consistent institutional model highlights the need for clearer governance frameworks.

What the Survey Reveals

To better understand how governments manage FCCL in practice, the research collected responses from 79 PPP experts and practitioners working in government institutions and PPP units. The survey results provide a valuable snapshot of current practices in fiscal risk management.

Fragmented Institutional Landscape

Nearly half of respondents reported that their organizations either lack a dedicated FCCL unit or assign these responsibilities directly to PPP Units

This suggests that in many countries, FCCL management remains institutionally fragmented, with responsibilities distributed across multiple agencies.

Experts also indicated that roles and responsibilities related to FCCL are not always clearly defined, highlighting the need for stronger coordination between PPP Units, ministries of finance, and sector ministries.

Limited Use of Advanced Risk Assessment Tools

Another key finding concerns the methodologies used to estimate fiscal risks. While many governments apply formal tools or models to assess FCCL, respondents reported that the use of advanced quantitative methods remains limited.

Some countries rely on internationally recognized models such as the PPP Fiscal Risk Assessment Model (PFRAM) developed by international financial institutions. Others use scenario analysis or financial modeling.

However, survey responses suggest that existing methodologies may not always be sufficiently robust to capture the complex and uncertain nature of contingent liabilities in PPP projects. This highlights the need for greater technical capacity and improved analytical tools.

When Are Fiscal Risks Assessed?

The study also explored the stages of the PPP project lifecycle at which FCCL assessments typically occur. The results indicate that most fiscal risk analysis is conducted during:
·the feasibility stage, and
·the contract negotiation or financial close stage.

IConducting FCCL analysis before finalizing project agreements is a positive practice, as it allows governments to evaluate fiscal implications before making binding commitments. However, the study found that FCCL assessments are rarely updated during project implementation or operation.

This is a significant gap. Fiscal risks can evolve over time due to economic changes, demand fluctuations, or project performance issues. Without continuous monitoring, governments may struggle to respond to emerging risks. Embedding FCCL analysis throughout the entire project lifecycle is therefore essential.

Transparency and Fiscal Governance

Transparency is another critical element of effective FCCL management. Survey responses indicate that while many institutions prepare internal FCCL assessments, the disclosure of these results remains limited.
In many cases, fiscal commitments associated with PPP projects are not systematically published in budget documents or financial reports. Yet international best practices increasingly emphasize the importance of transparency.

Countries with advanced PPP programs often disclose PPP-related liabilities in:

- annual budget documents,
- medium-term fiscal frameworks, and
- public financial statements.
- Such disclosures strengthen fiscal discipline, improve accountability, and allow policymakers to make better-informed decisions about infrastructure investments.

Lessons from International Practice

Global experience shows that countries that successfully manage PPP-related fiscal risks typically adopt several key practices. These include:

- Clear legal frameworks governing fiscal commitments and guarantees.
- Dedicated institutional arrangements for monitoring fiscal risks.
- Standardized methodologies for estimating contingent liabilities.
- Integration of FCCL into national budgeting systems.
- Transparent reporting of fiscal commitments.

Countries such as Australia, Chile, and South Africa have implemented robust systems for evaluating PPP-related liabilities and linking them to broader fiscal management frameworks.
These examples demonstrate that strong governance structures can significantly reduce fiscal risk while maintaining investor confidence.

The Case for Reform

The survey results show a strong consensus among PPP professionals on the need to strengthen FCCL governance. In fact, the highest level of agreement among respondents concerned the urgent need for a dedicated legal or regulatory framework governing FCCL management.

Experts also emphasized the importance of integrating FCCL results into public budgeting processes and decision-making systems. Such reforms would allow governments to better assess the long-term affordability of PPP projects and avoid unexpected fiscal shocks.

Building a Stronger FCCL Framework

Improving FCCL management requires a combination of institutional, legal, and technical reforms. Key priorities include:

1. Establishing Clear Institutional Responsibilities

Governments should define which institutions are responsible for FCCL analysis, monitoring, and reporting. Strong coordination between PPP Units and ministries of finance is essential.

2. Strengthening Legal and Regulatory Frameworks

Dedicated legal frameworks can help standardize methodologies, clarify responsibilities, and ensure accountability in fiscal risk management.

3. Enhancing Technical Capacity

Public officials involved in PPP programs need access to advanced analytical tools and training in fiscal risk modeling.

4. Integrating FCCL into Budget Planning

Fiscal commitments should be incorporated into national budgets and medium-term fiscal frameworks to support responsible financial planning.

5. Promoting Transparency

Publishing FCCL information improves governance, strengthens investor confidence, and allows stakeholders to understand the long-term fiscal implications of PPP programs.

Looking Ahead

Public–Private Partnerships will continue to play an important role in financing infrastructure and supporting economic development worldwide. However, their long-term success depends not only on attracting private investment but also on managing the fiscal risks they generate.

FCCL governance provides a framework through which governments can balance these objectives—ensuring that PPP projects deliver value while protecting public finances. Strengthening FCCL management is therefore not simply a technical reform. It is a fundamental step toward building sustainable and resilient PPP programs capable of supporting development for decades to come.

Public–Private Partnerships will continue to play an important role in financing infrastructure and supporting economic development worldwide.

WAPPP

Voices from the Chapters WAPPP's Global Community

01.

AI and Digital Transformation in Healthcare PPPs

02.

Benefits and Challenges of Implementing AI and Digital Health in Healthcare

03.

Partnership Models for Digital Health and AI

Overview and Context

This webinar was the first installment in a mini-series jointly organized by the Social Sector PPP Chapter and the Technology and AI Chapter of WAPPP (World Association of Public-Private Partnership Professionals). The session brought together practitioners from across the globe to explore how artificial intelligence and digital transformation are reshaping the delivery of healthcare and other social services. The moderator, Nasser Masoud, opened by framing the central challenge: healthcare systems worldwide face enormous pressure to achieve universal health coverage, yet they operate with significant gaps in infrastructure and severe shortages of health workers. He positioned AI and digital transformation as key levers to bridge these gaps — not just in healthcare, but also in elderly care, housing, education, and government service delivey.

Thibaut's Overview: What is AI and Why Does it Matter for PPPs?

Thibaut opened with a non-specialist introduction to artificial intelligence. He explained that AI refers to systems designed to mimic aspects of human intelligence — learning from data, making decisions, and simulating reasoning. He distinguished between narrow AI (task-specific, where we are today) and general AI (which would match full human cognitive capabilities including emotion and creativity, still years or decades away).

He outlined the core AI technologies in use: machine learning for pattern recognition and prediction, natural language processing, and computer vision. In practical terms, AI today can automate repetitive tasks, generate predictive insights from large datasets, personalize services for individual users, and process information at a scale impossible for humans alone.

Thibaut was candid about AI's limitations: it is highly data-dependent and vulnerable to bias if fed skewed data; it operates as a "black box," making its reasoning opaque and its outputs prone to errors or hallucinations; it raises significant ethical and privacy concerns; and its infrastructure costs can be prohibitive for governments in low- and middle-income countries.

In the context of Public-Private Partnerships, he highlighted specific risks — particularly that AI introduced without clear governance can reinforce inequalities or erode public trust. He stressed the need for multi-stakeholder governance frameworks to ensure accountability. On the opportunity side, he was enthusiastic: AI can drive tailored innovation, enable solutions to scale from one city to many at reduced cost, and foster collaboration between public oversight and private innovation. He concluded that PPPs are uniquely positioned to implement AI responsibly, and called for AI to be embedded at the strategic level of health-sector PPPs.

Remy's Presentation: Global Use Cases in AI-Driven Health PPPs

Remy presented three international examples of AI being deployed within PPP frameworks.
The first was Rwanda's partnership with Babylon Health, launched in 2020. The platform provides AI-powered primary care via mobile phones, now serving over 2 million users — roughly 30% of Rwanda's population. Patients interact with an AI chatbot for symptom triage and can receive consultations, prescriptions, and lab referrals by SMS, without visiting a clinic. The AI is localized to Rwanda's health protocols, language, and epidemiological context, making it a genuine public-private model combining government oversight with private digital innovation.

The second case focused on AI-powered radiology, specifically the use of AI to interpret chest X-rays for tuberculosis and other lung conditions in countries including Kenya, Pakistan, India, Nigeria, the UAE, and Vietnam. The AI system has been benchmarked against expert radiologists and demonstrated accuracy above 90%, significantly cutting the time from imaging to diagnosis. Remy made a powerful point: in France there are roughly 120 radiologists per million people, while in some African countries there are as few as 2–10. In such contexts, AI doesn't replace doctors — it multiplies them, effectively turning five radiologists into the equivalent of twenty-five.

The third case was Estonia's nationally integrated e-health system, where citizens access complete medical records via digital ID and all prescriptions are digital. AI operates in the background to detect fraud, validate insurance claims, support predictive analytics, and enable performance-based budgeting. Remy presented Estonia as a model for how transparent, resilient digital health infrastructure can be sustainably built and governed, with lessons applicable to emerging markets.
His overall conclusion: AI in low- and middle-income countries is not just a technological story — it is a story about equity, inclusion, and system transformation.

Varun's Presentation: AI Applications and PPP Collaboration Models

Varun surveyed the range of AI applications already active in global healthcare: early detection of cancers and cardiovascular disease, clinical decision support systems drawing on electronic health records, AI-enhanced treatment planning, AI-powered

telehealth and triage, wearable devices like continuous glucose monitors, and AI-assisted palliative and end-of-life care.

He then detailed the key areas where PPP collaboration can drive AI adoption in health: research partnerships between governments, academic institutions, and technology companies; optimizing clinical workflows and diagnostic efficiency; building cloud-based digital infrastructure accessible to smaller organizations; using epidemiological data for population health management (as seen during COVID-19); and hybrid risk-sharing models that distribute financial, operational, and implementation risk between public and private partners.

Varun presented two specific screening programs. In India's Punjab state, thermal imaging technology (Nirmay Thermalytics) was deployed across 183 sites to screen roughly 15,000 women for breast cancer in a single year, at a cost of $15–17 per test versus $50–100 for mammography, with a 90%+ sensitivity rate and a threefold higher detection rate than standard clinical exams. In Kenya, a smartphone-based eye screening app called PeakAcue achieved 94% accuracy, reduced loss-to-follow-up by 40%, and reached 5.3 million people across seven counties — at a cost per person of $0.50 versus $68 for traditional methods, and six times lower cost per completed referral.

He closed by calling for federated learning architectures (where AI models are shared rather than patient data), global interoperability standards, cloud-based AI tools accessible to smaller providers, and hybrid risk-sharing frameworks as the way forward.

Meriem's Presentation: AI in Remote Monitoring for Chronic Disease

Meriem focused on the enormous and often underappreciated burden of non-communicable diseases, which account for nearly three-quarters of global deaths — approximately 41 million annually. She described the "vicious cycle" of chronic illness: late diagnosis, limited care access, poor medication adherence, avoidable hospitalization, and financial burden. Studies suggest that up to 70% of chronic patients could benefit from remote care models.

She explained how AI enables remote monitoring through continuous real-time data processing from wearables (blood pressure monitors, pulse oximeters, glucose meters), predictive risk stratification to flag deteriorating patients before symptoms are visible, behavior nudging to support medication and activity adherence, and integration with clinical decision support dashboards.

She drew on three real-world examples. In France, the Prety Health pilot monitored heart failure and hypertension patients using wearable devices and AI-generated alerts, embedded in a public-private research ecosystem. In Ireland, a virtual hospital model on a remote island (Inis Mór) monitored COPD and heart failure patients using smart wearables connected to mainland clinical teams via AI analytics, in partnership with the University of Galway, the Irish Health Service, and Cisco. In the United States, Omada Health has built a fully remote chronic care platform for diabetes, obesity, and mental health, integrated within Medicaid, Medicare Advantage, and large employer payer networks.

Her most important lesson across all three cases: technology maturity alone is insufficient. Without system readiness, stakeholder trust, and local fit, even well-funded pilots fail to scale. As she put it, no trust means no adoption; no alignment means no scale; and no local fit means no impact — regardless of intentions or funding.

Saqib's Presentation: ROI, Hospital Operations, and the Future

Sakib closed the presentations by emphasizing the need to calculate return on investment rigorously — noting that surveys suggest 50–56% of organizations implementing AI have seen no ROI or negative ROI, often due to rushing adoption without clear financial planning.

His examples included Thailand's national AI program for diabetic retinopathy screening, which reduced referral times by over 60% and achieved 90%+ sensitivity; Johns Hopkins' AI-powered capacity command center (built with GE Healthcare), which cut ER wait times by 30% and discharge times by 21% and proved vital during COVID-19; and Johns Hopkins' sepsis early warning model, which monitored over half a million patient encounters and reduced sepsis mortality by 20%.

He closed with a WHO projection: investing as little as $4 per patient in telemedicine, mobile messaging, and chatbots could save 2 million lives over the next decade and generate nearly $200 billion in economic benefits, with a return on investment of 12:1.

Conclusion

The session ended with the moderator noting the upcoming next installment of the mini-series, which will explore implementation challenges in greater depth and develop frameworks for how PPPs can be structured to deploy AI at scale. The overarching message of this first session: AI is not a silver bullet, but when embedded in well-governed, stakeholder-inclusive public-private partnerships, it is one of the most powerful tools available for closing global healthcare access gaps.

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WAPPP "NEXTLEVELPPPS"

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Link:
https://tinyurl.com/ypp6pyse

Overview and Context

This was the second installment in a three-part mini-series jointly organized by WAPPP's Social Sector PPP Chapter and Technology and AI Chapter. Intorduced by Nasser Massoud and moderated by Thibaut Mourgues, the session built on the first webinar's exploration of global use cases and shifted focus toward the practical benefits, real-world challenges, and strategic frameworks needed to implement AI and digital health effectively. Four panelists contributed: Dr. Tamara (a healthcare AI strategist), Stefan Lazarski (a PPP and health technology consultant with a PhD on AI in healthcare PPPs), Dr. Varun Goyal (a health economist specializing in digital health implementation in India), and Meriem Mesfioui (a digital health adoption and stakeholder engagement specialist).

Dr. Tamara: Ten Lessons for AI Implementation in Healthcare

Dr. Tamara opened with a high-energy, provocative framing. She showed an AI-generated image of a futuristic city to illustrate how generative AI has already broken into creative fields once considered exclusively human — underscoring both the pace of change and its implications for healthcare. She referenced OpenAI's "Strawberry" (the o1 reasoning model), noting that its deeper contextual reasoning is a significant game-changer for clinical applications, pushing AI performance well beyond standardized examination benchmarks.

She then posed a pointed question to the audience: would you let a robot surgeon operate on you? Her point was to challenge reflexive skepticism.

NHS research, she noted, shows that robotic-assisted surgery correlates with reduced blood loss, fewer infections, shorter hospital stays, and faster recovery. The analogy she favored throughout was AI as an airplane's co-pilot — it doesn't replace the pilot, but prepares the data, handles routine processing, and frees the physician to focus on judgment and patient interaction.

Her ten lessons for AI implementation were delivered in reverse order, but collectively amounted to a robust strategic checklist:

- Deploy AI with a clear strategy and defined use cases, not as a technology in search of a problem.
- Insight from AI doesn't automatically save lives — clinical response protocols must accompany every alert.
- Prediction is only valuable when backed by institutional protocol.
- Garbage data in means garbage results out; algorithms are only as good as the data they are trained on.
- Prompt engineering — how users communicate with AI models — is a foundational skill that must be taught, not assumed.
- Equity is not a checkbox but a design principle: if fairness is not coded in from the start, it is coded out.
- AI will increasingly be embedded by default into clinical systems, making standalone or decentralized AI tools obsolete.
- AI needs a runway: validated data, robust infrastructure, and a trained workforce. Without these, even excellent algorithms fail.
- Policy, technology, and health must work together — none of the three can drive AI adoption alone.
- Ethics and purpose must be built in from the beginning, not retrofitted.

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When asked about the most important barrier to generalizing AI, Tamara placed policy and regulation first. She pointed to Saudi Arabia's SDAIA as an example of a country that has published a clear AI ethical framework and governance policies, available publicly, providing the guardrails that both organizations and regulators need when something goes wrong.

Stefan Lazarski: Use Cases from Siemens Healthineers and Lessons from PPP Research

Stefan, drawing on both his professional experience at Siemens Healthineers and his recently completed PhD dissertation on AI-driven innovation through PPPs in healthcare, presented four compelling case studies.

In Finland, Hospital Nova in Central Finland partnered with Siemens Healthineers to address imaging efficiency. The use of a single supplier for AI software, equipment, and training simplified governance and accelerated implementation. PET scan times were cut from 25 to 10 minutes — a major quality-of-life improvement for patients — while imaging precision and reporting quality improved significantly.

In Vietnam, a consortium involving Hanoi Medical University, Radiology Across Borders, and Screen Point Medical addressed a critical localization failure: AI diagnostic tools trained predominantly on data from American and European women were poorly calibrated for Asian women, who have higher breast density. The consortium re-trained the model on approximately 13,500 local patients, producing a cancer probability score

(1–10 scale) that allowed radiologists to prioritize the highest-risk cases. The key lesson: localization of AI is not optional — it is the difference between a functional tool and a dangerous one.

In Turkey, Siemens Healthineers worked with two major hospital laboratory networks (Medicana and Bayındır) to deploy predictive maintenance AI. The system monitored laboratory equipment and signaled when servicing was needed before breakdowns occurred, keeping workflows uninterrupted. One hospital grew from 5,000 daily laboratory results to 100,000 over four years — enabling same-day results and eliminating overnight stays for patients traveling from rural areas.

In Barcelona, Hospital del Mar partnered with Siemens on automatic organ contouring for cancer radiotherapy. AI replaced manual contouring, improving precision in identifying organs at risk and enabling personalized, adaptive treatment plans. The result: more precise therapy, time savings, reduced waste, and lower costs.

From his PhD research, Stefan identified two challenges that are often underemphasized in the literature: the need to involve clinical staff from the earliest stages of PPP design (not just at implementation), and the importance of expectation management — governments and healthcare leaders must define clear KPIs before engaging private partners. He also argued that quality improvement, not just cost efficiency, deserves explicit recognition as a PPP benefit, particularly in the social sector.
On staff resistance, Stefan was candid: specialists who have used the same equipment for 15 years resist change. The solution is not to override that resistance but to address it through open dialogue, early involvement, and co-creation — helping clinicians understand AI as a tool that enhances their autonomy, not diminishes it.

Dr. Varun Goyal: Benefits, Challenges, and a Road Map for LMIC Contexts

Varun offered a systematic overview of both the gains and the persistent obstacles of AI-driven digital health, with particular emphasis on low- and middle-income countries (LMICs).
On the benefits side: AI has transformed chronic disease management through better detection, monitoring, and adherence support. Patients are increasingly becoming "e-patients," taking active ownership of their health through wearables and mobile apps. AI-driven dashboards are improving transparency and accountability across health systems, from primary care centers to national governments. Telehealth combined with AI is reaching previously unserved rural and marginalized populations. And digitization is shifting health systems toward prevention, reducing long-term costs by catching conditions early.
On the challenges: fragmented electronic health records (EHRs) from incompatible vendors remain a fundamental barrier — algorithms trained on incomplete or siloed data produce unreliable results. Data privacy and security risks require strong legal frameworks, such as India's Digital Personal Data Protection Act of 2023. Infrastructure gaps — unreliable broadband, lack of data centers, inconsistent power — prevent scaling to village level. Algorithmic bias, driven by training data that over-

represents urban and dominant populations, risks creating inequitable tools. And regulatory complexity continues to slow innovation, while low digital literacy among rural and older populations limits uptake.

His proposed road map emphasized: designing solutions around local environments and user capabilities (citing an example where a patient feedback app had to be made compatible with feature phones because most rural users lacked smartphones); improving digital literacy by involving communities in solution design from the start; piloting before scaling; and using community health workers as trusted intermediaries between technology and end users. He also referenced a 2024 paper on the nine "digital determinants of health" — including ease of use, accessibility, affordability, digital literacy, algorithmic equity, and data poverty — as a practical checklist for solution design.

Meriem Mesfioui: A Scalable Framework for AI-Enabled Remote Monitoring

Meriem picked up directly from her Part 1 presentation, where she had identified three enablers — trust, alignment, and local fit — as consistently determining whether AI remote monitoring programs succeed or fail. Her goal for Part 2 was to translate those lessons into a practical, adaptable framework for implementation, particularly in LMICs.

She proposed a four-pillar model centered on the patient as a full human being, not merely a data point. The first pillar is robust digital infrastructure and interoperability — secure, interconnected systems that allow data to flow across levels of care. The second is an AI layer embedded in intuitive, user-friendly interfaces designed for nurses, patients, and doctors, not engineers. The third is clinical integration — aligning AI tools with existing workflows to enhance decision-making without creating digital fatigue. The fourth, and in her view the most critical, is system readiness and stakeholder intelligence.

She elaborated at length on this fourth pillar. It begins with deep stakeholder mapping — not just identifying institutions but understanding power dynamics, friction points, and where alliances might emerge. She recommended the WHO/ITU Global Digital Health Monitor as a structured tool for assessing system maturity across 23 indicators (governance, infrastructure, workforce readiness, equity, AI integration), and emphasized its value not just at national strategy level but at the project design level.

She also stressed the importance of adoption studies — understanding the emotional and structural barriers that prevent uptake even when technology is sound and systems are ready. Common barriers she identified include low digital and health literacy, fears about data misuse or job displacement, and a sense of losing control over one's care journey. She drew on the NASSS framework (Non-Adoption, Abandonment, and challenges to Scale, Spread, and Sustainability) as a particularly useful diagnostic tool.

Her core message on trust: it must be built by design, not assumed. This means transparent communication about data use (in plain language), early and meaningful involvement of

patients in co-design, gradual rollout blending technology with human support, culturally adapted interfaces, and frontline workers trained as trusted bridges between the technology and the communities it serves.

Closing Discussion: Key Questions and Future Outlook

A question from the audience raised whether PPP concession structures — historically long-term due to large capital expenditure — are appropriate for AI. The moderator and Stefan both clarified that AI and technology assets depreciate far more quickly than physical infrastructure, and that PPP structures for technology should be considerably shorter-term and built with flexibility for change.

When panelists were asked where the biggest AI healthcare breakthroughs of the next five years would come from, responses converged on several themes: generative AI and large language models in health economics and pharmaceutical research (Varun); robotics in clinical treatment (Stefan); "human interoperability" — building the social and relational infrastructure to match technical interoperability (Mariam); and the widespread capture of individual health data into electronic records as the foundation for genuinely preventative, population-level personalized medicine (Nasser).

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Overview and Context

This was the third and final installment in the WAPPP joint mini-series between the Social Sector PPP Chapter and the Technology and AI Chapter. Where the first webinar introduced AI and its healthcare applications, and the second explored benefits and challenges of implementation, this session focused squarely on partnership models — the structural, financial, and relational frameworks that enable AI-driven digital health to function at scale. The session was deliberately more interactive and conversational, with all panelists engaging in open dialogue rather than individual presentations. The moderator, Nasser Massoud, was joined by Thibaut Mourgues, Dr. Tamara Sunbul (Group Chief Information Officer of FA Care Group, Saudi Arabia), Dr. Yara Aboelwaffa (Senior Digital Health Technical Advisor at Health Enabled, formerly of WHO and ITU), Meriem Mesfioui (digital health adoption and stakeholder engagement specialist), and Dr. Varun Goyal (health economist and digital health consultant).

The Imperative for Partnerships

The session opened with a foundational question: why do public and private actors need to partner in the digital health space, and how has that imperative evolved?
Nasser set the scene by noting the inherent tension: the private sector has the agility and entrepreneurial drive to build innovative digital health solutions, but those solutions are only as good as the data and patient access they can draw on — both of which are held primarily by public health systems. This interdependence makes partnering not just beneficial but structural.

Dr. Tamara Sunbul reframed the conversation immediately.

Digital health PPPs are fundamentally different from traditional infrastructure PPPs, she argued, because there is no physical asset.

Instead of tracking bed occupancy, you measure readmission rates or the performance quality of an AI algorithm. Risk sharing changes accordingly — there's no building to repossess if things go wrong. The rise of software-as-a-service (SaaS) further blurs the line between a vendor relationship and a true partnership, since SaaS arrangements lack genuine risk sharing. She called for a reimagining of what shared goals and shared risk look like in this new landscape.

Dr. Varun Goyal added that digital health involves collaboration across multiple distinct actors — governments responsible for public health systems, providers and payers responsible for hospital-level care, and frontline community health workers — making partnership not just useful but necessary at every layer of the system.
Meriem Mesfioui brought a more structural and cultural lens, arguing that the imperative for partnership is not only financial or operational but deeply relational. Without co-built trust, she said, frontline workers resist change, patients distrust invisible systems, and public and private actors refuse to share control over sensitive processes.

The real enemy of innovation, she argued, is not technology failure but misalignment — ministries, payers, startups, and hospitals moving at different speeds with incompatible definitions of success. Partnerships create a shared frame of reference, common KPIs, and a basis for long-term accountability. Dr. Yara Aboelwaffa offered a historical perspective, noting that PPPs originated as financial instruments for infrastructure—concession agreements, availability payments, performance-linked contracts. That transactional view, she said, is now being replaced by a mission-driven model of shared value creation, where governments define a health mission and rally private co-creators around it. Crucially, data is a non-rival, reusable asset whose value multiplies over time—a characteristic that existing contractual structures were never designed to accommodate.

Thibaut Mourgues synthesized these threads by identifying three ways AI has fundamentally reshaped PPP models: first, AI systems are dynamic and learning (requiring contracts to measure performance not deliverables); second, data has replaced infrastructure as the central asset (raising issues of sovereignty, privacy, and equity); and third, AI enables precision at population scale — delivering personalized care across entire health systems in ways previously impossible.

Enablers for Successful Digital Health Partnerships

The panel was asked to each identify one key enabler. Thibaut nominated data governance — specifically federated architectures that allow AI models to learn from public-sector data without that data leaving the public environment. Yara focused on aligning incentives to the maturity of each country's ecosystem: early-mover advantage and regulatory co-design for lower-maturity countries; tax incentives and fast-track approvals for higher-maturity ones.

Meriem advocated for stakeholder orchestration — not just mapping who the stakeholders are, but actively managing the dynamics between them

insurers are opening their own clinics, reimbursing telehealth visits, and investing in digital engagement tools as part of a move toward value-based and population health care models. She argued that as healthcare financing shifts from fee-for-service to capitation and outcome-based payments, digital tools become essential — because keeping populations healthy at scale is impossible without data, remote monitoring, and AI-driven risk stratification.

Yara noted the broader need for new financing instruments — social bonds and other vehicles that recognize the longer time horizons needed to prove digital health effectiveness — and called for a reappraisal of return expectations that takes into account the fundamentally different nature of healthcare investment.

Closing Reflections

The panel closed with rapid-fire forward-looking statements. Thibaut reiterated that AI remains an immature technology and that robust safeguards and human oversight are essential while it matures. Meriem ended with a resonant principle: patients will trust digital health solutions when we stop designing for them and start designing with them. Yara called for more rigorous frameworks for aligning incentives across different partner types and country environments. Dr. Tamara offered the most sweeping closing: the future of PPPs is not about building hospitals — it is about building digital ecosystems where governments, private sector, insurers, and healthcare innovators co-create around data, outcomes, and inclusion, delivering not just infrastructure but long-term healthcare resilience.

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