



IFPSM Europe - ADACI

International Convention on Public Procurement

ROMA-NOVEMBER 6-7/2025

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INTERNATIONAL FEDERATION OF PURCHASING AND SUPPLY MANAGEMENT

ADACI

Italian Purchasing and Supply
Management Association

Founding Member
of the International Federation
of Purchasing
and Supply Management



IFPSM Europe - ADACI
International Convention on Public Procurement
ROMA-NOVEMBER 6-7/2025

ADACI

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- 5 Editorial
- 6 Welcome you to Rome
(Fabrizio Santini, President of ADACI)
- 7 Welcome to our Summit
(Chris Oanda, President of IFPSM)
- 8 China's Latest Achievements and Key Characteristics in Public Procurement
(Cai Jin, Vice President of IFPSM - from January 2026: President of IFPSM President of CFLP - China Federation of Logistics and Purchasing)
- 10 The Global Role of IFPSM in Advancing the Procurement and Supply Chain Profession (Marina Lindič, Secretary General of IFPSM)
- 12 The integrated principles inspiring Public Procurement
(ADACI Research & Development Committee)
- 22 SMEs in Public Procurement
(ADACI Research & Development Committee)
- 29 Innovation Procurement
(Giovanni Atti, former President of ADACI and Member of the Board of IFPSM)
- 38 Agentic AI in Public Procurement: a Framework and an Architecture
(Bernardo Nicoletti and Andrea Appolloni, University of Roma TorVergata, Italy)
- 45 Adoption of Artificial Intelligence in Public Procurement: Enabling Factors and Practical Bottlenecks in the Light of Pilot
(Mika Hänninen, Mika Immonen, Jukka Hallikas, Jyri Vilko, Susanna Närvänen, LUT University, Kouvola Unit, Finland)



In the central pages
we present:
49–51
the list of members
of IFPSM
and
52–55
a selection
of photographs
from the
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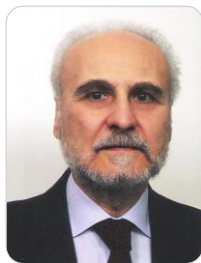


- 56** Xiamen Initiative on Global Supply Chain Development and Stability
- 57** Automation and Artificial Intelligence in Public Procurement - Between Vision and Reality (*Gil Zefoni, Chair of Europe, IFPSM and CEO, Israeli Procurement & Logistics Managers Association - IPLMA*)
- 60** Government AI readiness Index
(*ADACI Research & Development Committee*)
- 62** The Transformative Power of Artificial Intelligence in Public Procurement
(*Maurizio Petronzi, Head of Procurement & Operations, Cassa Depositi e Prestiti*)
- 64** Scoring Quality with AI: The North Face (*Philippe Maraval, CPO France Travail*)
- 66** Towards a new approach to Public Procurement from a geostrategic perspective
(*José María Gimeno Feliu, Professor of Administrative Law, University of Zaragoza, Spain*)
- 68** The Global Gateway Initiative and the new phase of European development cooperation mechanism (*Gianmatteo Sabatino, University of Trento*)
- 70** Circularity and Public Contracts
(*Scilla Vernile, Università degli Studi di Milano-Bicocca*)
- 72** AC.TI.VA – Intelligent Automation of Public Contracts: The INPS-IBM Case
(*Roberto Crisci and Loredana Martullo, INPS*)
- 75** Digital public procurement: interoperability and prospects following the launch of the new ANAC platform (*Paolo Mezzetti, CEO & Co-Founder at BeeLiveIT Srl*)
- 78** Trump's "Brain Tariff": When Protection Becomes Economic Self-Harm
(*Federica Dallanocce, National Vice President and General Secretary of ADACI*)
- 82** The New Trade War: How US Tariff Policy Redefines Global Commerce
(*Marco Sella, Cross-Border | Global Trade Solutions*)
- 87** Public procurement in EU and competitiveness
(*Sašo Matas and Mitja Medvešček, Ministry of Public Administration, Slovenia*)
- 88** Innovation and Value-Based Procurement in EU Healthcare
(*Hervé Legenvre, EIPM / Louise Knight, University of Twente*
Sophie Carlier, UniHA
Josep Maria Guix Segura, Consorci de Salut i Social de Catalunya
Klaas Stek, University of Twente / Marcel Stuijts, Bizob
Johnsen Thomas, Audencia / Eleonora Varntoumian, EHMA)
- 96** Procurement in Healthcare: the silent revolution that changes care
(*Monica Quaroni, Purchasing and General Services Planning Unit Contact of CNAO and Councilor of ADACI Lombardia/Liguria*)
- 98** Agenda of "International Convention on Public Procurement"



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Michele Anzivino

Unlocking Government Savings by Optimizing Public Procurement

Government procurement accounts for about \$13 trillion worldwide, excluding military spending, representing on average around one-fifth of all government expenditures. Oliver Wyman believes that governments could save up to 40% of procurement costs by reducing inefficiencies and optimizing its potential (see exhibit 2 below).

Public procurement is highly relevant because it represents a massive, strategic market that governments use to deliver services, build infrastructure, and achieve economic, social, and environmental goals, like boosting innovation, creating jobs, supporting SMEs, and fostering sustainable development. Effective public procurement drives efficiency, builds trust through transparency, ensures taxpayer money is used responsibly, and can transform economies toward greener, more inclusive futures.

Effective management of public procurement is essential for:

Ensuring transparency: public procurement processes should be open and transparent to ensure fair competition and prevent corruption which can save significant amounts of public funds.

Promoting sustainability: governments often use procurement to promote environmental sustainability and social responsibility by favouring eco-friendly and ethically produced goods and services.

Boosting SME participation: public contracts can benefit small and medium-sized enterprises (SMEs) and lead to economic growth and job creation.

Securing the supply chain: reliable procurement processes can stabilize the supply chain by providing predictable demand and timely payments to suppliers.

The pressure on governments to achieve more with less will only increase. With social, economic, and political factors continuously shaping the requirements of public spend, improved public procurement is the one lever open for harnessing spiraling public spend. However, reducing procurement costs will require a radical and holistic rethinking of procurement policy, avoiding the temptation to undertake short-term quick fixes. If cost reduction initiatives are to be sustainable, governments need to establish comprehensive, long-term programs complemented by clear and strong support of the country's leadership.

To contribute to the strategic reorganisation of public procurement, ADACI has accepted the IFPSM's invitation to organize an international convention on public procurement in Rome, where experts from around the world will debate issues of general interest and will compare the different solutions adopted by various countries. It has also decided to dedicate this issue of the association's magazine entirely to public procurement, publishing articles written by experts from IFPSM members associations.

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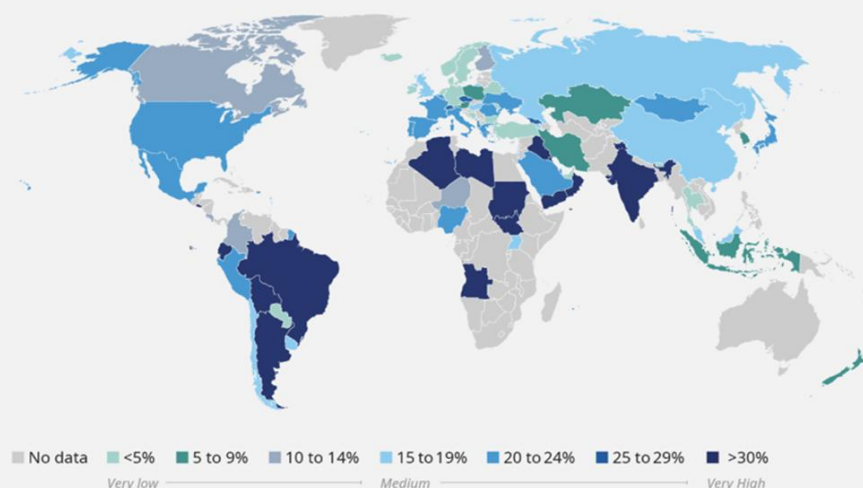
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Exhibit 2: Public procurement spend optimization potential based on Oliver Wyman's Public Procurement Performance Index (PPPI), using 2021 data

Potential savings from procurement spend optimization



Fabrizio Santini,
President of ADACI



Welcome you to Rome

Dear readers,

after hosting the 2023 World Summit in Florence, ADACI is pleased to organise the first IFPSM Convention on Public Procurement which will take place in Rome on 6-7 November 2025. The idea for this event was born two years ago, during a special session of the World Summit dedicated to public procurement issues. Over 130 people from all over the world discussed cross-cutting topics of common interest and promised to meet in the near future to continue exchanging information and best practices.

Public procurement helps governments to achieve the best value for money and to cope with limited budgets and financial constraints. This in turn contributes to making markets competitive and safeguards the public interest. Currently, public procurement officials are facing a dynamic landscape with evolving challenges, including digital transformation, supply chain disruptions, and the need for sustainable practices. They must navigate complex regulatory compliance keeping pace with changing rules and standards, managing rising costs, and addressing talent shortages while also embracing innovation and data-driven decision-making.

In addition, they have to deal with the new global economic environment which is shifting from a globalized and open system to a multipolar world, too protectionist and less inclined to pursue the United Nations sustainability objectives. What will be the impact of this radical change on our supply chains and SMEs? Will the Green Deal and the objectives of sustainability, environmental protection, equity, inclusion and governance become marginal?

All the above topics will be analyzed and discussed during the round tables at the Rome convention, providing participants with insights into existing best practices in various countries and enabling them to offer suggestions or guidance to their lawmakers. The exchange of ideas on specific public procurement issues helps make it more effective and efficient and not just focused on compliance with applicable law.

Over the last decade, for example, competition for public contracts in Europe has decreased and the European Court of Auditors confirmed that key goals of the EU's reform to ensure competition, such as simplifying and shortening the procurement procedures, have not been met, and recommended a deep root cause analysis. What happened in Europe confirms the opportunity of a common analysis of the current hot topics and problems of the sector.

Government officials have to navigate complex regulations and to overcome this challenge, it is important to have a thorough understanding of the world regulations that govern public procurement. This can involve attending training sessions and conferences, as well as regularly reviewing procurement policies and procedures. IFPSM and ADACI, in addition to organizing a two-day international convention on the hottest topics in the sector, intend to set up a permanent team of international experts with the aim to promote the exchange of studies, analyses and experiences between operators who annually commit 14%-15% of the world GDP.

On behalf of the large and qualified Italian public procurement community that has worked tirelessly to ensure the success of the first IFPSM convention in the sector, I extend my warmest greetings to all its participants, hoping they will also appreciate the beauty and monuments of the Eternal City.

Chris Oanda
President of IFPSM



Procurement with Purpose: Global Lessons, Local Leadership

I remember a moment early in my procurement career: staring at a stack of paper bids, weighed between legality and process, yet hardly ever asked what impact the contract would leave on communities, environment or innovation. We've come a long way since then, but not far enough.

As we gather in Rome this November, we meet not only to discuss procurement reforms, but to reflect on our shared purpose: *how to make public procurement a genuine force for societal good*. Around the globe, public procurement is beginning to shift from being a technical, administrative requirement to a strategic lever for change. Italy, like much of Europe, stands at the forefront of this transformation by bridging innovation, ethics, and sustainability through policies that make procurement both strategic and human.

The European Union's Green Public Procurement (GPP) framework continues to set global benchmarks for integrating environmental and social value into public contracts. Across Italy, regional authorities are applying these principles through digital tendering platforms and circular procurement models that promote local innovation while protecting the environment. The Italian National Anti-Corruption Authority (ANAC) has also made significant progress in improving transparency and professionalization, aligning with the OECD's call for a trusted, value-driven procurement system.

Yet the journey is not only European. In Kenya, the Public Procurement Information Platform is transforming access and oversight. Liberia's e-GP system is increasing transparency and efficiency. Pakistan's PPRA, with support from the World Bank, is building accredited training for procurement officers. These examples show that from Monrovia to Milan, the principles of good procurement, espoused as integrity, innovation, inclusion will remain universal.

At IFPSM, we see procurement as one of the world's most powerful economic levers which represents nearly **20% of global GDP** according to the **World Economic Forum**. When wisely directed, these resources can combat climate change, strengthen SMEs, and restore public trust.

At IFPSM, we are committed to ensuring that procurement professionals everywhere are equipped not only with skills, but with purpose: ethical leadership, digital acumen, and a mindset that looks beyond the contract to the community. Purposefully, we champion capacity building through our **Global Standard** and programme accreditation for educational institutions which ensures that new professionals enter the field with not just technical know-how, but a values-driven mindset.

Let Rome 2025 be remembered not only as a gathering of professionals, but as a declaration that procurement is about people, purpose, and progress. Together, we can make public spending a driver of hope and shared prosperity across nations to serve people and secure our planet.



Cai Jin

Vice President of IFPSM
(from January 2026: President of IFPSM)



President of CFLP

(China Federation of Logistics and Purchasing)

China's Latest Achievements and Key Characteristics in Public Procurement

2024 marks a critical year in China's effort to fulfill its "14th Five-Year Plan." In the face of shifting international dynamics and the arduous task of domestic economic recovery, China's public procurement market has steadfastly upheld high-quality development as its central thread, driven institutional innovation, oriented toward green transformation, and supported by digital-intelligence integration. In pursuing stability amid progress, it has composed a new chapter in the public procurement sector.

In 2024, China's total public procurement volume reached RMB 45 trillion. Under the fiscal theme of "tight fiscal discipline," resources were precisely directed toward social welfare, scientific innovation, and strategic key sectors, providing strong support for steady economic operations. Throughout the year, the public procurement market deepened reform of "delegation, regulation, and service", advanced the construction of a unified national market, and simultaneously achieved breakthroughs in institutional optimization, green transition, digital empowerment, and collaborative synergy - demonstrating strong resilience and vitality.

I. Institutional Innovation Leads, Energizing Market Vitality

"Only those who reform advance, only those who innovate strengthen." In 2024, the public procurement field adopted a problem-oriented approach to accelerate the improvement and optimization of institutional systems. The Ministry of Finance issued the *Interim Measures for the Administration of Cooperative Innovation Procurement Methods in Government Procurement*, which, for the first time, incorporated cooperative R&D into procurement frameworks, injecting new momentum into technological innovation.

The government has issued a series of policies, offering systemic guarantees for more standardized and efficient public procurement.

II. Green, Low-Carbon Transformation: From Concept to Practice

Green development is the underpinning of high-quality growth. Guided by the "dual carbon" goals, green procurement has leaped forward. The Three-Year Action Plan in the field of government procurement expanded the priority procurement scope of green products to 100 cities. In the engineering and construction market, promotion of green buildings intensified, raising their market share. Central enterprises led by example; for instance, State Grid, China Shipbuilding, and CRRC embedded carbon footprint management into procurement, driving carbon reduction across the full supply chain.

Under this modern context, the public procurement market's green development reveals six major trends:

1. Policies and market environment become increasingly favorable to green procurement.
2. Enterprises shift from passive policy-driven compliance to proactive strategic layout.
3. Scope expands from large enterprises to include small and medium-sized enterprises, raising participation.
4. Models evolve from single to diversified.
5. Approaches emphasize collaboration - enterprises actively engage upstream and downstream partners to jointly push for green supply chain management, shifting from closed practices to transparency.
6. Digital and intelligent technologies increasingly empower green procurement.

III. Deep Integration of Digital Intelligence, Reshaping the Procurement Ecosystem

In the digital economy era, smart technologies have become the core engine for raising quality and efficiency in public procurement. On one hand, digital procurement platforms have advanced significantly, promoting procurement processes that are more electronic, standardized, and automated.

On another hand, data analytics has strengthened decision-making, enhancing procurement efficiency, lowering cost, and optimizing choices. Meanwhile, supply chain transparency and vendor management capabilities have improved dramatically. In particular, supplier management now provides multidimensional vendor profiles, enhancing precision in sourcing. In addition, the public procurement domain is accelerating AI application scenarios: “AI-enabled procurement staff” are increasingly entrusted with full-process functions such as bid opening, evaluation, and inquiries, playing key roles across more fields and scenarios.

IV. Collaborative Sharing and Mutual Benefit, Unleashing Synergy

Collaborative sharing has become a defining feature of high-quality public procurement. In 2024, guided by the strategy of building a unified national market, cross-region, cross-industry, and cross-entity collaborations flourished, enabling efficient resource integration and deep market potential release - injecting momentum into the new development paradigm.

Whether it is the Yangtze River Delta pilot zone initiating cross-regional integrated tender reforms, the Beijing-Tianjin-Hebei region sharing waterway engineering evaluation experts, state-owned giants like CNOOC and Sinopec leading centralized procurement of petroleum equipment, construction supply chain alliances promoting bulk material centralized supply, or the “State-Owned Enterprise Procurement Evaluation Expert Sharing Platform” breaking enterprise walls for joint sharing - these practices promote efficient resource allocation and embody the new development philosophy of “co-construction, integration, and win-win cooperation.”

V. Full-Chain Collaboration and Symbiosis, Forging Resilient Competitiveness

The transformation of supply chain management continues deepening. In 2024, for the first time, SASAC published benchmarking evaluation results for procurement and supply chain management among central enterprises.

Twenty-five enterprises including State Grid and Sinopec achieved “Class A” rating. Through professional consolidation, digital enablement, and green transformation, central and state-owned enterprises are constructing an ecosystem of “large, medium and small enterprises collaborating, upstream and downstream linkage.” In government procurement and public works, lifecycle management and strategic synergy are woven into practice, elevating both supply chain security and competitiveness.

Looking ahead to 2025, the public procurement market still faces challenges such as demand contraction and weakening expectations. But institutional innovation, efficiency revolution empowered by digital intelligence, and transformation opportunities driven by green priorities will surely inject fresh impetus into industry development.

Going forward, China’s public procurement must adhere to the “Five Persistences” as its action guide:

Persist in rule of law leadership: Strengthen top-level design, refine the revisions of the “two laws,” promote fair competition review and credit management systems, and build a transparent and just market environment.

Persist in green transformation: Refine low-carbon procurement standards, improve supervision mechanisms, and shift green procurement from concept to benchmark practice.

Persist in openness and collaboration: Deepen negotiations under the GPA, support procurement entities participating in international procurement, and build a domestic-international dual circulation synergy.

Persist in digital empowerment: Promote full-process digital transformation, strengthen data sharing and intelligent applications, and achieve precise supervision and efficient service.

Persist in chain-based innovation: Propel state-owned enterprises from conventional procurement into supply chain management, and fortify a supply chain system that is secure, resilient, and efficient.



Marina Lindič
*Secretary General
of IFPSM*



The Global Role of IFPSM in Advancing the Procurement and Supply Chain Profession

The International Federation of Purchasing and Supply Management (IFPSM) is the leading global federation representing the procurement and supply chain profession. With over 40 national and regional member associations and a collective reach of more than 250,000 professionals, IFPSM acts as a unifying platform to strengthen, connect, and advance the discipline worldwide.

As the only organization of its kind, IFPSM fosters global collaboration, knowledge sharing, and professional development. Its mission is to promote excellence, ethical standards, and sustainability within procurement and supply chain management, ensuring the profession continues to evolve and meet global challenges.

A Global Network for Collaboration and Professional Growth

IFPSM's strength lies in its ability to connect practitioners, academics, and industry leaders from across the globe. It creates a vibrant ecosystem where ideas are exchanged, partnerships are formed, and innovations are nurtured. Through conferences such as the **IFPSM World Summit and IFPSM Convention on Public Procurement in Rome**, the federation gathers international experts to explore emerging trends, share research, and co-develop strategies that shape the future of the profession.

By bridging national associations, IFPSM encourages the harmonization of standards and professional qualifications, enabling a more cohesive global community. This network empowers professionals to work across borders and promotes alignment in values, competencies, and sustainable practices.

Organizational Restructuring and Relocation to Slovenia

In response to the evolving needs of the global profession, IFPSM embarked on a comprehensive restructuring process designed to strengthen governance, transparency, and operational agility. As part of this transformation, the federation relocated its headquarters from Finland to Slovenia, signalling a new era of strategic renewal and inclusiveness.

This relocation places IFPSM at the heart of Europe - geographically and symbolically - allowing the organization to serve as a connector between Western, Central, and Eastern part of the globe, and to engage more dynamically with global partners.

At the core of this transformation stands the **Secretary General**, who leads the federation's strategic and operational activities. The Secretary General ensures alignment among member associations, drives the implementation of IFPSM's vision and mission, and supports the global development of procurement and supply chain management. This leadership is crucial for ensuring IFPSM remains a forward-thinking, relevant, and impactful federation.

Advancing Professional Standards and Sustainable Procurement

IFPSM actively promotes professional excellence through its Global Standard (GS) and Programme accreditation standard (PAS). Both are supporting education, training, and certification initiatives across member associations. By developing and maintaining global benchmarks, IFPSM ensures that procurement professionals possess the competencies, ethical awareness, and strategic insights necessary to thrive in a rapidly changing world.

Equally important is IFPSM's commitment to sustainable procurement. The federation emphasizes the strategic role of procurement in achieving the United Nations Sustainable Development Goals (SDGs) and encourages organizations to embed sustainability into their sourcing strategies. Through advocacy, research, and education, IFPSM empowers its members to implement responsible procurement practices that balance economic efficiency with social and environmental impact.

Strengthening Public Procurement Practices

One of IFPSM's growing areas of focus is **Public Procurement** - a domain that holds immense influence over national economies, innovation, and sustainable development. Public procurement represents a significant share of GDP in most countries and serves as a critical tool for achieving policy objectives, from supporting SMEs to promoting green and socially responsible sourcing.

IFPSM contributes to this field by:

- Promoting **professionalization** and competence-building in public sector procurement,
- Encouraging **transparency, accountability, and integrity** in procurement processes,
- Facilitating **knowledge exchange** between public and private sectors,
- Supporting research and innovation in **public procurement reform and digital transformation**, and
- Advocating for the integration of **sustainability and circular economy principles** into public purchasing frameworks.

Through partnerships with governments, academia, and international organizations, IFPSM helps shape a modern, ethical, and efficient public procurement landscape - one that drives sustainable growth and societal value.

Knowledge, Innovation, and Research

In collaboration with universities, research centers, and global thought leaders, IFPSM fosters academic exchange and applied research in procurement and supply chain management. Topics such as digitalization, risk management, resilience, and sustainable value creation are key areas of focus. By connecting theory with practice, IFPSM contributes to the continuous evolution of the profession.

A Global Advocate for the Profession

As the collective voice of procurement and supply chain professionals, IFPSM engages with international institutions, policymakers, and business communities to promote the strategic value of procurement. Its advocacy underscores the function's role as a driver of innovation, efficiency, and sustainability – not merely a transactional activity, but a strategic lever for organizational and societal progress.

Conclusion

In an interconnected world facing economic, environmental, and social challenges, the role of IFPSM is more vital than ever. By fostering collaboration, advancing professional standards, promoting sustainable practices, and supporting public procurement reform, IFPSM continues to shape a responsible, inclusive, and globally connected procurement and supply chain profession.

Together, we build a sustainable and ethical future for procurement and supply management.

The integrated principles inspiring Public Procurement¹

ADACI Research & Development Committee

Foreword

Public procurement is a strategic process for achieving economic growth, innovation, and sustainability goals. Beyond the simple purchase of goods and services, it stimulates economic development, promotes fair competition and value for money, fosters responsible supply chains, and builds trust between the public and private sectors. Given the scale of spending, governments are expected to manage it efficiently and with high standards of conduct, adhering to a set of basic principles or guidelines to ensure that all procurement processes are fair, transparent, and open to competition.

The OECD² recommendations on public procurement are based on twelve integrated principles: transparency, integrity, access, balance, participation, efficiency, e-procurement, capacity, evaluation, risk management, accountability and integration. These pillars have been developed for policy makers and public procurement practitioners and may be of interest to private sector representatives and other organizations working on public procurement issues. They promote the creation of well-regulated and competitive market by treating all suppliers equally, promoting open and fair competition, and requiring public decisions subject to scrutiny. Adherence to these principles promote trust, accountability, and good governance in public spending and contribute to the achievement of policy objectives by ensuring that public resources are used effectively and ethically.

Within the EU, they play a crucial role³, as they prevail over any other public procurement law, policy or regulation.

This is confirmed by the fact that they apply to any contract that can be presumed to have public status, regardless of its value and contractual stage (preparation, tendering, award, execution and termination). Each principle has its own specific meaning, but they all converge in a common area of intersection, as they all aim to contribute to the same objective: fair, transparent and competitive procurement procedures. On this basis, European Public Procurement Directives have included these principles in their regulations, requiring compliance with them, and European case law has used them to interpret national laws, adding obligations where not expressly established therein, considering the principles complementary to them.

The first article of the European Directive 2014/24 states that: “*The award of public contracts by or on behalf of Member States’ authorities must comply with the principles of the Treaty on the Functioning of the European Union, and in particular the free movement of goods, freedom of establishment and the freedom to provide services, as well as the principles deriving therefrom, such as equal treatment, nondiscrimination, mutual recognition, proportionality and transparency*”. All IFPSM members, regardless of whether they belong to the OECD or the European Union, should recommend that their public procurement professionals apply them.

¹ This article reproduces parts of the 2025 report: ‘Implementing the OECD Recommendation on Public Procurement in OECD and Partner Countries’ published on 30 June 2025. All figures reproduced below refer to the results of 2024 OECD survey.

² The Organisation for Economic Co-operation and Development (OECD) is an international forum of democratic, market-economy countries dedicated to fostering sustainable economic growth, prosperity, and social well-being worldwide. It has 38 Member States: Australia, Austria, Belgium, Canada, Chile, Colombia, Costa Rica, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States of America.

³ They are slightly different from those considered by OECD.

The 2025 OECD Report and Recommendations on Public Procurement

The 2025 OECD Report provides strategic guidance for creating efficient, fair, and transparent public procurement systems, and analyzes progress made by its Member States in 2020-2024, highlighting advances in transparency, integrity, and competitive processes, as well as challenges in areas such as digital transformation, sustainability, and risk management. It confirms that significant progress has been made over the past five years, but that further efforts are needed in the following areas:

- transparency;
- access to public procurement;
- e-Procurement systems;
- efficiency and effectiveness of public procurement;
- integration of public procurement with public financial management;
- strengthening the relevance of public procurement;
- Integrity;
- strategies for integrating various goals into procurement practices;
- risk-based approach;
- trust in public institutions.

In the following paragraph, together with the analysis of the principles that should inspire public procurement, the results of the 2024 survey conducted by the OECD and its suggestions regarding the improvements that will unleash public procurement full potential, have been included.

The integrated principles of public procurement³

The OECD recommendation is structured around twelve key integrated principles, applicable to various legal and administrative frameworks.

These include transparency, integrity, access, balance, stakeholder participation, efficiency, e-procurement, capacity, evaluation, risk management, accountability, and integration.

These integrated principles provide the guiding framework for designing and implementing effective public procurement systems, promoting transparency, integrity, efficiency, and accountability to achieve policy goals and strengthen public trust.

Implementation efforts are taking place in an ever-changing environment, characterized by economic and social challenges and geopolitical constraints.

Transparency

Ensure an adequate degree of transparency of the public procurement system at all stages of the process. Public procurement professionals are required to publicly disclose procurement processes and data to ensure fair treatment, build trust, and promote accountability. Procedures must be clear and openly advertised, allowing all participants to understand the process and rules, often using electronic platforms for publication. Transparency implies visibility into public procurement processes and spending to foster trust and accountability. Taking precautionary measures and maximising transparency in competitive tendering is vital, helping to enhance integrity. Greater transparency reduces information asymmetries and fosters trust, encouraging a wider range of suppliers to engage in competitive bidding.

Transparency risks include:

- cases of mismanagement, fraud and corruption related to the lack of transparency and disclosure of information around public procurement processes;
- distorted competition if interested suppliers do not have access to the same type of information.

OECD comment: transparency practices are well-established but further improvements are needed throughout the public procurement lifecycle. Pre-tendering and post-contract transparency remains limited. Balancing adequate levels of transparency with the protection of confidential information through appropriate and timely disclosure could improve accountability and competition, and contribute to a more transparent and competitive procurement landscape.

European Court of Auditors comment: despite directives emphasizing fairness, many businesses feel they lack access to information, raising concerns about the true transparency of procurement processes.



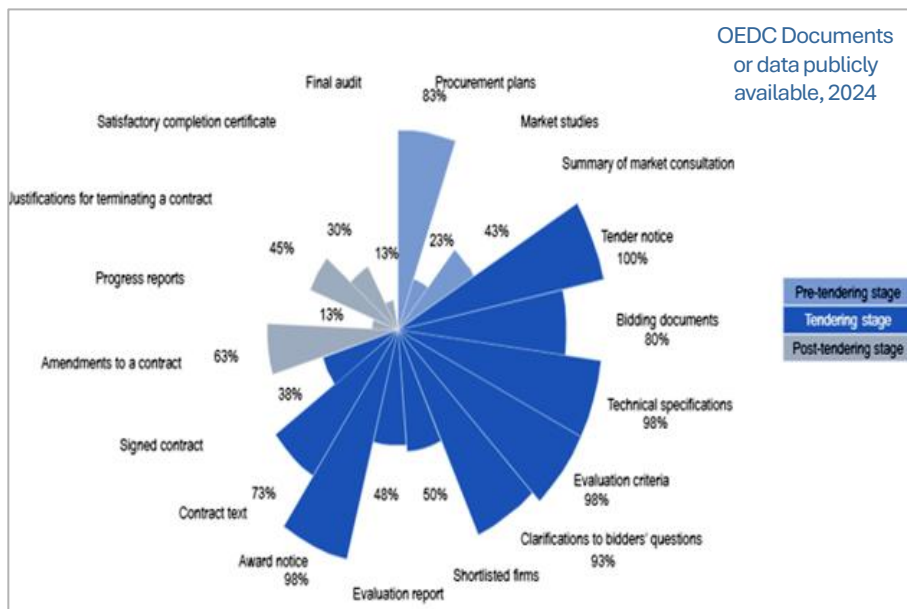
Traceability

Although the EU Public Procurement Directives do not explicitly establish "traceability" as a core principle, traceability is integrated into specific procurement policies, particularly through Green Public Procurement (GPP), where it's used to verify the origin and compliance of products, especially those linked to environmental or social criteria, such as deforestation-free commodities. This ensures that products purchased are legally sourced and comply with sustainability standards across the supply chain.

Visibility

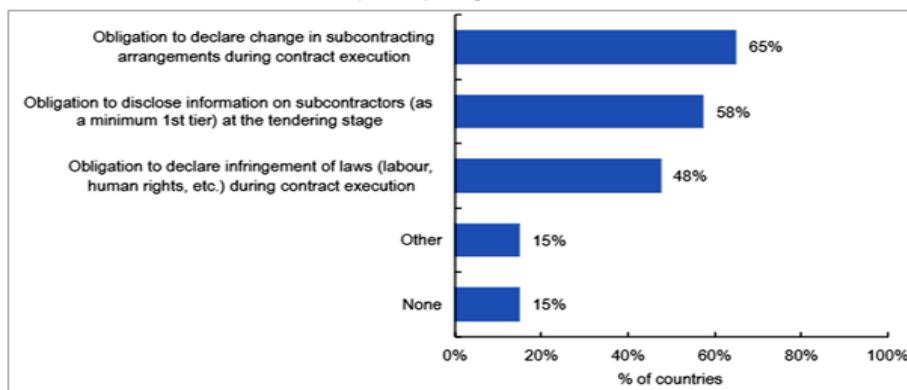
Visibility of public funds flows should be ensured from the beginning of the budgeting process and throughout the public procurement cycle. The OECD confirms its efforts to make public procurement documents and data publicly available, contributing to fostering transparency. Its 2024 survey was expanded to include more recent elements such as publication of key information on e-procurement systems. Specially, while nearly all respondents publish tender notices (100%), technical specifications (98%), and evaluation criteria (98%), a smaller number publish summaries of market consultations and reasons for contract termination (43%), signed contracts (38%), satisfactory completion certificates of satisfactory completion (30%), market studies (23%), final audits (13%), and progress reports (13%).

OECD Documents
or data publicly
available, 2024



In some cases, the lower publication rates may reflect a fear of inadvertently facilitating collusion, particularly when disclosing information that could influence future bidding behaviours. The following picture highlights the obligation to report information on subcontracts issued and violations of laws, existing in some OECD countries.

Transparency obligations, 2024



Integrity

Maintain the integrity of the public procurement system through general standards and procurement specific guarantees. There is the integrity of the procurement process, and that of public procurement professionals. Within the process it is essentially about trustworthiness. Practitioners involved in the public procurement process are expected to be honest, trustworthy, responsible and accountable. Risks related to integrity include:

- loss of public money and delivery of substandard products and services;
- fraud and theft of resources;
- mismanagement of conflict of interest in the public administration.

OECD comment: integrity measures in public procurement are widespread, yet efforts should continue to ensure proactive management of risk integrity. The systematic enforcement of conflict-of-interest policies and the collection of data on submission of mandatory interest declarations could be further improved. Emerging technologies could be leveraged in the future to enhance integrity measures, transparency, and accountability.

Access

Provide fair and non-discriminatory access to procurement opportunities for all qualified suppliers. This means providing all stakeholders free access, via an online portal, to information on public procurement particularly regarding the public procurement system (e.g. institutional frameworks, laws and regulations), specific procurements (e.g. procurement forecasts, calls for tender, award announcements), and the performance of the public procurement system (e.g. benchmarks, monitoring results).

Risks related to access include:

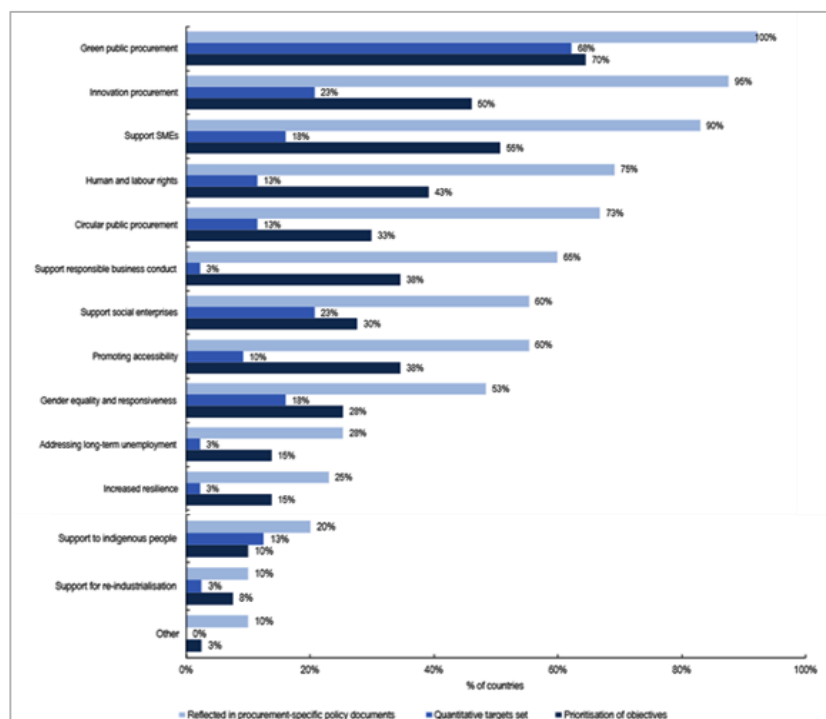
- use of exceptions to procurement procedures (direct awards, accelerated procedures, etc.);
- complex public procurement rules and use of non-standard bidding documents.

OECD comment: while promoting access to public procurement opportunities is crucial for fostering competition, building a robust competitive environment remains a challenge. Frequent legal and policy changes can reduce the stability of system and the attractiveness of procurement opportunities.

Balance

Recognise that any use of the public procurement system to pursue secondary policy objectives should be balanced with the primary procurement. Balancing strategic objectives through public procurement means aligning public spending on goods and services with broader policy goals, such as economic growth, innovation, social inclusion, and environmental sustainability, rather than focusing solely on cost-efficiency or compliance. This shift involves strategic planning to identify opportunities, market research, supplier diversification to mitigate risk, and performance-based award criteria to ensure value for money and achieve objectives such as supporting small businesses or developing sustainable economies.

Balancing strategic objectives through public procurement, 2024



OECD comment: while public procurement is used strategically to achieve policy objectives, progress is needed in developing strategies to integrate multiple objectives into procurement practices and measure their impact. Targets and prioritisation methodologies are commonly established only for environmental objectives. Furthermore, opportunities remain to improve the assessment of the impact of public procurement on policy objectives.

Participation

Promoting transparent and effective stakeholder participation.

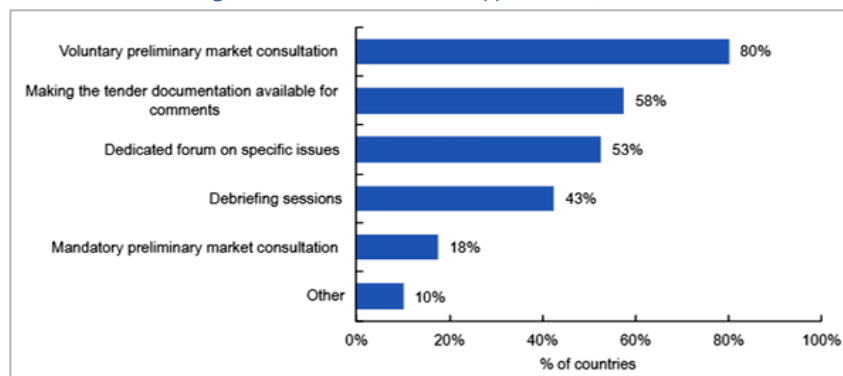
OECD comment: practices aimed at promoting stakeholder participation in public procurement are widespread, but there is scope to improve the quality of these processes. Closing feedback loops remains a challenge. Proportionate consultations and timely feedback would support stakeholder interest and maximise the benefits of participatory processes, improving transparency and inclusiveness. Few countries directly involve citizens in complex or high-value procurement processes that involve significant risks or poor management. Better integration of public procurement with public financial management is needed to enhance synergies between systems. Procurement plans generally aligned with budgetary planning, and mechanisms for keeping procurement within budgetary constraint are well-established. However, descriptions of financial and human resource requirements during the planning phase remain limited.

Consultation with suppliers and/or business associations

Consulting suppliers and business associations enables a mutually beneficial understanding of government needs and market capabilities through early engagement, open communication, and the collaborative development of procurement strategies. This process helps aligning market realities with government objectives, identifies market weaknesses, promotes innovation, and ensures more effective, resilient, and innovative procurements for both public entities and businesses.

A 2024 OECD survey confirmed that many countries use pre-bid market consultations and that fewer engage in debriefing sessions with suppliers after the tender process. In addition to mandatory or voluntary consultations, some officers also reported making the tender documentation available to suppliers and business associations for comments and having dedicated forums on specific issues not related to a single procurement process.

Consultation of suppliers and/or business associations to build mutual understanding of the governments' needs and the supplier market, 2024



Efficiency

Develop processes to drive efficiency throughout the public procurement cycle while satisfying the needs of public administrations and their citizens. .

- Simplify the public procurement system and its institutional frameworks.
- Implement robust technical processes to efficiently meet customer needs.
- Develop and deploy tools to improve procurement procedures, reduce duplication and achieve better value for money (including centralised purchasing, framework agreements, e-catalogues, dynamic purchasing, e-auctions, joint procurements and contracts with options).

Risks related to efficiency include:

- a functional overlap, inefficient silos, duplications and waste;
- purchased goods and services which do not meet customer needs and expectations;
- lack of professional contract management; and
- lack of coordination and communication between central and decentralised levels.

OECD comment: while efficiency in public procurement is a shared goal among respondents to the 2024 OECD survey, especially in a context of challenging budgetary constraints, further efforts are needed to improve the measurement and reporting on efficiency gains. Mechanisms and tools to transparently monitor or communicate efficiency gain results transparently remain limited. User-friendly features could improve accessibility, accountability, and responsiveness, fostering greater efficiency in public procurement. Officers should leverage digital technologies to modernize procurement practices and improve efficiency.

Effectiveness

Achieving the best value for money in the procurement of goods, services, and works. Throughout of projects, it's essential to prioritise a combination of sustainability, cost-effectiveness, quality, and effectiveness. Procurement processes should be strategically planned and executed to achieve the most advantageous combination of these factors.

OECD comment: practices for evaluating the effectiveness and impact of public procurement are expanding slightly, but could be further improved if supported by collection and use of quality data. KPIs are common, but impact evaluation remain limited.

Timely, high-quality data throughout the procurement lifecycle would enable the development of indicators to monitor performance and cost savings, measure effectiveness, and support more informed public procurement decisions.

Performance-based award criteria

Award criteria in public procurement are the rules a public entity uses to evaluate and rank bids for a contract. They focus on the bid itself (not the bidder) and typically include price/cost or quality. The criteria must be directly related to the subject matter of the contract, be published in advance, and may include factors such as technical merit, sustainability, innovation, service delivery, and whole-life cost.

OECD comment: use awarding criteria that balance quality and financial aspects, ensuring that the best overall value, not just the lowest price.

E-procurement

Improve the public procurement system by leveraging digital technologies to support appropriate innovation in e-procurement across the entire procurement cycle. Digital transformation involves using digital tools, platforms, and data analytics to automate, simplify, and optimize the entire procurement lifecycle, from planning and tendering to contract execution and payment. The goals are to improve efficiency, enhance transparency and accountability, enable data-driven decision-making, foster innovation, and create a more user-centric and strategic procurement system. This shift goes beyond basic e-procurement to integrate AI, machine learning, and advanced analytics to identify patterns, manage risks such as fraud, and support policy objectives.

Rapid digital transformation requires resilient procurement systems, effective risk management, and greater transparency in digital processes.

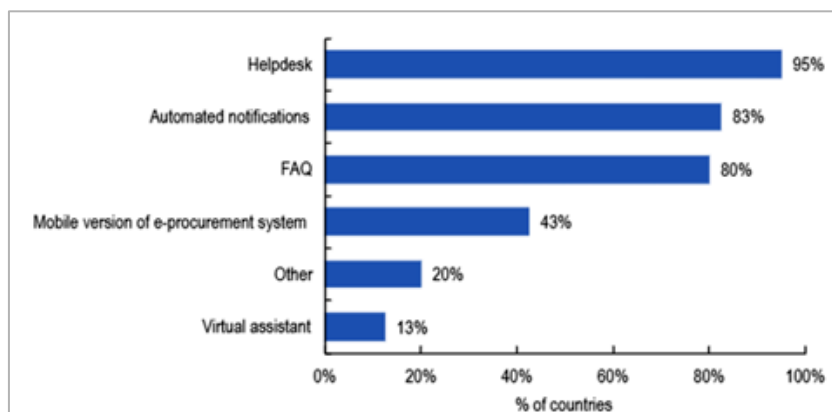
Risks associated with e-procurement include:

- high administrative costs of individual procurements as well as inefficient and slow procurement procedures (including duplications, lack of harmonized documentation, etc.);
- lack of information and transparency on procurement opportunities, which hinder (cross-border) competition.

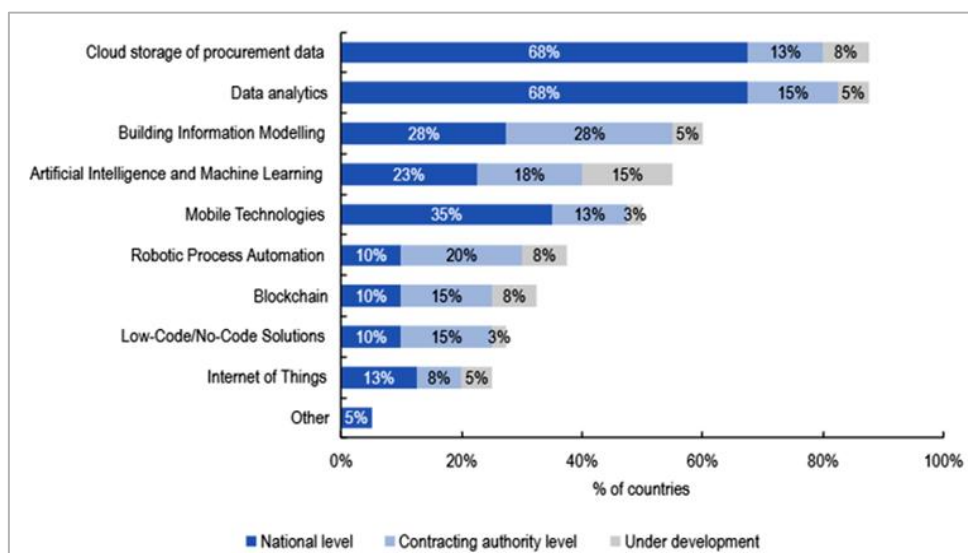
OECD comment:

Significant progress has been made, but further progress is recommended. Digital tools and centralised platforms have improved data access and integration, but frequent regulatory changes could jeopardise system's stability. Integration with broader digital governance systems is not homogeneous, and some innovative technologies remain underutilised, highlighting opportunities for greater efficiency and effectiveness.

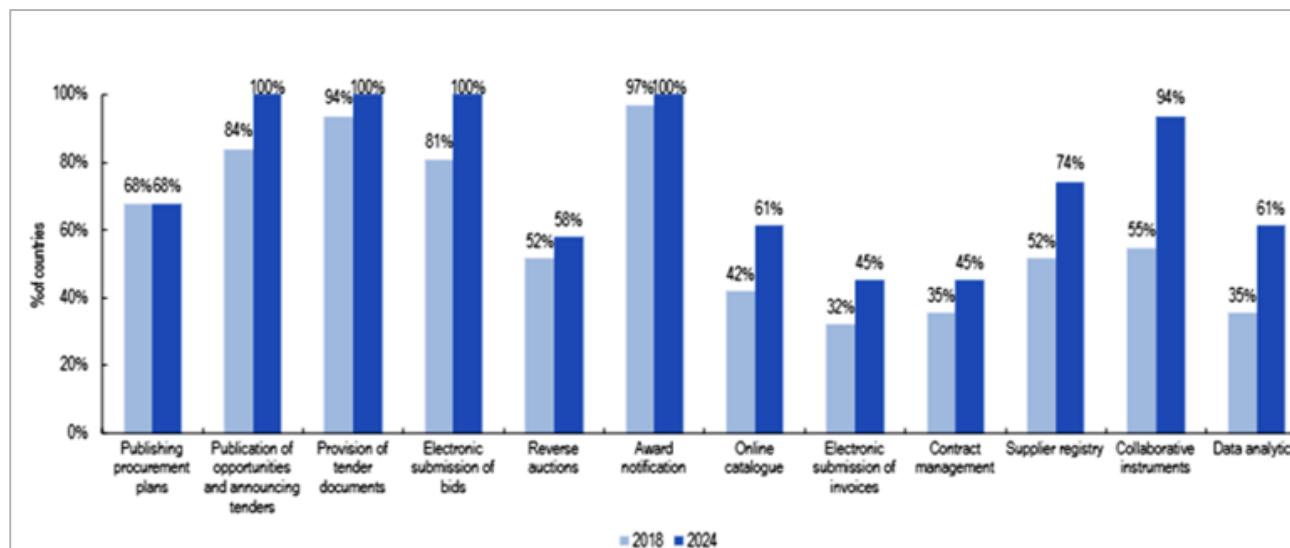
Features available in the national e-procurement system, 2024



Types of innovative technologies used to support procurement activities, 2024



Functionalities provided by national/central e-procurement systems, 2018 and 2024



Capacity

Develop a procurement workforce capable of consistently delivering value for money efficiently and effectively.

- Ensure that procurement officials meet high professional standards in term for knowledge, practical implementation and integrity by providing a dedicated and regularly updated set of tools.
- Offer attractive, competitive and merit-based career options for procurement officers.
- Promote collaborative approaches with knowledge centres such as universities, think tanks or policy centres to enhance skills and competences of the procurement workforce.

Capacity risks include the failure to transition of public procurement from an ordering function to a more strategic one.

Upskilling the public procurement profession and strengthening the entire procurement ecosystem

Improving the public procurement profession involves enhancing skills in digital tools, data analytics, strategic thinking, sustainability, collaboration and risk management to navigate a complex landscape and improve efficiency.

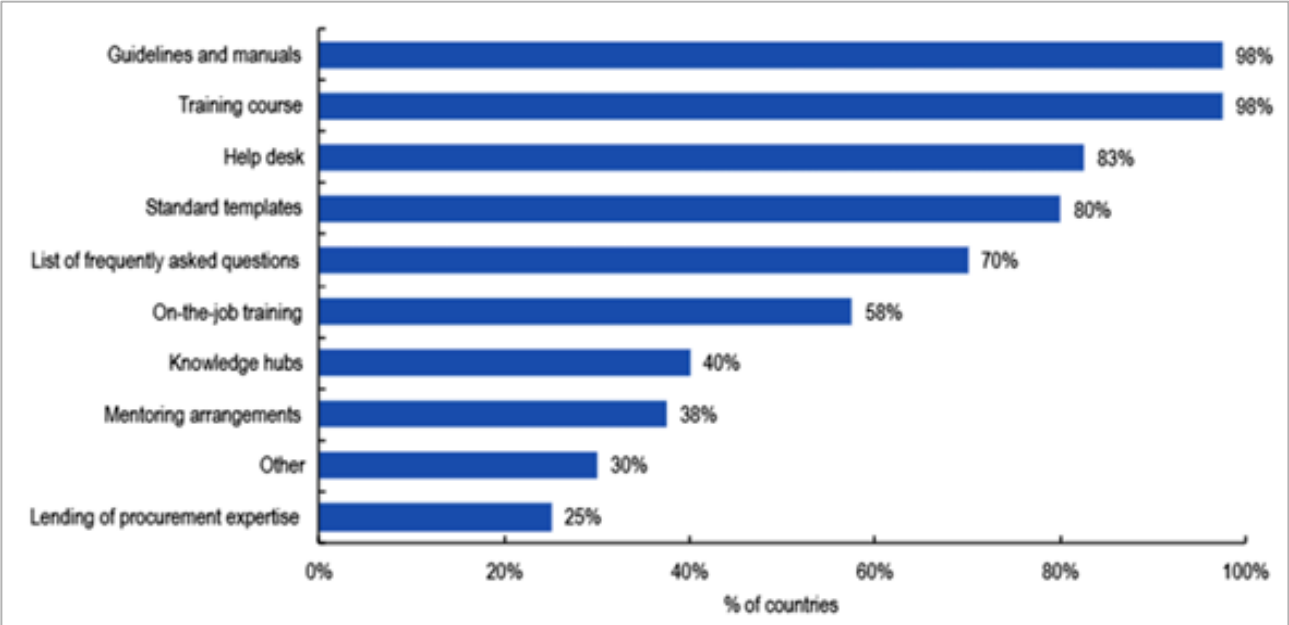
Procurement aspects supported by innovative technologies, 2024



Key strategies include investing in structured training and professional certifications, fostering collaboration and knowledge sharing through networks and professional bodies, and modernizing processes with technology such as e-procurement and AI.

OECD comment: some progress has been made in strengthening the public procurement function, but further efforts are needed to make it competitive. Professionalisation initiatives are expanding, however, procurement is not widely recognised as a distinct civil service profession, and incentives for officials remain largely non-financial. OECD promotes strong procurement governance to ensure efficiency, effectiveness, and fairness across the entire procurement cycle (pre-tendering and post-tendering phases).

Capacity-building initiatives to support public procurement officials, 2024



Evaluation

Systematically evaluate the performance and effectiveness of procurement systems and practices. Promote performance improvements by evaluating the effectiveness of the public procurement system from individual procurements to the system as a whole, at all levels of government where possible and appropriate.

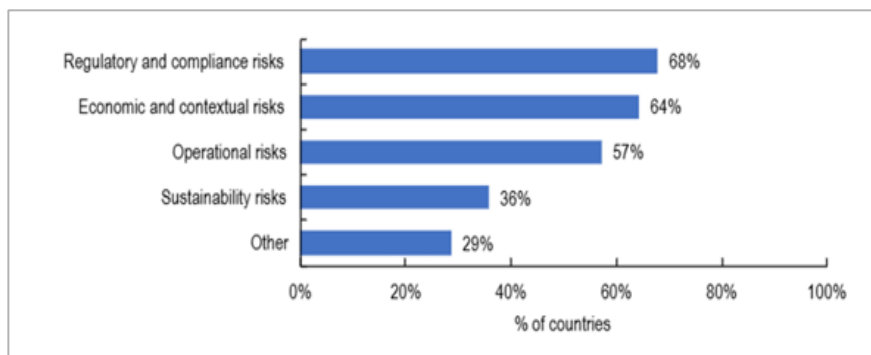
- Periodically and consistently evaluate the results of the procurement process (based on consistent, up-to-date and reliable information).
- Develop indicators to measure performance, effectiveness and savings of the public procurement system.

Risks related to evaluation include:

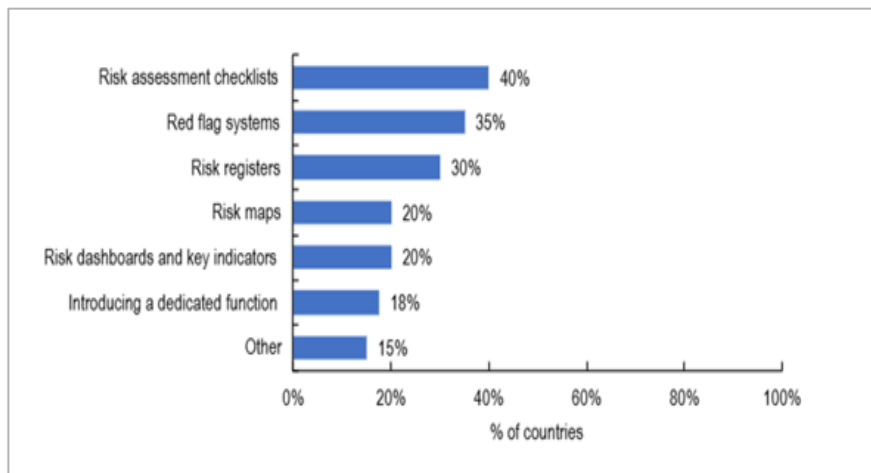
- public procurement data is not always collected in a robust and consistent manner; as a result, statistical information is inaccurate and unreliable and cannot be used for future procurement decisions;
- The lack of performance measurement frameworks and indicators impedes analysis of the effectiveness of public procurement systems over time.

OECD comment: some progress has been made but further efforts are needed

Categories of risks addressed by OECD countries



Tools implemented for the management of public procurement risks, 2024



Risk Management

Integrate risk management strategies for mapping, detecting and mitigating throughout the public procurement cycle.

- Develop risk assessment tools to identify and address threats to the proper function of the public procurement system.
- Publish risk management strategies, for instance systems of red flags or whistleblower programmes, and raise awareness and knowledge of the procurement workforce and other stakeholders about risk management strategies.

These risks should be actively managed, particularly in the framework of large events and large infrastructure projects where such risks are increased.

Risks to public procurement include:

- risks of waste or inefficiency in all aspects of the procurement process;
- financial risks, particularly during periods of severe economic and financial uncertainty;
- reputational risks/potential damage to the image of the contracting authority.

OECD comment: the introduction of risk-based approaches is stagnant. The integration of comprehensive risk management strategies across all stages of the procurement cycle, including fraud and corruption, remains limited. Developing targeted strategies and tools to address various forms of risks help to improve overall risk management.

Accountability

Implement oversight and control mechanisms to support accountability throughout the public procurement cycle, including appropriate complaint and sanction processes.

- Establish clear lines for oversight of the public procurement cycle.
- Handle complaints fairly, promptly and transparently.
- Ensure that internal controls (including financial controls, internal audit and performance controls), and external controls and audits are coordinated, adequately resourced and integrated.

Accountability risk include:

- The chain of responsibilities (including the type and level of responsibilities, assignment of roles and segregation of duties, the required knowledge and experience, the corresponding financial limits, and recordkeeping) are not always clearly defined by internal guidelines for public procurement processes;
- public procurement processes can be the subject of complaints by potential suppliers;
- control objectives are not always clearly defined and control reviews not always performed periodically;
- spending controls are not always carried out.

OECD comment: ex ante and ex post reporting measures are widely implemented, but greater coordination is needed among between bodies and supervisory authorities, especially with the redefinition of the procurement functions.

Lessons learned during the COVID-19 pandemic have not been fully integrated into emergency procurement procedures to strengthen reporting mechanisms. Limited audits of emergency procurement processes highlight opportunities to enhance emergency preparedness and oversight.

Integration

Supporting the integration of public procurement into overall public finance management, budgeting and services delivery processes. A holistic approach that integrates procurement into the broader policy public sector policy and governance framework. This involves creating seamless processes by connecting different systems, data, and phases of the procurement lifecycle, often through digital transformation and e-procurement platforms. It involves integrating responsible business conduct principles, sustainability criteria, and digital tools throughout all phases, from market interaction to contract management, to improve efficiency, collaboration, transparency, and data-driven decision-making.

Integration-related risks include:

- procurement plans not always include a detailed and realistic description of financial and human resources requirements and are not always properly reflected in the government's budgets;
- budgets and procurement plans are often still prepared on an annual basis, instead of a multi-annual basis, which hinders the alignment with medium-term strategic priorities of the governments and reduces the flexibility in purchasing decisions;
- the e-procurement systems are not always sufficiently integrated with other e-government systems, including financial management information systems (FMIS).

OECD comment: synergies between systems have to be enhanced.

To the principles considered by OECD it would be appropriate to add:

The principle of Result

The "principle of result" emphasizes achieving desired outcomes and value for money through efficient and effective procurement processes, rather than just adhering to strict, formal rules. It encourages flexibility, innovation, and adaptability in the face of complex needs and market conditions, allowing public bodies to select the best solutions and suppliers while maintaining fairness, transparency, and accountability in the use of public funds.

This principle has become an overriding criterion in the exertion of discretionary power by the public administration, which is asked to adapt the rule to each specific case, thereby interpreting the economic operator's will. Its implications include fostering competition and transparency, allowing for discretion in procedures when a formal requirement is technically unmet, but the substantive goal is achieved, promoting strategic objectives like social value creation and sustainability, and shifting the focus from strict procedural adherence to the practical success of the procurement.

Its application requires experience, professionalism, purchaser's empowerment and adequate risk management.

The principle of result has been formally adopted by various countries, while for others it does not represent a principle in itself (e.g. China and United States). The US procurement law, governed by the Federal Acquisition Regulation (FAR), mandates that contracts are awarded to the supplier that best meets the objectives of the requirement and best responds to the needs in terms of technical capability and price, and does not codify a separate "principle of result".

Some peculiar aspects of the Principle of Result:

- Focus on objectives: the primary goal is to secure the most favorable goods, services, or works, emphasizing the ultimate outcome rather than just the process itself.
- Flexibility and Adaptability: it encourages a flexible approach to tender rules, allowing for interpretation and adaptation to specific circumstances rather than strict formal adherence.
- While procedures remain crucial, the principle allows for flexibility when a formal requirement is technically missing but the intended result is still achieved.
- Innovation and Calculated Risks: public bodies are encouraged to be open to new ideas and ways of doing things, taking calculated risks to foster innovation in solutions and approaches.

- **Accountability:** public entities are held accountable for the results achieved, ensuring that the entire procurement process, from planning to delivery, is transparent and responsible.
- **Improved Public Services:** the ultimate goal is to improve public services by ensuring that public money is spent effectively and efficiently, leading to better outcomes for citizens.
- **Shift in Judicial Review:**
Legal challenges may consider the overall result and how a minor issue was overcome, rather than focusing solely on technical non-compliance.

Equal Treatment (non-discrimination)

All potential bidders must be treated equally and without discrimination regardless of race, age, religion, or gender (or their nationality or location within the EU). This means providing clear information to both suppliers and potential contractors ensuring that they fully understand the public procurement process.

Open competition

Competition is widely considered as a cornerstone of efficient and effective public procurement. It fosters innovation, improves the quality of the service, and can lead to significant cost savings for public administration. Supporting competition requires ensuring visibility on public procurement processes and spending, developing policies and strategies to ensure effective access to procurement opportunities, and finally encouraging all stakeholders to actively contribute to the design of the public procurement system. Procurement procedures must be open to all qualified companies and economic operators, promoting a competitive market (and preventing barriers to intra-EU trade). Encourage strong competition among suppliers to offer the best value for money, reducing corruption and optimizing public spending. Competition helps to ensure goods and services at a reasonable price and quality.

European Court of Auditors comment: over the past decade, competition for public contracts has declined, and the 2014 reform of the EU directives has shown no signs of reversing this trend. Overall, there is a little awareness for competition in public procurement. Available data is not systematically used to identify the root causes of the decline and only sporadic action is taken to reduce barriers. The key objectives of goals of the EU's 2014 reform to ensure competition, such as simplifying and shortening the procurement procedures, have not been achieved.

SMEs involvement in public procurement

Supporting SMEs in public procurement involves government policies and practices aimed at increasing the participation of SMEs in public procurement by reducing barriers and offering benefits, such as breaking down large contracts into smaller lots, using clearer and simpler requests for proposals, offering upfront payments, and reserving contracts for SMEs. These measures not only help SMEs grow by providing stable revenue and market access but also benefit the public sector by promoting innovation and competition, leading to better use of public funds. The European Union (EU) recognizes the existence of significant obstacles that prevent SMEs from participating effectively in public procurement.

Innovation

Innovation in public procurement involves using the purchasing power of the public sector to stimulate the market to develop new and improved solutions to societal challenges. It goes beyond the traditional purchase of existing products and services by procurement entities, focusing on purchasing the innovation process or acting as an "early adopter" of new technologies. Key methods include Pre-Commercial Procurement (PCP), in which buyers purchase R&D services to meet specific needs, and innovation in public procurement, in which the public sector launches innovative solutions and stimulates their market adoption.

Sustainability

Sustainable Public Procurement (SPP) means integrating environmental and social considerations into the purchasing decisions, alongside traditional economic factors. This approach goes beyond the simple cost of goods or services, considering the overall impact on society and the environment throughout the product's lifecycle. Although many countries have Green Public Procurement (GPP) policies, challenges remain in consistently monitoring compliance, assessing the impact of GPP, and fully realizing its potential for environmental benefits.

Conclusion

Public procurement principles are essential to ensuring the efficiency, effectiveness, and ethics of public procurement. While these principles foster economic growth and societal development by ensuring broad access to high-quality opportunities and services, they can also create administrative complexity. The challenge is to balance these principles to prevent procedural burdens while ensuring robust competition, accountability, and the full potential of public procurement.

SMEs in Public Procurement¹

ADACI Research & Development Committee

Understanding the SME ecosystem

SME stands for Small and Medium-sized Enterprise, a classification for businesses that fall between small businesses and large corporations, based on factors like employee count and annual revenue or assets. The exact definition varies significantly by country and industry, with some setting the upper limit for employees at 250, as in the EU, while others, like the United States, use a higher threshold of 500 employees.

Key Features:

- Employee Size represent the most common metric, though the specific number varies.
- Revenue/Turnover: annual revenue or turnover also serves as a threshold for classification.
- Assets: financial assets can be another factor in determining if a business is an SME.
- Independence: SMEs are typically independent, non-subsidiary firms.

Features of SMEs in the European Union

Type of SME	Staff headcount	Turnover ¹ or	Balance Sheet Total
Medium-sized	< 250	≤ € 50 ml	≤ € 43 ml
Small	< 50	≤ € 10 ml	≤ € 10ml
Micro	< 10	≤ € 2 ml	≤ € 2 ml

Turnover is the total sales revenue over a period, while the balance sheet total is the sum of all assets on the balance sheet at a specific point in time, representing the company's financial position (assets/activities and liabilities)

In the United States, a small to medium-sized enterprise (SME) is typically defined by the U.S. Small Business Administration (SBA) as an independent firm with fewer than 500 employees. While this is the general benchmark, the precise definition can vary by industry. The number of employees in China's SMEs is not a single, fixed figure, as it varies by industry and includes criteria for employee count, revenue, and assets. For example, a medium-sized industrial enterprise needs at least 300 employees, while a medium-sized construction enterprise needs 600 to 3,000 employees.

Public procurement and SMEs

SMEs constitute 99% of all firms and employ up to 80% of the workforce² (World Trade Organization, 2020). They play a significant role in various economic sectors, including services, agribusiness, construction, retail and wholesale trade, manufacturing, real estate, and imports and exports. Start-ups and SMEs can be a primary source of innovation, adapting supply to different contexts or user needs and responding to new or niche demand. Growth in strategic sectors such as software, nanotechnology, biotechnology and clean technologies, is largely driven by new and small firms. Unfortunately, they face size-related barriers in accessing finance, skills, and technology and suffer the complexity of the procedures and administrative burden of public procurement which hamper their access to the market.

Given their importance, facilitating SMEs' participation in public procurement is crucial for promoting inclusive economic growth and fostering a valid entrepreneurial ecosystem. Many public sector organisations implement supplier diversity programs to foster inclusivity and to promote the participation of underrepresented businesses, including SMEs. Governments are increasingly taking steps both to give SMEs better access to public markets and to remove barriers preventing them from winning public contracts. Engaging SMEs in public procurement is beneficial both for the companies and for the public sector. Removing the barriers to SME participation in public procurement is in line with the principles of equal treatment, open access and effective competition, and has been part of many recent public procurement reforms in OECD countries.

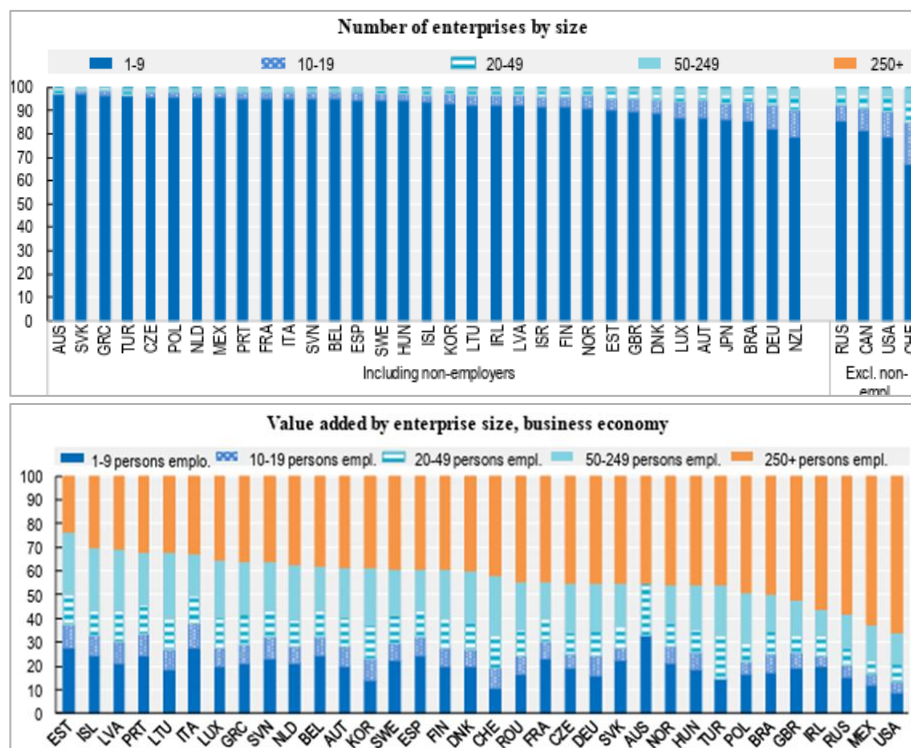
Governments are seeking to facilitate SMEs' access to public procurement by ensuring, for example, that:

- the size of tenders does not unjustifiably discourage SME participation;
- public procurement processes and documents are not unnecessarily complex, and are
- simplified according to the value and risk of the procurement object;

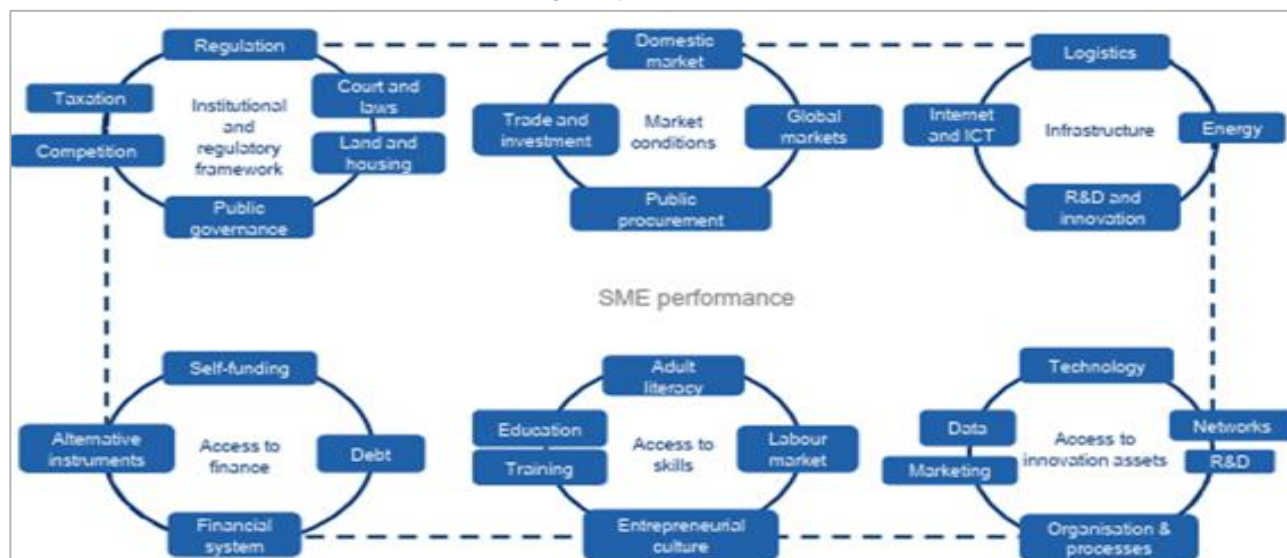
- the SMEs financial capacity is set at a proportionate level;
- the use of information and communication technologies improves SMEs' access to public procurement.

Some governments have implemented explicit public procurement measures for supporting SMEs, such as dedicated financial instruments and preference programmes. In the US, government has set targets for contracting with small business, including women-owned, veteran-owned, and disadvantaged small business, with a goal of 23% of all federal prime contracts awarded to small business. The Chinese government³ has a policy ensuring that at least 40% of public procurement contracts are awarded to SMEs.

Features of SMEs in the European Union



Institutional and regulatory framework conditions for SMEs



While the EU does not have a mandatory target for awarding contracts directly to SMEs, it strongly encourages and support the participation of *SMEs through policies that aim to increase their access and reduce barriers to the internal market.*

To ensure that these support policies are effectively integrated with daily practice, contracting authorities as well as SMEs, should have the necessary capacities and skills.

To address this challenge, policy makers provide practitioners with implementation tools, such as guidelines, and tailored training. In some countries, these efforts are reinforced through the establishment of a dedicated body to ensure effective implementation across the different levels of government. In addition, public authorities are increasingly collaborating with SMEs to build a partnership based on mutual understanding of needs and potential.

Benefits SMEs can offer

SMEs are the backbone of any healthy economy: they drive growth, provide employment opportunities and open new markets. There are many benefits of working with SMEs such as good customer service, due to highly skilled and experienced workforces and smaller chains of command. SMEs are often more adaptable and agile to situations than larger organisations due to their smaller nature, which allows them to respond quickly and flexibly to changing requirements and provide the most suitable solution (ideal for tight timescales). SMEs can also support greater localisation, which can reduce carbon footprints associated with delivery helping to support public sector organisations in reaching net zero. They also create local jobs, and can contribute to the local social value agenda in other ways, as they are more committed to the community they live and work in. In addition, they ensure:

- Better value for money. SMEs have lower administrative overheads and management costs than larger firms, depending on the nature of the procurement, and this can result in lower prices.
- Better quality of service – SMEs have short management chains and approval routes, so they can respond quickly to changing requirements. They often offer a more customised level of service and in some cases, they ensure higher quality than their larger competitors, who can be discouraged by the limited demand.
- More innovation. Sometimes SMEs bring innovation through the early exploitation of new technology or by using innovation to differentiate themselves from established market players.

SMEs face difficulties in participating in public procurement markets

Despite the potential benefits of having SMEs participating in public procurement markets, they are underrepresented in the process compared to their large competitors. In the last ten years the share of contracts awarded to SMEs has been increasing in USA and China³ and has remained stable in Europe and Africa. An important objective of the 2014 reform of the EU directives was to favour SMEs access to public procurement. Unfortunately, the share of contracts awarded to SMEs has not increased overall as confirm by the 2023 report published by the European Court of Auditors (ECA). According to OECD, the difficulties that SMEs encounter in doing business with public contractors are:

- slow payment cycles;
- bid specifications drafted too restrictively and/or in a generic and imprecise manner;
- difficulty getting in touch with actual user of service/product;

- excessive bureaucracy/paperwork required for the applications;
- reluctance to consider new products/services;
- bid specifications written in a generic and imprecise manner;
- excessive paperwork in relation to the relevance of contract to be awarded;
- excessive delays between bid closing and contract award;
- difficulty in competing against large firms;
- lack of rigorous performance audits to weed out unprofessional contractors;
- bid bond requirement;
- performance bond required.

A recent survey carried out by ChileCompra, the Chilean central purchasing body, identified the following barriers to Chilean SMEs participating in the public procurement market:

- very large contracts;
- insufficient access to information on business opportunities in public procurement;
- lack of knowledge regarding public procurement procedures;
- excessive bureaucracy;
- expensive standards and certification requirements;
- disproportionate levels of technical qualification;
- disproportionate levels of financial qualifications and incompatible payment terms;
- unclear tender requirements;
- lack of time to prepare bids;
- preference for lowest price tender;
- centralisation of public procurement contracts;
- lack of feedback from public buyers.

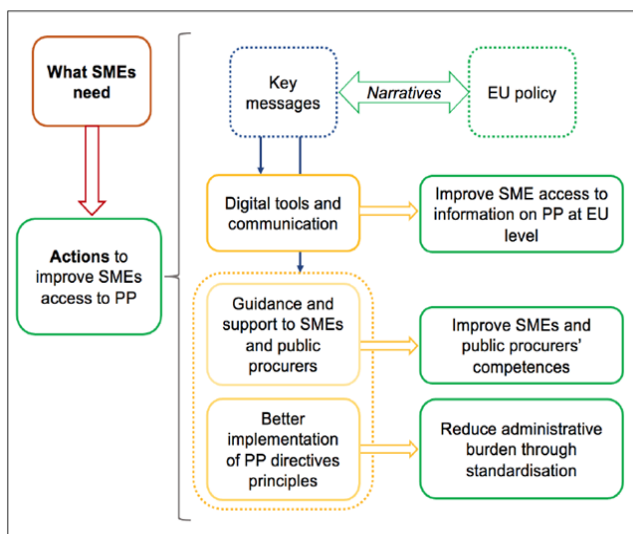
According to OECD, many of the challenges SMEs faced in participating in public procurement in the 1980s and 1990s persist today. Governments have reacted with policy measures to remove the barriers and facilitate access to both national and international markets. In spite of the efforts made to address the constraints identified by SMEs, today discussions still focus on how to remedy the situation. In 2021 the EU Commission conducted a study⁴ to identify the possible actions to reduce such barriers and identified the four main obstacles that hinder SMEs in every stage of procurement cycle:

- low trust in PP and public procurers, who are perceived as far from market reality;
- high administrative burden and a learning process that requires significant resources not always available in SMEs;
- cultural obstacles that hamper collaboration between SMEs and public officers;
- complex and unfriendly digital platforms (barrier for enterprises with low digital literacy).

The study revealed that SMEs expect:

- more efficient tools to improve their capacity to screen public procurement opportunities;
- more effective and simpler communication systems;
- a strong support for digitalisation and upskilling of their personnel to avoid the risk of being excluded by the technological shift;
- more dialogue between SMEs and public procurers (it could increase SMEs trust in PP and favours better knowledge of PP principles);
- more guidance and support for SMEs (this implies partnerships between national agencies, public services for SMEs and business associations);
- a systematic approach to capacity building by public procurers (they should be empowered to formulate and use selection criteria more consistent with procurement needs);
- simplification and standardisation of public procurement practices (standard models to enable shorter and more consistent tender documents could reduce administrative burden and help public procurers to focus on consistency and value for money).

Actions to improve SME access to PP4



OECD Recommendation

The OECD advocates for policies that ensure tenders are appropriately sized, processes are simplified, financial conditions for SMEs are proportionate, and information and communication technologies are used to improve their access. The ultimate goal is to promote inclusive economic growth by making public procurement more accessible and beneficial for SMEs. OECD key recommendations include the following:

- **simplify Processes:** public procurement processes and documents should not be unnecessarily complex and should be simplified based on the value and risk of the purchase considered;
- **proportionate financial capacity:** the financial requirements for SMEs should be set at a proportionate level to ensure their participation is not excessively limited;
- **appropriate tender size:** the size of tenders should not unjustifiably discourage SME participation;
- **leverage technology:** the use of information and communication technologies (ICT) can significantly improve SMEs' access to public procurement opportunities;
- **strategic policy integration:** countries should integrate SME support into broader policy goals, such as promoting innovation, environmental protection, and responsible business conduct through PP.

Specifically, the OECD Council recommends⁵ its members:

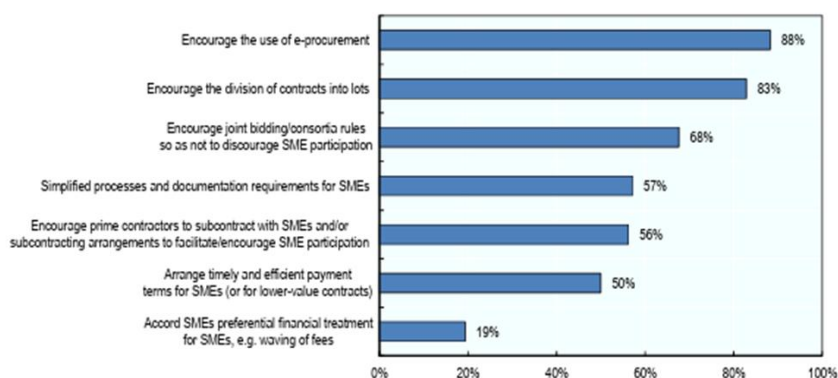
- To facilitate access to procurement opportunities for potential competitors of all sizes. To this end, they should have in place coherent and stable institutional, legal and regulatory frameworks that treat bidders, including foreign suppliers, in a fair, transparent and equitable manner.
- To deliver clear and integrated tender documentation, standardised where possible and proportionate to the need, ensuring that:
 - they are designed so as to encourage broad participation, including new entrants and small and medium enterprises;
 - they contain binding information on the evaluation and award criteria and their weights.
- To ensure that the extent and complexity of information required in tender documentation and the time allotted for suppliers to respond is proportionate to the size and complexity of the procurement, taking into account any specific circumstances.
- To limit the use of exceptions and single-source procurement. Competitive procedures should be the standard method for conducting procurement as a means of driving efficiencies, fighting corruption, obtaining fair and reasonable pricing and ensuring competitive outcomes. If exceptional circumstances justify limitations to competitive tendering and the use of single-source procurement, such exceptions should be limited, pre-defined and should require appropriate justification when employed.

- To review the criteria for assessing suppliers. To promote a fair and inclusive procurement process, authorities should design supplier award criteria that value the contributions of SMEs and startups, focusing on quality, innovation potential, sustainability and social objectives, and local impact.
- To divide contracts into lots facilitating SMEs' access, both quantitatively and qualitatively. Quantitatively, the size of the lots may better correspond to the capacity of the SME to deliver the good or service, and qualitatively, the content of the lots may correspond more closely to the specialised sector of the SME. Some of the arguments against dividing contracts into lots include concerns over the potential adverse effects on competition.
- To allow and facilitate joint bidding. Where compliant with competition law, joint bidding in which two or more firms submit a single bid, represents a commonly accepted practice in OECD countries. Suppliers, typically operating on a temporary rather than long-term agreement, bid in consortium for a contract. The reliance on capacities of other firms to meet criteria relating to economic and financial standing and technical and professional ability constitutes the main benefit of this mechanism.
- To encourage the use of e-procurement and digitalization. Public procurement portals are digital platforms that centralize and digitize the processes of public sector purchasing, improving transparency, efficiency, and competition. Examples include national e-procurement systems like Etihad (Saudi Arabia) and the E-GP System (Kenya), as well as pan-European platforms such as the European Commission's Funding & Tenders Portal and the Open tender platform, which provides access to data from multiple jurisdictions. These portals allow businesses to find, bid on, and track tenders and contracts online, streamlining the entire procurement lifecycle from planning to award.
- To increase transparency on public procurement processes and opportunities.

If lots are defined too narrowly, that may open the door to direct awards, which often lack transparency and thus damage value. At the EU level, the 2014 EU Directive on public procurement takes this concern into consideration by stipulating that contracts must not be artificially split in order to avoid application of the public procurement rules concerning aggregation requirements.

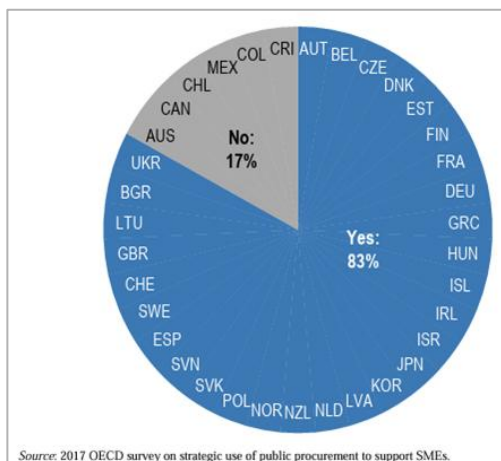
Encouraging division of contracts into lots to facilitate SME participation in public procurement

Figure 2.1. Measures and approaches used to support SMEs in public procurement



Note: Based on responses received from 20 OECD and 5 non-OECD countries.
Source: 2017 OECD survey on strategic use of public procurement to support SMEs.

- To simplify and standardise public procurement processes The complexity of public procurement systems and processes represents a major hurdle to SME participation in public procurement markets.
- To favour the use of procurement instruments and tools for lower-value contracts. Launched in 2004 and currently operating with an e-catalogue of over 10 million items, the MePA (Electronic Marketplace for the Public Administration) is one of the leading e-marketplaces currently operating in Europe. Managed by Consip, MePA provides a paperless environment for awarding low-value public contracts for goods, services and maintenance works. It is a digital marketplace in which contracting authorities can purchase goods and services offered by qualified enterprises for a value below the EU threshold (works contracts: € 5,538,000; supplies and services contracts: € 443,000).



Source: 2017 OECD survey on strategic use of public procurement to support SMEs.

MePA encourages economic operators to engage with contract authorities throughout Italy and provides operational flexibility, allowing for direct awarding from standardised e-catalogues and for requests for quotations (RfQ). The low-value purchases managed through MePA represent 99.2% of the approximately 4.5 million contracts performed annually, and around 20% of the total value of tenders published every year.

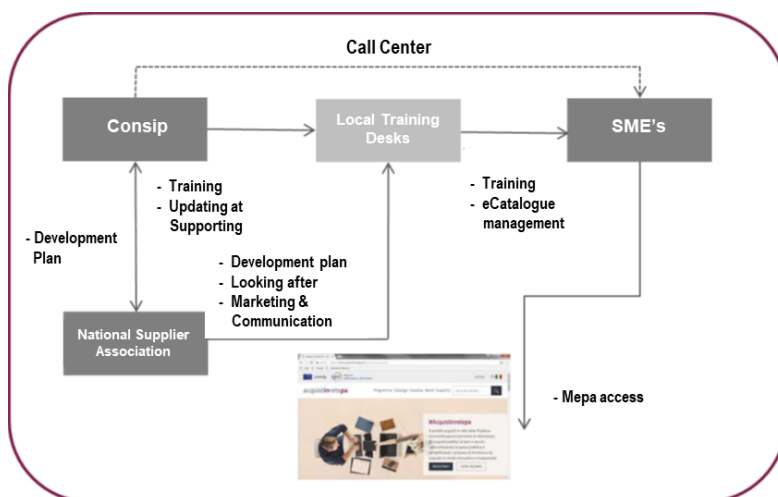
- Addressing the financial capacity (timely and advance payments and protection against late payment). SMEs may have limited capacity to satisfy bid security, minimum turnover or experience requirements, difficulties in obtaining loans for the working capital needed to execute a contract on a timely basis, and have less ability to incur the cost of lengthy payment delays that may be associated with public contracts.
- Setting proportionate qualification levels and financial requirements. To set proportionate qualification and financial requirements, public authorities must ensure these conditions are directly relevant and reasonably related to the contract's nature, scope, and risks, adhering to principles of fairness, transparency, and competition. This could require a cost-benefit analysis, assessing value for money and supplier capacity, and avoiding requirements that are excessively burdensome compared to the contract's value or market capabilities.
- Supporting SMEs participating as subcontractors. Favouring subcontracting in public procurement can happen through measures like mandating subcontracting percentages, setting specific subcontracting conditions, and favouring bids that utilize subcontractors for specific tasks. The benefits of this approach include potentially lower bids from firms offering rebates for subcontracted work, the inclusion of smaller and medium-sized enterprises (SMEs) by having them take on specific roles, and the ability to access specialized expertise. The Australian Industry Participation Framework applied to large Commonwealth tenders requires successful tenderers to prepare and implement a plan providing to Australian industry with a full, fair and reasonable opportunity to participate in the organisation's project. Such Plan is expected to promote the benefits of engaging Australian SMEs as subcontractors as opposed to relying on established supply chains when buying goods and services for the project.

- Increasing information on available contract opportunities. Look for specific government portals (e.g., FedBizOpps in the UK, or equivalent in other countries) that list contract opportunities, scope of work, and deadlines.
- To reduce transaction costs. The use of digital technologies in public procurement, and in particular the development of e-procurement systems, has greatly helped simplify public procurement processes.
- Supplier Training Desks. Systems containing training programs and resources designed to help suppliers effectively navigate and participate in public procurement processes, covering aspects like understanding bidding, compliance, ethical conduct, and building strong relationships with public sector. These tools focus on equipping suppliers with the knowledge and skills to meet the specific demands of public procurement, including navigating the procurement cycle, managing risks, and adopting best practices to secure better deals.

Since 2004, Consip has strengthened its cooperation with the suppliers' institutional representatives by setting up Supplier Training Desks at the enterprise associations' territorial offices. Their main objectives are:

- facilitate the participation of SMEs in public procurement;
- improve SMEs' familiarity with ICT tools;
- provide training in the use of e-procurement tools; and
- support qualification and use of MePA⁶ by SMEs. The business model, see figure below, involves the institutional actors of the market, each of them with a defined role. Consip trains people from the associations who in turn train the local SMEs.

Business model of Consip's Supplier Training Desks



- Increasing SMEs' chances of winning public contracts through preference programmes.

Examples of preferential measures, implemented by a few countries⁷, include set-asides and bidding price preferences. There are serious concerns over the adverse effects of preference programmes on competition in public procurement.

The US small business set-aside is a powerful tool for helping small businesses compete for and win federal contracts. Every year, the US federal government purchases approximately USD 400 billion in goods and services from the private sector. When market research concludes that small businesses are available and able to perform the work or provide the products being procured by the government, those opportunities are "set aside" exclusively for small business concerns.

Article 9 of the Chinese Government Procurement Law of 2002, states that "government procurement has to be conducted in such a manner as to facilitate achievement of the economic and social development policy goals of the State, including but not limited to environmental protection, assistance of underdeveloped or ethnic minority regions, and development of small and medium-sized enterprises".

Finally, OECD recommends that adherents develop a procurement workforce with the capacity to continually deliver value for money efficiently and effectively.

To this end, governments should:

- ensure that procurement officials meet high professional standards for knowledge, practical implementation and integrity by providing a dedicated and regularly updated set of tools, for example, sufficient staff in terms of numbers and skills, recognition of public procurement as a specific profession, certification and regular trainings;

- provide attractive, competitive and merit-based career options for procurement officials, through the provision of clear means of advancement, protection from political interference in the procurement process and the promotion of national and international good practices in career development;
- promote collaborative approaches with knowledge centres such as universities, think tanks or policy centres to improve skills and competences of the procurement workforce.

The European Commission enhances the capacities of public procurement officials through initiatives like the ProcurCompEU⁸ framework and the Public Procurement Data Space (PPDS)⁹ to foster professionalization and strategic use of public procurement. Key efforts include professionalizing public buyers, promoting green and innovative procurement, boosting eProcurement, and providing training and tools through institutions like the European Institute of Public Administration (EIPA).

Conclusion¹⁰

The role of public procurement extends beyond merely acquiring goods and services; it can drive local economic development, foster innovation, and build robust partnerships across sectors. Involving a broad spectrum of suppliers not only supports a fairer, more dynamic procurement environment but also contributes to a more innovative and resilient economy.

By making procurement processes more accessible to smaller and emerging businesses, public authorities can foster a marketplace where SMEs and startups are empowered to compete, collaborate, and grow. Such inclusivity allows these firms to gain valuable experience and resources through public contracts, helping them scale their operations and strengthen their market presence.

Note

¹ Sources: 2018 OECD Report: SMEs in Public Procurement, Practices and Strategies for share benefits; OECD SME and Entrepreneurship Outlook 2019 and OECD SME and Entrepreneurship Outlook 2023.

² World Trade Organization, 2020.

³ China expands policies to help SMEs prosper by Tom Saltmarsh September 22, 2023.

⁴ An analysis of SMEs' needs in public procurement, EU Commission Feb 2021.

⁵ Even though these recommendations were made in 2017 they are still valid.

⁶ MEPA: the Italian Public Administration Electronic Marketplace, which is an online platform for public bodies to purchase goods and services from qualified suppliers.

⁷ Only a few OECD countries have legislative provisions for bid preference (e.g. Korea and Mexico) and set-asides (e.g. Canada, Korea and the United States) - OECD Report: SMEs in Public Procurement.

⁸ ProcurCompEU: a competency framework designed to help public administrations and officials improve their skills and expertise in public procurement.

⁹ Public Procurement Data Space (PPDS): a platform launched in 2024 that connects European and national procurement databases, using data analytics to improve decision-making and enhance transparency.

¹⁰ Information on how to encourage the participation of SMEs.



Innovation Procurement¹

Giovanni Atti, *former President of ADACI and Member of the Board of IFPSM*

Introduction to innovation procurement

Public procurement rules no longer just concern “how to buy”, but also provide guidance on “what to buy”. The aim of tax-payers is gaining new dimensions, beyond merely satisfying the primary needs of the nation. The public is interested not only whether purchasing processes comply with the law, but also whether they provide added value in terms of quality, cost-efficiency, innovation, environmental and social impact, and opportunities for the suppliers’ market.

Innovation procurement or Public Procurement Innovative Solutions (PPI) is the strategic use of purchasing power to foster new goods, services, and processes, thereby improving public services, driving economic growth, and stimulating technological advancements. It can involve initiating research and development through pre-commercial procurement² or acting as an early adopter of innovative, commercially available but not yet widely deployed solutions. Through public procurement of innovative solutions, public bodies define their needs in functional terms, inviting market operators to propose innovative solutions to meet these needs, often focusing on outcomes rather than on peculiar technical specifications. Unlike innovative procurement, which focuses on enhancing procurement processes, innovation procurement focuses on acquiring novel solutions that create value and address public challenges. It encourages investment in research and development, promotes competition, and empowers public sector managers to adopt innovative solutions.

Accounting for over 12% of GDP, public procurement could create a huge market for innovative products and services, but its potential in this area remains underutilised³. Governments aim to improve public procurement practices by promoting the demand of innovative goods, services and works. This will allow the integration of public demand into the innovation ecosystem and will foster economic recovery. Furthermore, innovation could be a major tool to foster the transformation of our economic system towards a green and digital economy.

In the field of innovation policies, governments have traditionally directed their efforts towards the supply side, ensuring that the private sector operates in an innovation friendly-environment. In recent years, however, the role of “demand-side policies” to support innovation has gained in prominence and has been receiving growing interest from many countries. Governments recognise that innovations materialise when there is a demand for innovation. Therefore, effective policies to support innovation have to focus on both supply and demand conditions (*OECD, 2011*). Among demand-side innovation policies, such as innovation-friendly regulations, public procurement is increasingly recognised as a potential strategic instrument and a policy lever for achieving innovation, the development of small and medium-sized enterprises (SMEs), sustainable green growth and social objectives, like public health and greater inclusiveness. All of these goals are consistent with 2030 Agenda for Sustainable Development (*OECD, 2016*).

Governments are under increasing pressure to improve the cost-effectiveness of public services while addressing complex challenges like climate change, public health crises, and digital transformation. Innovation is essential in overcoming these issues, and public procurement plays a central role in fostering it. By strategically utilising public procurement, governments can stimulate the development of new products, services, and technologies to address emerging societal needs, thus improving public services and strengthening the business ecosystem, especially for SMEs.

If used strategically, innovation procurement has the potential to improve productivity and inclusiveness, and allows potential vendors to enter the market with new, innovative goods or services. The strategic use of public procurement to boost innovation is closely connected to a government’s power to create market conditions. In fact, given the size of public procurement, governments, among other actors, it can influence demand. As a result, the role of purchasers in the public sector is changing to include more elements of active risk.

Enhancing the implementation of strategic use of innovation procurement requires strong political commitment, and the capacity to manage new processes and working methods at all levels of government (*OECD, 2015b*). Part of governments' new role is to facilitate interactions and collaborations between different actors or stakeholders.

Following the example of the United States, the EU recognized the importance of procurement as a tool for promoting innovation in the early 2000s. In 2014, it revised its procurement directives aimed at facilitating the acquisition of innovations via a number of PPI tools. Contrary to the traditional calls for tenders, which left little room for innovative solutions, the new approach introduced the concept of procurement needs in terms of functional requirements and took life-cycle costs into account in assessing cost-effectiveness, defining innovation related factors as award criteria.

This created the necessary preconditions for suppliers to successfully explore and propose innovative solutions in the tender phase. Germany was a forerunner in implementing the revised legal framework, allowing government agencies to specify innovative aspects of procured products as selection criteria in calls for tender.

Features of successful innovation procurement

Well-designed innovation procurement promote innovation, opening the door to higher quality and more efficient solutions, environmental and social benefits, better cost-effectiveness; and new business opportunities for enterprises. It includes:

- the development of innovative solutions through the procurement of research and development services;
- the procurement of innovative solutions that are not yet available or do not exist on the market;
- the procurement of innovative solutions that do exist, but are not yet widely available on the market.

By requiring innovation to meet public needs, public procurement can create lead markets for innovative goods and services on a scale that makes the R&D investments profitable for suppliers.

In addition, by acting as an early user of innovation, governments usually absorb the risks associated with deploying novel and unproven technologies. This early adoption may provide important lessons to innovators, helping them refine their products and strategies in preparation for large-scale commercialisation. While this approach cannot directly de-risk the upfront investment ex-ante, it can enhance the innovator's confidence in subsequent ventures.

Unlike standard procurement, where the main focus is on production, and the main concern is cost efficiency, innovation procurement includes a R&D phase with significant non-recurring costs, prior to the production phase.

This approach requires contracts and procedures to be properly designed to provide suppliers with the right incentives to achieve innovation and efficiency goals, as well as a different cultural on the part of policy makers and public purchasers.

The various changes to be made include the following.

- **Focus on Functional Requirements:** instead of specifying a particular product, contracting authorities have to define their needs in terms of desired outcomes or functions by using a performance specification in the tender stage. A performance specification defines the desired outcomes and functions of a product or service, such as its durability, efficiency, or safety, without dictating the specific methods, materials, or processes to achieve those results. In contrast, a technical specification or prescriptive specification provides detailed instructions on the exact materials, dimensions, processes, and design elements to be used. Performance specifications offer greater flexibility and encourage innovation by focusing on what needs to be achieved rather than how it should be done. They do not prescribe specific methods or materials, allowing the supplier to find the most cost-effective or innovative solutions.
- **Award criteria:** for innovation procurement, the Most Economically Advantageous Tender⁴ (MEAT) criterion goes beyond the simple lowest price to include factors such as technical requirement, quality, innovation, and environmental or social aspects, together with cost-effectiveness and life-cycle costs. The goal is to achieve the best overall value for money taking into account the innovative nature and potential future benefits of a solution, ensuring the criteria are clearly linked to the subject- of the contract and promoting strategic with best-value for money over simply the cheapest option.
- **Bundling versus unbundling contracts:** in Public Procurement (P.P.). contracts, bundling is the strategy of combining multiple, often complementary, project components, functions, or phases into a single, larger contract awarded to one partner. Conversely, unbundling involves breaking down a large contract or complex project into smaller, separate contracts or tasks, each potentially awarded to different partners through separate bidding processes.

Both strategies are used to improve efficiency, transfer risk, and optimize value for money by aligning the contract structure with the project's specific needs. Bundling combines various project elements, such as design, construction, finance, and operation, into a single, comprehensive contract, with a single point of responsibility and an integrated risk management approach. Bundling contracts favor innovation by creating larger, more complex projects that incentivize suppliers to offer innovative solutions to meet broader needs, such as technology, credit, and technical assistance. This integrated approach allows for efficiency gains, greater investment in new technologies, and a more robust market for innovation by providing a comprehensive package of products or services. In the context of military and defense procurement, bundling with sole-source production is a common practice. Multi-year contracts in such settings do not only enhance innovative efforts, but also amplify cost efficiency incentives.

Bundling contracts allow for risk sharing by consolidating multiple project phases into a single agreement, which incentivizes the bundled party to manage risks more effectively. In public-private partnerships, bundling construction and operation phases encourages private partners to consider whole-life costs and favour the transfer of risk from the government to the private sector.

- **Centralisation:** innovation procurement doesn't necessarily imply centralisation, but centralisation can be an effective strategy for achieving innovation goals by fostering collaboration, standardisation, and expert knowledge sharing, though hybrid models also exist, balancing centralisation with decentralised autonomy to better suit specific organizational and market needs. Centralised units facilitate communication and collaboration, avoiding duplication of efforts and enabling the sharing of knowledge and best practices across the organisation.

Features and challenges of innovation procurement

The major features, impacts and challenges of PPI are:

- **Demand-Driven Innovation:** by boosting demand size, procurement centralisation can enhance the impact of PPI as a catalyst for innovation. Public sector identifies its needs, and uses its purchasing power to create demand for innovative solutions ultimately improving public services, driving economic growth, and fostering a more innovative ecosystem. It represents a public sector strategy where governments use their purchasing power to create demand for novel solutions, thereby stimulating industry investment and the development of new products, services, and processes.

By identifying unmet needs, the public sector acts as an early adopter, encouraging companies to innovate and bring solutions to the market.

- **Market Engagement:** by demanding innovation to satisfy public needs, public procurement can create lead markets for innovative goods and services at a scale that makes the R&D investments worthwhile for suppliers. This early adoption may provide important lessons to innovators, helping them refine their products and strategies in preparation for large-scale commercialisation.
- **Collaboration:** innovation foster collaboration between the main stakeholders and levels of public administration and requires an open dialogue between contracting authorities and innovative enterprises.
- **Bottom-up approaches:** international surveys⁵ demonstrate that innovation is mainly the result of bottom-up approaches favoured by purchasers, and underline the importance of strategic governance of P.P..
- **Macro-Level Impact:** at macro level, innovation drives economic growth through increased productivity and efficiency. It also shapes national and economic global structures, requiring strong institutional frameworks and effective industrial policies to promote its development and manage its effects.
- **Financial Support:** innovation procurement alleviates financial constraints for innovative companies, especially small and young companies that have limited access to external finance.
- **R&D and Sales:** innovation procurement significantly increases companies' R&D investments and promotes sales of high-tech products.
- **Risk of Protectionism:** the use of accreditation catalogues can carry a risk of protectionism, as benefits could be unfairly directed towards local firms.
- **Focus on incremental vs. radical Innovation:** Existing research⁵ indicates that PPI can foster innovation. Firm-level evidence, however suggests that it tends to encourage incremental rather than radical innovations, thus promoting technology diffusion rather than revolutionary technological advancements. PPI is particularly effective for young, small, or financially constrained firms, especially if they are given the flexibility to explore and propose different innovative solutions. Emerging literature finds evidence of the effectiveness of PPI in promoting green innovation.

- **The green transition:** requires the development and widespread adoption of green innovations. This potential market attraction is particularly relevant in sectors with a significant environmental impact and where public authorities hold substantial market shares, such as defense, health, construction, and transportation.

Benefits of Innovation Procurement

- The benefits ensured by innovation procurement usually include:
- modernized public services: it provides citizens with better quality services and public utilities;
- economic growth: it incentivizes industry investment, creates new market opportunities, and supports the commercialisation of innovative products and services;
- value for money: it enables the public sector to achieve better value for money by acquiring solutions that are more effective and efficient;
- societal impact: it addresses societal challenges and promotes technological advancements.

The challenges of implementing an adequate public procurement strategy for innovation are many, such as reducing risk aversion, setting up new forms of coordination, improving skills and capacity, encouraging public purchasers to dialogue with suppliers, and enhancing data collection and the monitoring of results.

Recommendation of the OECD Council and PPI implementation status

OECD's report¹ reinforces IFPSM's vision for a holistic use of public procurement, and reaffirms the value of investing in PPI as a strategic tool and a means of addressing key societal challenges. OECD has developed a framework to support countries in their use of PPI, adaptable to different national contexts, focusing on new modes of collaboration and new forms of networking between governmental and non-governmental actors. It includes ten areas of intervention that should be included in any national PPI programme.

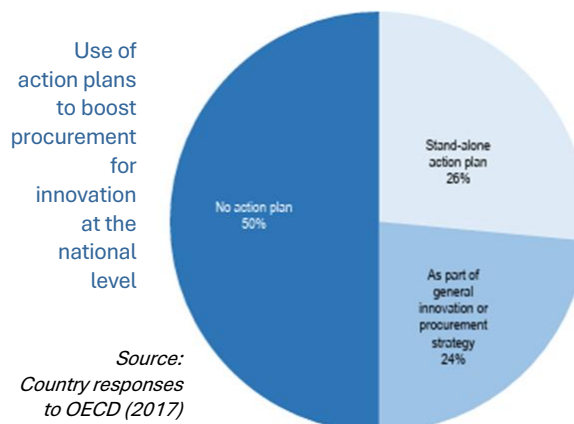
- Integrate policy strategies with defined targets at national, and regional level. This aims to ensure strong political commitment. To achieve innovation as a secondary policy objective, public procurement must be strategically implemented in coordination with other areas.
- Set up a legal framework, including understandable definitions, guidelines and templates to facilitate its implementation.
- Appoint "transformational" leaders with specialised skills knowledge to build qualified multidisciplinary teams to foster sound management. Additionally, intermediaries such as innovation agencies, could help connect buyers and suppliers.

Provide sufficient budgets, funding and other financial incentives, as lack of financial support is a major barrier to innovation procurement.

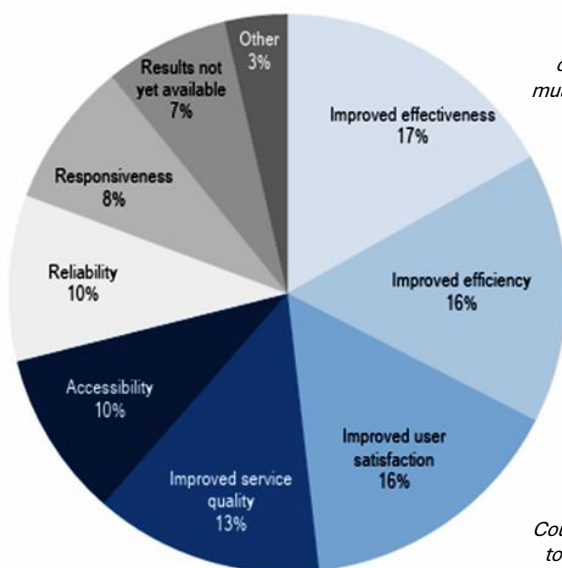
- Promote professionalisation providing specific training to develop staff skills and competences establishing multidisciplinary teams and competence centres focused on PPI.
- Raise public awareness by publishing best practices examples, creating a platform for knowledge-sharing and/or hosting workshops and seminars to share and build on success. Early stakeholder engagement should also not be underestimated.
- Undertake risk management and measure its impact to reduce potential losses and damages, and increase trust.
- Define test standards, methods and quality certificates, using standardisation as a catalyst for innovation.
- Encourage cooperation between all the actors in the public procurement process.
- Use appropriate e-procurement and information technology (IT) tools to perform a proper risk assessment and measure the impact of PPI.

However, achieving these goals is a challenging and a long-term process.

According to OECD, almost 80% of countries support procurement for innovation, and 50% have developed an action plan for procurement for innovation, either as part of broader innovation programme or as stand-alone initiative. Countries use various measures to support procurement for innovation, mostly policy instruments, regulations or legal instruments. Others include comprehensive programmes supported by specific financial instruments. In most cases, demand for a new product or service is the main reason for using PPI. The second most common reason is the improvement of performance of existing products or services. Nearly half of the countries (49%) report improved effectiveness or increased user satisfaction. Successful innovation procurement is often carried out in collaboration with external partners.

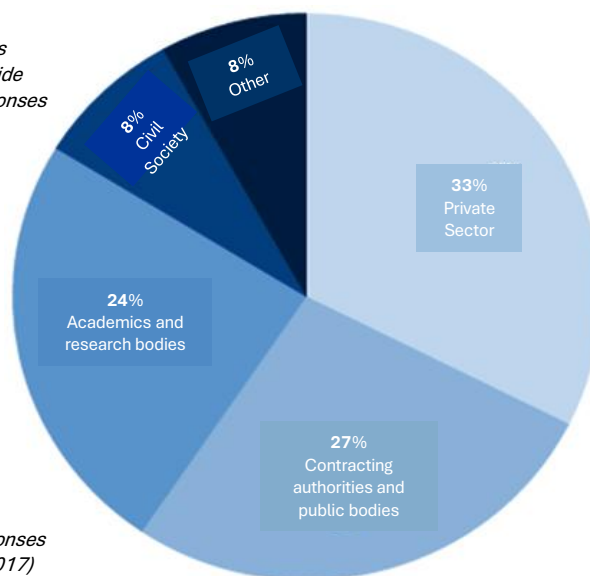


Results achieved by implementing procurement for innovation



Note:
Countries
could provide
multiple responses

Partners in procurement for innovation



Source:
Country responses
to OECD (2017)

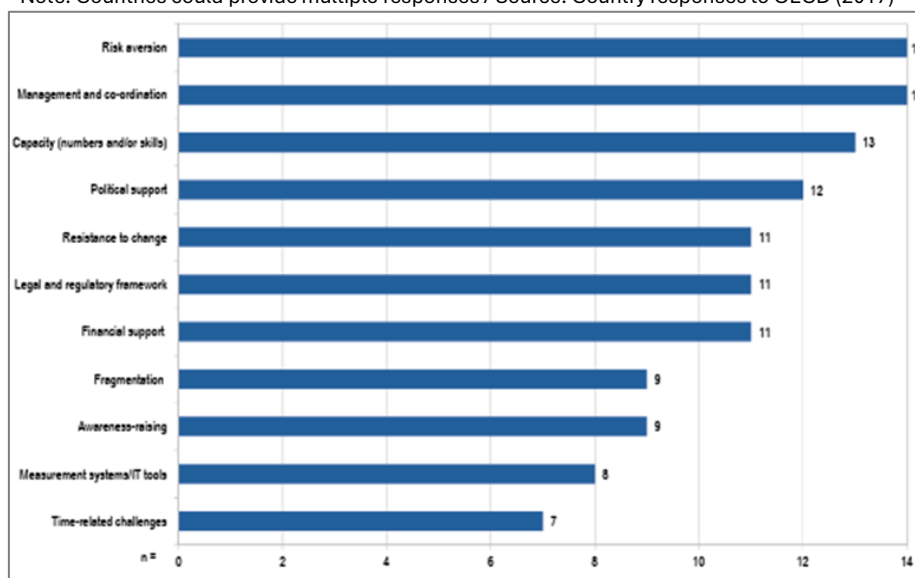
Barriers to the implementation of innovation procurement

Existing literature highlights three main barriers: first, purchasing staff's lack of ability of procurement personnel to deal with innovative markets, second, the reluctance or fear of modifying traditional contractual frameworks to embrace innovative form of partnership, and third, purchasing staff's time constraints. A survey conducted by some academics⁵ found that companies face barriers originating from the buyer's failure to consider the full procurement cycle, risk aversion and lack of political support.

Uyarra⁶ corroborates these findings, highlighting that the lack of interaction with procurement organisations, the use of over-specified tenders as opposed to outcome-based approaches, poor buyers' expertise, a lack of useful feedback and communication, and poor risk management during the procurement process are examples of the main obstacles reported by suppliers. These attributes are perceived as even greater when the supplier is a small company or non-profit organization.

The negative impact of bureaucratic workload is particularly significant when procurement personnel play a central role in the R&D process. According to the OECD, countries have made progress in implementing innovation procurement in recent years. However, as with any new policy, much of this progress lies in overcoming obstacles. The obstacles are very often similar across countries; the challenges are also often interconnected, making them particularly difficult to address. The following figure provides an overview of common obstacles countries face in developing or implementing innovation procurement policies.

Note: Countries could provide multiple responses / Source: Country responses to OECD (2017)



Management or coordination is frequently cited even if it doesn't specifically pertain to procurement for innovation. Measurement and monitoring can be crucial to the implementation of PPI and highlight the strengths and weaknesses of innovation. Organisational culture determines the risk appetite, which is collaborative dialogue between bodies with different perspectives. Indeed, where this dialogue was present, the outcome was usually positive.

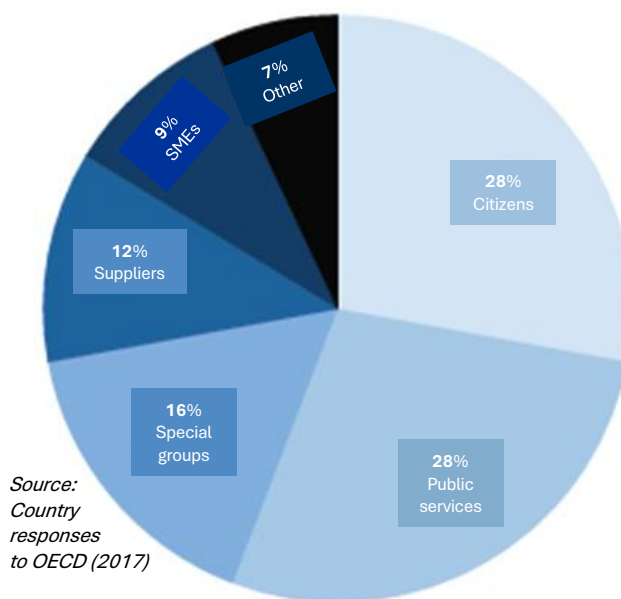
Capacity

The lack of capacity in terms of numbers and/or skills is the third most frequently cited category of challenges. It concerns two interconnected aspects: the qualitative and quantitative needs of the public procurement workforce to conduct innovation procurement. Qualitative aspects concern issues like specialised skills and knowledge required to conduct PPI. Quantitative aspects concern the sufficient availability of skilled staff to handle all PPI cases. The issue of capacity is distinct from issues such as cultural challenges: even if all officers are highly motivated to conduct innovation procurement, staff might not know how to do it. A lack of knowledge or expertise can hinder PPI because it requires a strategic approach that goes beyond simple decision making based on simple criteria, such as price. Often, it is difficult to find people with these skills, e.g. people who are able to identify unmet needs, to balance innovation goals with primary procurement objectives, or who are able to build test environments for innovative prototypes or solutions. Some countries (e.g. Finland, Germany, Greece and Sweden) mentioned the lack of sufficient staff in general. Belgium highlighted the need for skilled staff for bottom-up implementation. In addition, staff with specific skills is needed to manage and lead multi-disciplinary teams, consisting of professionals with a background in information technology, acquisition, financial management or law. Hiring highly-skilled staff is not only a challenge for the public agencies conducting innovation procurement. Smaller companies as potential suppliers face similar challenges, because they often lack staff with knowledge of public procurement processes. In addition to lack of skills, innovation procurement can also be hampered by the lack of officials willing or able to lead innovation projects, even when the few officials available are highly skilled. The two dimensions are closely related, and also have a financial aspect: hiring staff might be costly and hiring qualified staff can be even more so. The availability of highly qualified staff to support innovation procurement often depends on the availability of financial resources.

Partners and beneficiaries of procurement for innovation

OECD report highlights the important contribution provided by partners to the success of the innovative procurement projects. The largest group of partners in procurement of innovation are companies in the private sector (33%), the second largest group (27%) are mostly public institutions/bodies or other government entities. These include partnering ministries, government entities on other levels of government (e.g. municipalities) or state-owned enterprises or providers of government services (e.g. hospitals). The next largest group are academics and research bodies (24%).

Main beneficiaries in procurement for innovation



Some of the most frequently cited challenges are not related to issues usually associated with innovation procurement, such as unfamiliar technical complexities or higher costs for special orders. Rather, these challenges concern important aspects of any administration or organisation. Management or coordination, for example, is cited more frequently than areas that might, at first glance, be more specific to innovation procurement. Management and coordination would probably be identified as an everyday-challenge in any administration. Other key areas, such as monitoring, were not often cited as challenging areas; at the same time, countries have considerable scope to increase their monitoring efforts as they might be crucial to implementing innovation procurement. The achieved results are indicators for economic growth. The frequent pursuit of urgent solution contradicts long-term strategies. Lack of funds also means fewer resources can be allocated to risk mitigation measures, and fragmentation can lead to a lack of funding for a specific part of the system.

Political support

The existence of a national innovation procurement plan can be regarded as a basic requirement for the implementation of new procurement models. What is needed is smart policy development, strong political will and commitment as well as experimental approaches to innovation policy and a clear and coherent policy framework. Policy measures can take all of this into account by launching initiatives aimed at increasing awareness in innovation procurement for innovation practices, providing guidance and financing opportunities.

Resistance to change

Another major hurdle to innovation procurement concerns the organisational culture in the procurement function at all levels. Public procurement officials may resist change or have attitudes that conflict with the creativity and forward-thinking needed to experiment new and innovative approaches. Motivation to apply innovative approaches is missing; staff lack interest in innovative solutions. This aspect is critical and difficult to manage: organisational culture is much more difficult to control; simple, centralised approaches like increased funding won't work. At the same time, the organisational culture appears to be one of the most important success factors supporting innovation. Often, realising sourcing opportunities for innovation depends on the individual's ability to think creatively to find a solution, or to feel confident in accepting an unusual offer.

Legal and regulatory framework

Legal provisions often provide obstacles to innovation procurement: either because the traditional public procurement framework in place hampers innovative solutions, or because specific regulations guiding procurement for innovation are missing. Some existing regulatory frameworks can be interpreted as restrictive and inconsistent with innovation procurement. This latter aspect of legal interpretation supports the afore-mentioned challenges related to risk aversion, especially when the legal framework offers limited clarity. In such cases, public officials may fear litigation and refrain from actions that could be interpreted ambiguously in court.

Financial support

Sufficient resources are important for all organisations involved in innovation procurement innovation process (e.g. an agency, but also the company providing the innovative product or service). Countries often lack sufficient financial support available to conduct innovation procurement that is often associated with higher than usual. In addition to sufficient funding, countries have expressed a need for dedicated funds.

Fragmentation

Innovation procurement is often managed by different institutions that play different roles: responsibilities are assigned to only one or more parts of the activity. For example, one institution's responsibilities relate only to procurement elements, while other institutions are responsible for the "content", i.e. the good or service being procured. Strategic innovation procurement is therefore often hampered by fragmentation (or poor integration) across various dimensions. This includes the fragmentation of governance systems and administrations, for example due to different levels of governance, federal structures or several institutions taking part in PPI.

Awareness-raising

Despite the recent increase in attention to the strategic role of innovation procurement, there is still a lack of awareness. Purchasers, as well as potential suppliers, are unaware of the role of public in innovation and that public could generate demand for innovative products. Furthermore, there might be a lack of knowledge about the innovation processes. Some countries have launched awareness-raising initiatives complemented by training.

Communication and co-ordination

The most frequently underestimated aspects concern communication, advocacy and awareness-raising, both internally and externally. Extensive communication and coordination are crucial for the success of innovation and a culture of innovation. These aspects are closely linked to the challenges faced in terms of management and leadership and culture of innovation. Innovation procurement thrives where:

- there is a good communication on the various aspects of innovation;
- there is coordination between different levels of government;
- procurement officers maintain market consultation and dialogue with potential suppliers.
- the risk-benefit ratio is known and PPI is highly accepted;
- partnerships have been established with relevant stakeholders;
- coordination between the different branches of public procurement process is good.

In turn, where these aspects were not present, innovation procurement has proven difficult.

Strategy

Leadership and dedicated innovation strategy have proven to be key factors in the successful implementation of PPI. Higher levels strategies have contributed to coordination among different lower levels of government, as a common direction eliminated disagreements.

Comprehensive strategies appear to be a common, well-placed way to demonstrate political support for PPI, the lack of which has been identified as a major challenge.

Change management

For many countries, innovation procurement presents a challenge especially because it is new and requires adaptation. Change management can address this issue, and help countries implement other measures to address the challenges. Experience shows that countries underestimated the time needed for agencies to conduct innovative procurement procedures. Furthermore, it took unexpectedly longer to develop a culture that accepted the new methods.

Developing customized technical solutions

An often-overlooked aspect of policy design, but of practical relevance, was technical challenges. For example, procurement processes had sub-optimal results because bidders presented themselves with an insufficient level of technical maturity, meaning the product offered was not sufficiently advanced and therefore did not meet the requirements. In response, functional specifications could be introduced to ensure the product offered met the needs. At the same time, specific requirements often made bids less innovative as there was little room for creative solutions. We should purchase results and not standards, that is the best solution for the work in question.

Innovation and sustainable green growth

In most countries, public procurement has evolved from a limited administrative process to “smart” procurement management, including strategic innovation procurement. An effective government strategy for PPI and the right policy mix are the most important prerequisites for the implementation of an innovation-friendly environment. New concepts are arising to define the combination of secondary policy objectives.

Finland included innovation through public procurement in its national “Cleantech” policy and related action plans. This does not necessarily imply the development of new innovative solutions, but rather the provision of environmentally friendly products that already exists (e. g. LEDs, solar energy infrastructure for households and mobility or low-carbon products to reduce CO2 emissions).

Monitoring risk and measuring impact

Monitoring evaluation and risk management are activities that are part of the public procurement cycle for innovation procurement. Only 44% of OECD countries have systems in place to measure the impact of their innovation procurement. However, monitoring is essential for tracking and demonstrating the benefits of innovative solutions. Some countries have begun to address the issue of impact evaluation and measurement by conducting case-by-case studies. The compatibility of different monitoring systems and the appropriate use of data could be more effective. Furthermore, sourcing, leveraging and sharing data and best-practice information on impact measurement and evaluation models could contribute not only to innovation procurement but also to supporting all policies and programmes (OECD, 2015c). Risk management is another key activity for facilitating innovation procurement. Agencies perceive innovation procurement as a riskier form of public procurement than traditional procurement. At the same time, resources for risk assessment and mitigation are scarce. Effective risk management systems can achieve two results: they help reduce losses or damages, and increase trust, as the risks associated with a process become more transparent and understandable. Suppliers, during the tendering phase, typically tend to minimize the residual financial risks for their investments in innovative services or products by using clearly formulated risk-sharing arrangements (funding, IPR, guarantees). The following table maps impact and risk management activities based on different stages on the innovation procurement process and the party undertaking each activity. This table can guide the design of monitoring activities. Some countries successfully measure the impact of their programmes (e.g. Finland and the United Kingdom).

Source: Country responses to OECD (2017)

Risk Management			
	Preparation	Implementation	Evaluation
Procurers	- Calculate risks - Estimate life-cycle costs - Use consultant expertise - Perform market consultation - Offer a win-win situation - Offer framework agreements and functional specifications	- Monitor entire process - In case use exit strategies - Use risk management tools	- Perform impact assessment with , e.g. IT support - Disseminate lessons learned and benefits of the innovative process - Tweak future process based on evaluation results
Suppliers	- Build trust - Name specifications - Reflect risk-benefit-balance and seek win-win situation	- Monitor on processes - Protect own IPR	- Exploit/access market - Enhance innovation capacity - Use scaling effects and follow-up projects
End-Users	- Build trust - Accept offers for involvement at early stage	- Give feedback at any stage - Test prototypes, use test beds	- Evaluate benefit - Give feedback regarding experience

Innovation Procurement in China

PPI in China focuses on promoting indigenous and green innovation by using procurement as a tool to stimulate demand for new technologies and products, often through accredited lists and signals to the market. Key mechanisms include the "demand-pull effect," where public spending creates a market for innovation, and a "certification effect," where government accreditation signals innovation to private investors, particularly beneficial for small, young, and financially constrained firms. While challenges exist, including potential protectionism and implementation inconsistencies, PPI has successfully encouraged R&D investment, high-tech product sales, and access to external finance for Chinese firms, especially in sectors like energy-saving and green technologies.

Key aspects of Innovation procurement in China:

Indigenous Innovation: PPI is a primary policy instrument for China's effort to promote domestic technological capabilities and achieve global leadership in innovation.

Demand-Pull: acting as a major buyer, the government uses public procurement to generate demand for new and improved products, creating a market that encourages innovation from suppliers.

Certification/Reporting: government often maintain lists of accredited or "locally innovative" products and technologies, which serves as a signal to private investors about the reliability and potential of these innovations, helping companies to overcome financial constraints.

Green Innovation: China has established procurement lists for energy-saving and environmentally labeled products, directly promoting the adoption of resource-efficient technologies and supporting a circular economy.

Innovation Procurement in the US

Innovation procurement in the US involves the government purchasing solutions and services that don't yet exist or are emerging from new technologies, often to drive innovation and achieve specific social or economic goals. Tools like the Procurement Innovation Lab foster experimentation, while others, like the Commercial Solution Opening, favour the agile acquisition of innovative commercial items.

Key aspects of Innovation Procurement in the US:

Purpose: to stimulate the development of new solutions and technologies by creating demand for them, rather than simply buying off-the-shelf products.

Goals: can be strategic (e.g., energy conservation, new defense technologies) or aimed at improving procurement processes themselves, such as using big data for efficiency or promoting open-source alternatives to reduce vendor dependency.

Agility: emphasizes flexible, iterative approaches to procurement, encouraging experimentation and learning from early adoption of new technologies and methods.

Mechanisms and Initiatives:

Procurement Innovation Labs: frameworks where procurement professionals and technologists can experiment with and develop new acquisition strategies, technologies, and processes.

Commercial Solutions Opening: a streamline acquisition process that uses simplified contract terms to foster competition for innovative commercial items, technologies, and services.

Policy Directives: a December 2024 policy memorandum on scaling innovative buying practices in Federal procurement signals continued emphasis on incorporating new methods into federal acquisition.

Conclusion

Innovation Procurement is a strategic instrument that leverages public purchasing power to drive market innovation and solve societal challenges, offering benefits to public bodies and fostering economic growth through collaboration with innovative firms. However, achieving this requires overcoming barriers such as a lack of awareness, skills, and collaboration, necessitating supportive policies, clear guidance, and robust institutional frameworks to realize its full potential. ADACI and IFPSM organised the first International Convention on Public Procurement in Rome also to raise awareness of the importance and benefits of innovation procurement and to contribute to overcoming the barriers to its adoption.

Note

1. Source: Public Procurement for Innovation, OECD 2017
2. Pre-commercial procurement (PCP) is a public sector purchasing strategy that buys research and development (R&D) services from multiple suppliers to develop innovative solutions to meet unmet public needs. It involves a risk-benefit sharing model, where the public authority pays for the R&D services while the suppliers retain rights to reuse the intellectual property from the resulting prototypes in other projects. This demand-side approach stimulates innovation by creating a first customer reference for the companies, allowing the public sector to test and compare different potential solutions before they are commercially available.
3. EU benchmarking shows that Europe is exploiting only half of the potential power of innovation procurement to fuel economic recovery and that there is large underinvestment in particular in the procurement of digital solutions and in R&D procurement, both of which are key for strengthening the EU's strategic autonomy and competitiveness. EU Guidance on innovation procurement 2021.
4. The "Most Economically Advantageous Tender" (MEAT) is a procurement evaluation method where public authorities award contracts based on the overall best value for money, not just the lowest price. It considers price alongside other qualitative, technical, environmental, and social factors, such as quality, innovation, long-term sustainability, and life-cycle costs, rather than focusing solely on cost.
5. Public procurement as an innovation policy: Where do we stand? Olga Chiappinella, Leonardo M. Giuffridab, Giancarlo Spagnolo, March 2025.
6. Elvira Uyarra, Professor Alliance Manchester Business School.



Agentic AI in Public Procurement: a Framework and an Architecture

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Abstract

This paper describes the potential of Agentic Artificial Intelligence (AAI) to transform public procurement. It defines a functional framework and technical architecture for integrating AAI into public procurement systems, considering this integration's particular challenges and potential.

Unlike the private sector, public procurement must adhere to strict standards and regulations for fairness, transparency, and accountability to citizens.

This overview illustrates how AAI can be used throughout the procurement cycle in line with these public sector values.

Due to its inherent complexity, public procurement is subject to strict regulations that ensure transparency, fair treatment, and full accountability for public spending.

Solutions such as AAI offer the opportunity to transform this function.

The paper looks at practical solutions to the challenges associated with this transformation.

Keywords: *public procurement, dynamic capabilities, agentic AI*

Introduction

AAI refers to systems that can act autonomously to achieve specific goals. They use complex algorithms and learned patterns to perform tasks, make decisions, and interact with their environment. In the sensitive context of public procurement, this autonomy is not absolute. The proposed framework specifies that AAI should operate within a regulatory and human-led paradigm, i.e., AAI can automate and optimize tasks. The final decisions and responsibilities always rest with human experts.

The goal of integrating AAI into public procurement is to develop these systems responsibly from the ground up and ensure that they promote, rather than undermine, public sector values. This requires a shift in thinking, where ethical standards become fundamental design principles that provide the technology that truly benefits the stakeholders.

AAI promises potential for change, including creating efficiencies, mitigating human bias, promoting better value creation, accelerating procurement cycles, and improving access to public contracts for small and medium-sized enterprises (SMEs).

This study shows how AAI can significantly strengthen the "dynamic capabilities" of public procurement.

AAI is a transformative technology. It has autonomy, adaptability, and proactive decision-making.

Unlike legacy systems, AAI emphasizes iterative planning, enhanced learning, and dynamic thinking.

Its core characteristics include operating independently, responding to environmental changes, taking the initiative to achieve goals, continuously improving based on new data and feedback, and orchestrating complex processes.

Dynamic capabilities represent the inherent capabilities of an organization that enable it to recognize and plan for change, seize opportunities, and adapt its resources for sustained performance (Teece, 2007).

Traditionally, these capabilities included planning, recognizing, seizing, and transforming. This paper introduces "planning capability" as a critical starting point for AAI.

In public procurement, this is equivalent to driving innovation, acting effectively in response to changes in the market, streamlining processes, and steadfastly adapting to altering legal, technical, and market environments (Schapper et al., 2021).

(Table 1).

AAI additionally enhances these dynamic capabilities.

Table 1 - Core Capabilities Overview

Capability	Definition	Key Activities	AAI Enhancement Examples	KPIs
Sensing	Detecting market /operational changes	- Market trend analysis	- Real-time partner monitoring	- Early risk detection rate
		- Partner risk assessment	- Predictive demand modeling	- New opportunity ID speed
Planning	Defining Actions, Responsibilities	Schedule	- Optimal allocation	- Return on Investments
		Resource demand and allocation	Optimal resource allocation	- Timings
Seizing	Acting on opportunities	- Rapid partner qualification	- Automated bid evaluation	- Decision cycle time
		- Dynamic contract negotiation	- AI-driven scenario modeling	- Cost savings captured
Transforming	Continuous process renewal	- Partner performance optimization	- Automated contract adjustments	- Process improvement rate
		- Procurement model innovation	- Self-learning	

Advanced analytics and real-time predictive models augment its ability to change, detecting variations in markets, rules, and partners¹, and alerting organizations to act proactively on trends or disruptions (Kumar et al., 2023).

Regarding seizing opportunities, AAI enables procurement functions to respond to emerging opportunities or react quickly to disruptions by autonomously negotiating contracts, selecting partners, and proposing strategic projects, reducing the effort required to make decisions.

In process re-engineering, AAI facilitates the continuous redesign of procurement processes and increases efficiency, resilience, and compliance by automating end-to-end processes, connecting to external data, and continuous learning (Nicoletti, 2025). AAI in public procurement offers several benefits, including greater efficiency by reducing manual work and speeding up processes. It also improves an organization's resilience to change and encourages innovation by identifying problems and developing solutions.

Challenges include complex oversight and accountability, ensuring fairness and mitigating bias, and overcoming organizational and data-related barriers to adoption.

The OECD's G7 Toolkit and the U.S. AI Risk Management Framework can help address these issues by promoting "human-in-the-loop" mechanisms, bias mitigation, and ongoing staff training.

¹ This paper use the term partner rather than supplier or vendor to stress the need of a cooperative work together.

Research Objectives

This research aims to deepen the understanding and provide practical guidance for integrating AAI into public procurement. Given the increasing complexity and strategic importance of public procurement, the study provides actionable insights into AAI adoption's technical and managerial aspects.

The study has five main objectives:

- first, to develop a comprehensive functional framework for AAI system integration that covers both operational and strategic elements (RO1);
- second, to identify and explore specific applications and use cases for AAI across the procurement cycle, from market analysis to contract management (RO2);
- third, to propose a technical architecture that ensures AAI implementation be secure, scalable and compatible with existing procurement systems and regulations (RO3);
- fourth, defining a model for human-AI-machine collaboration that optimizes procurement outcomes by combining the strengths of automation with human expertise while maintaining human control over critical decisions (RO4);
- and fifth, analyzing the challenges and prospects related to the implementation of AAI in public procurement (RO5).

Together, these objectives provide a structured basis to discuss the opportunities and risks of AAI in public procurement.

Dynamic Capabilities

In today's rapidly changing business environment, organizations must develop what experts call "dynamic capabilities" - the ability to plan, adapt, innovate, and transform to remain competitive continuously.

This concept is about more than just getting things done efficiently. It is about developing an organization's ability to evolve with the market and even shape it.

At its core, dynamic capabilities are four interrelated capabilities that promote a company's resilience and growth.

The first extended dynamic capability is planning, which is based on deciding how to progress in the transformation process.

Then there is sensing - the ability to recognize and interpret changes in the business environment. This means responding to changes in customer preferences, emerging technologies, new competitors, or changing regulations.

Organizations with a strong sensing capability can recognize opportunities and threats before they become apparent to others.

The second critical capability is seizing opportunities - the ability to act quickly and effectively when opportunities arise.

This includes mobilizing resources, making strategic decisions, and implementing change immediately (Table 2).

Organizations that have mastered this skill can take advantage of market opportunities before the competition recognizes them.

The third component is transformation - the ongoing process of renewing and reconfiguring the organization's assets, methods, and strategies.

This is not about one-off changes, but about creating a culture of continuous adaptation.

Organizations that master transformation can reinvent themselves before market forces force them to do so. In the context of public procurement, these dynamic capabilities are critical.

Procurement systems traditionally move slowly and are bound by regulations and bureaucratic processes. AAI can improve all four dynamic capabilities. Through real-time data analysis, AAI is a powerful tool for identifying market changes, partner risks, and new opportunities. It enables faster and more informed decision-making at the acquisition stage by automating routine assessments while ensuring compliance.

Perhaps most importantly, AAI supports continuous change by identifying patterns and opportunities for improvement that humans may overlook. The true power of dynamic capabilities becomes clear when we see them in action.

Think of how leading technology organizations have managed change in the industry - not by sticking to their original business models, but by constantly seeking out new directions, capitalizing on emerging opportunities, and transforming their operations.

The same principles apply to public procurement, where the ability to adapt can make the difference between efficient service delivery and wasteful spending.

For an organization to survive and prosper over time, it is necessary to develop these dynamic capabilities.

It requires investment in the right technologies like AAI, but equally important is cultivating an organizational mindset that values adaptability, speed, and continuous learning.

The most successful organizations of the future will be those that recognize upcoming changes, act decisively when opportunities arise, and continuously evolve their operations - turning potential disruption into advantage.

Table 2 - AAI Implementation Matrix

Process Stage	Traditional Approach	AAI-Enhanced Approach	Tools Required	Change Management Needs
Market Research	Manual partner databases	AI-powered market intelligence	- NLP for news analysis	- Data literacy training
Partner Selection	Committee-based evaluations	Algorithmic pre-qualification	- Explainable AI models	- Transparency protocols
Contract Mgmt	Periodic manual reviews	Continuous AI monitoring	- IoT integration	- Alert response procedures

Framework

The proposed framework for integrating AAI into public procurement is a multi-layered system (Figure 2).

It demonstrates that AAI's successful and responsible adoption extends beyond purely technological solutions (Hickok, 2022).

It necessitates robust sound strategic governance, which ensures AAI that the use of AAI aligns with and upholds core public sector values such as transparency, fair procedures, and citizen accountability to citizens (Williams, 2023).

These values are foundational design principles guiding every stage of AAI development and deployment phase, with ethical considerations inherently built into the design from the outset (Johnson et al., 2024).

The technical architecture must intrinsically promote transparency, auditability, and fairness (Siciliani et al., 2023).

The primary function of AAI is to assist human decision-making. Without taking the place of human judgment, it offers crucial and significant information and insights (Beane, 2023).

Repetitive tasks can be automated to increase efficiency (Guida et al., 2023), allowing human operators to concentrate on strategic, complex tasks (Allal-Chérif et al., 2021).

AAI can detect and reduce risks like fraud and non-compliance, strengthening the security and integrity of public spending (Ezeji, 2024).

The necessity of human supervision and intervention mechanisms in human-automation-machine collaboration models is a fundamental component of this framework (Nissen & Sengupta, 2006).

This ensures accountability and allows for human judgment in complex, ambiguous, or ethically sensitive situations where AI's capabilities may be limited (Adams & Brown, 2023).

The framework meticulously details how AAI transforms key dynamic capabilities in procurement, explicitly focusing on planning, sensing, discovery, and seizing utilization.

The planning phase involves forecasting future needs, setting strategic goals, and shaping the procurement framework.

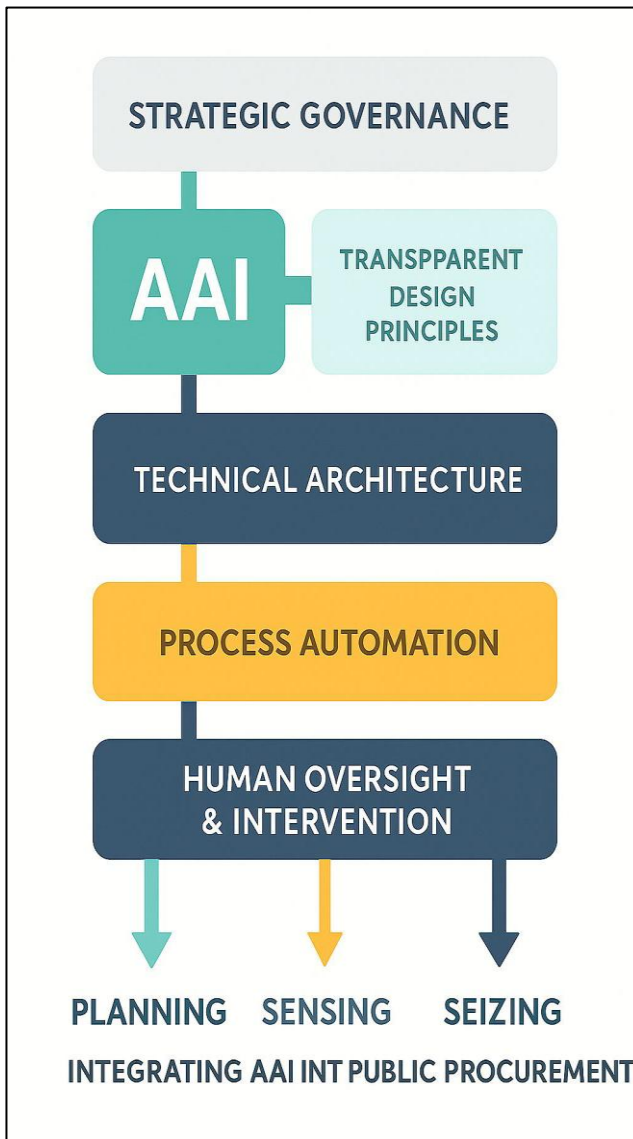
AAI revolutionizes this phase by providing advanced analytical capabilities and foresight (Nicoletti, 2025). AAI can analyze historical procurement data, spending patterns, market conditions, and budget allocations.

It can help identify subtle trends and recurring needs that human analysis might miss (Guida et al., 2023).

Figure 1 - (Extended) Dynamic Capabilities



Figure 2 - A snapshot of the Proposed Framework



AAI integrates business goals, objectives, and strategic imperatives, proactively identifying emerging procurement needs well in advance (Nagitta et al., 2022), thus shifting and transforming procurement from a reactive to a strategic approach. It translates high-level plans into actionable design blueprints (Beane, 2023), utilizing natural language processing (NLP) to assist in developing and supporting the development of technical specifications (Allal-Chérif et al., 2021), producing sophisticated drafts that create polished blueprints that reflect market standards, and comparing new requirements with historical documents to ensure consistency (Siciliani et al., 2023).

It can also identify overly restrictive requirements that might limit competition and suggest innovative, performance-based alternatives.

Furthermore, AAI systematically identifies opportunities for strategic aggregation of demand across departments, recognizing recurring purchasing patterns that, when combined, lead to economies of scale (Cui et al., 2020).

Studies show that AAI can uncover more consolidation opportunities than manual methods (Zhang et al., 2022), resulting in cost savings and streamlined learner supply chains (Morgan, 2021). For sensing, the organizational ability to perceive and interpret signals from external markets and internal processes to recognize and identify opportunities and threats (Teece, 2007), AAI improves this ability through constant, vigilant monitoring (Herold et al., 2023). It provides a continuously updated understanding of the partner landscape (Mallesham, 2024), monitors global partner markets, tracks pricing trends, assesses market volatility, identifies potential supply chain disruptions, recognizes emerging innovations, evaluates sustainability practices, and analyzes the financial stability of partners (Grimbert et al., 2024).

This real-time information enables procurement teams to anticipate market developments and make informed sourcing decisions (Dwivedi et al., 2021). AAI also expands the partner base by identifying qualified, often overlooked partners, including innovative small organizations (Obinna & Kess-Momoh, 2024) and partner capabilities through advanced analysis of unstructured data (Nai et al., 2022), using historical performance to predict future reliability (Sai et al., 2022).

Risk assessment is significantly improved as AAI integrates various risk indicators (Sampaio et al., 2024), including financial stability, past contract performance, compliance records, supply chain resilience, and adherence to sustainability standards (Coglianese, 2023), helping organizations to manage complex supply chains safely (Van Hoek, 2024).

In opportunity capture, an organization's ability to capitalize on identified opportunities by rapidly deploying new assets, resources, and processes (Teece, 2007), AAI enables unprecedented efficiency (Mukherjee & Chang, 2025).

In tender preparation, AAI helps create standardized tender documents that address legal requirements, align technical specifications with market norms, balance evaluation objectives, and include appropriate terms and conditions (Von Behr & Abrahamsson, 2022). NLP ensures that documents are transparent and consistent, minimizing misunderstandings and delays (Siciliani et al., 2023).

In bid evaluation, AAI automates the verification of formal compliance (Williams, 2023), reducing the risk of viable bids being disqualified due to minor technical issues (Chopra et al., 2021).

For technical criteria, AAI extracts and structures information from bid documents (Zhang et al., 2022), compares specifications and calculates technical scores (Morgan, 2021), promoting objectivity and consistency.

Beyond direct price, AAI performs value analysis considering total cost of ownership (TCO) (Brintrup, 2020), identifies value-enhancing features, detects unrealistic price expectations, and analyzes the price-performance ratio to support optimal bid selection (Cui et al., 2020).

Results

AAI produces structured procurement recommendations that combine quantitative assessments with qualitative insights, identify risks, and provide evidence-based explanations (Adams & Brown, 2023). Crucially, human procurement officers retain full authority over final decisions, with any deviation from AAI recommendations requiring clear justification (Beane, 2023). Integrating AAI into tendering processes represents a paradigmatic shift in corporate procurement strategies (Gil-Garcia & Dawes, 2021) and fundamentally changes the creation and evaluation of bids and offers in modern supply chain management (Herold et al., 2023).

These autonomous systems continuously monitor multiple supply marketplaces, automatically identify opportunities, and simultaneously process extensive sourcing data to optimize inventory and address supply chain inefficiencies in real time (Zhang et al., 2022). The technology uses specialized multi-agent architectures where individual AAI components focus on specific functions such as analyzing documents, evaluating partner responses, and monitoring compliance, enabling the creation of tailored quotes in less time than manual processes (Holland & Nof, 2019).

Benefits

While the application of AAI in public procurement requires additional considerations of transparency, accountability, and compliance (Hickok, 2022), its ability to detect patterns of fraudulent activity or irregular bidder behavior while maintaining logs for auditability demonstrates its power in ensuring fair processes (Nai et al., 2022).

This technological development provides procurement professionals with a strategic realignment that allows them to capitalize on opportunities while setting new performance benchmarks for the efficiency of tendering processes in the context of private and public sector governance requirements (Straub et al., 2023).

Finally, transformation involves continuously renewing and reconfiguring an organization's assets, processes, and structures to maintain and enhance value (Teece, 2007).

AAI is central to enabling this continuous improvement and renewal in procurement (Nicoletti, 2025). AAI ensures continuous improvement through autonomous monitoring and proactive contract management, constantly monitoring contractual obligations such as delivery dates, pricing terms, performance requirements, and compliance standards (Chopra et al., 2021). Beyond reactive alerts by deadlines, AAI generates proactive notifications (Siciliani et al., 2023) and enables timely corrective action to prevent potential breaches or delays before they become costly problems (Van Hoek, 2024).

Real-time performance monitoring is greatly enhanced as AAI tracks partner performance against

defined quality criteria (Waseem et al., 2023), delivery dates, and end-user satisfaction, and immediately identifies emerging issues that require escalation.

Conclusions

In conclusion, the analysis of this paper underlines the transformative potential of AAI to reshape public procurement. By automating routine tasks, minimizing human bias, improving value creation, accelerating procurement cycles, and improving access for small businesses, AAI can lead to greater efficiency, fairness, and overall value for citizens (Paltasingh & Pani, 2023). However, this potential can only be fully realized if AAI is correctly applied and supported by a robust, multi-layered governance framework (Hickok, 2022).

This framework must prioritize ongoing human oversight, integrate ethical considerations as core design principles (Johnson et al., 2024), and actively work to maintain public trust. This paper offers practical steps and strategic recommendations for procurement officials, researchers, and policy makers to responsibly and effectively integrate AAI (Straub et al., 2023). By adhering to these principles, public agencies can harness the power of AAI to modernize procurement processes and ensure that technological advances align with and reinforce public service values (Wirtz et al., 2019).

AAIs are fundamentally transforming procurement, enabling organizations to develop dynamic capabilities that focus on planning, sensing, seizing, and changing, leading to remarkable agility and strategic advantage in an increasingly complex global marketplace (Mukherjee & Chang, 2025).

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Adoption of Artificial Intelligence in Public Procurement: Enabling Factors and Practical Bottlenecks in the Light of Pilot

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Abstract

This paper examines how artificial intelligence (AI) can enhance efficiency, transparency, and strategic capacity in public procurement. It explores the key enablers and barriers influencing AI adoption within public organisations. Based on an empirical analysis of Finnish AI pilot cases in municipalities, state agencies, and publicly owned companies, the study maps how organisations evolve from isolated experiments to data-driven procurement processes. Findings reveal that AI adoption remains fragmented and that many initiatives remain stuck in the “pilot trap,” where pilots fail to scale without organisational support.

Purpose - This paper investigates how artificial intelligence (AI) can enhance the efficiency, transparency, and strategic capacity of public procurement. It aims to identify key enablers and barriers in AI adoption across different maturity stages, mapping how public organisations evolve from experimental pilots to data-driven and strategically integrated procurement systems.

Design/Methodology/Approach - The study combines a systematic empirical analysis of AI pilot cases conducted in Finnish public sector organisations, including municipalities, state agencies, and publicly owned companies. Data were collected through semi-structured interviews and document reviews, enabling comparative analysis of adoption models and institutional contexts.

Design/Methodology/Approach - AI adoption in public procurement remains fragmented, with most organisations operating at early maturity levels. Pilots have demonstrated concrete benefits. However, widespread implementation is constrained by data management maturity, organisational maturity and ethical and regulatory maturity. The study identifies a recurring “pilot trap,” where isolated experiments fail to scale without organisational integration or governance support.

Findings - AI adoption in public procurement remains fragmented, with most organisations operating at early maturity levels. Pilots have demonstrated concrete benefits. However, widespread implementation is constrained by data management maturity, organisational maturity and ethical and regulatory maturity. The study identifies a recurring “pilot trap,” where isolated experiments fail to scale without organisational integration or governance support.

Research Implications - The research advances theoretical understanding by linking AI development maturity mechanisms in public procurement. It extends AI research into a public governance context, illustrating how different factors jointly shape AI diffusion.

Practical Implications - The identified adoption models supports strategic planning for responsible and scalable AI deployment in public sector.

Social Implications - AI adoption in public procurement can strengthen public trust, accountability, and the sustainable use of public funds.

Research Limitations - The study focuses on a national sample of Finnish organisations; generalisation to other governance systems should be made cautiously. Further longitudinal research is needed to evaluate long-term transformation impacts.

Originality/Value - This paper is among the first to integrate procurement processes with empirical evidence from public procurement practice. It offers both conceptual and actionable insights for advancing responsible AI adoption in the public sector.

1. Introduction

Public procurement represents a significant share of national expenditure and serves as a key instrument for enhancing efficiency, accountability, and sustainability in public service delivery. However, procurement processes are often highly regulated, administratively complex, and resource-intensive, limiting the effective use of data in decision-making. The digitalisation of procurement has facilitated the automation of transactional processes and the introduction of electronic procurement systems. The next developmental leap involves integrating artificial intelligence (AI) to support decision-making, process analytics, and knowledge-based management. AI has the potential to strengthen the analytical and strategic capabilities of procurement organisations, enabling a shift from rule-based procedures toward anticipatory, data-driven operations (Guida et al., 2023, Siciliani et al., 2023). This study investigates how AI can improve procurement processes at different levels—operational, tactical, and strategic—and how public organisations are attempting to move from isolated pilots to integrated AI-processes. By combining theoretical insights with evidence from real-world pilot cases, the paper identifies the enabling and constraining factors shaping AI adoption in the public procurement domain.

2. Literature Review

2.1 Artificial Intelligence in Public Procurement

Previous research suggests that AI can improve efficiency, transparency, and decision quality in public administration. In procurement AI applications operate across three main levels: operational, tactical and strategic levels. In operational level applications are for instance automating routine processes such as order management, invoice matching, and payment processing, linking contract-based invoices to reporting systems. In tactical level applications can support pre-tendering activities including risk and scenario analyses, drafting of tender documents, processing contracts, and analysing tender documents. In strategic level applications are related data-driven supplier market analysis, spend analytics and monitoring of sustainability targets. (Guida et al., 2023, Wirtz et al., 2019; Mikhaylov et al., 2022; Janssen & van den Hoven, 2021). Despite these potential benefits, AI adoption faces barriers related to data quality, organisational culture and ethical concerns (Janssen et al., 2020). Managing these challenges is crucial for successful implementation in public procurement contexts.

3. Methodology

This study employs a qualitative research design combining empirical analysis of AI pilot cases in Finnish public sector organisations.

The dataset includes sixteen semi-structured interviews with representatives from municipalities, state agencies, and publicly owned enterprises. Each organisation has been identified as a forerunner in snowballing method, where each of them are identified in national AI-networks and public datasets concerning forerunner AI-cases.

Each interview explored the organisation's AI adoption model, barriers, and enablers. Supplementary documentation was also analysed to contextualise the pilots. The approach enables cross-case comparison and identification of institutional patterns in AI adoption.

The cases cover a diverse range of AI applications, including automated contract analysis, risk assessment, document anonymisation, procurement calendar automation, and AI-supported evaluation processes.

This diversity provides a robust foundation for analysing how different public entities navigate the transition from pilot experiments to organisational transformation.

4. Findings and Discussion

4.1 Overview of AI Adoption Cases

Preliminary analysis of the pilot cases shows substantial variation across organisations in terms of AI maturity, resources, and strategic integration. Several large cities and state agencies are situated in the piloting phase, where AI applications are used experimentally or in isolated units, but have not yet triggered systemic transformation.

Common AI use cases include Microsoft Copilot and ChatGPT Enterprise tools for document drafting and translation, automated procurement document processing, and risk assessment in tendering. Leading public organisations have adopted closed, local or cloud-based architectures. While most pilots have demonstrated operational efficiency gains, none have achieved integration into strategic procurement management.

In this chapter two typical public sector organisations and their AI-pilots are examined comparatively to illustrate how distinct governance arrangements, data conditions, and resourcing choices shape pilot outcomes and their scalability into routine procurement practice.

Organisation A has concentrated early AI activity within a single-vendor arrangement and a single-language model, resulting in vendor lock-in and limited systematic market scanning.

Governance enablers comprise a formal data strategy and a change-management office with an AI support model, which structure adoption and end-user assistance.

On the application side, the organisation piloted Microsoft AI agents and has deployed Microsoft Copilot for general use. By contrast, a procurement contract-discovery pilot was unsuccessful, indicating challenges in data readiness, problem framing, or systems integration.

Overall, Organisation A's experience illustrates how enterprise tooling and basic governance can accelerate uptake while simultaneously entrenching path dependence when market scanning and solution diversity are constrained by single-vendor lock-in.

Organisation B places strong emphasis on market scanning and internal coordination but has not advanced to piloting, citing data-safety concerns and the absence of market-ready solutions.

Foundational work is underway through the launch of an AI strategy and dedicated resourcing. The organisation is planning systematic mapping of AI needs and applying AI within the existing system infrastructure, signalling a consolidation phase that strengthens governance and technical fit prior to trials.

This pathway reflects deliberate risk management and compatibility checks as preconditions for later experimentation.

4.2 The “Pilot Trap” and Organisational Silos

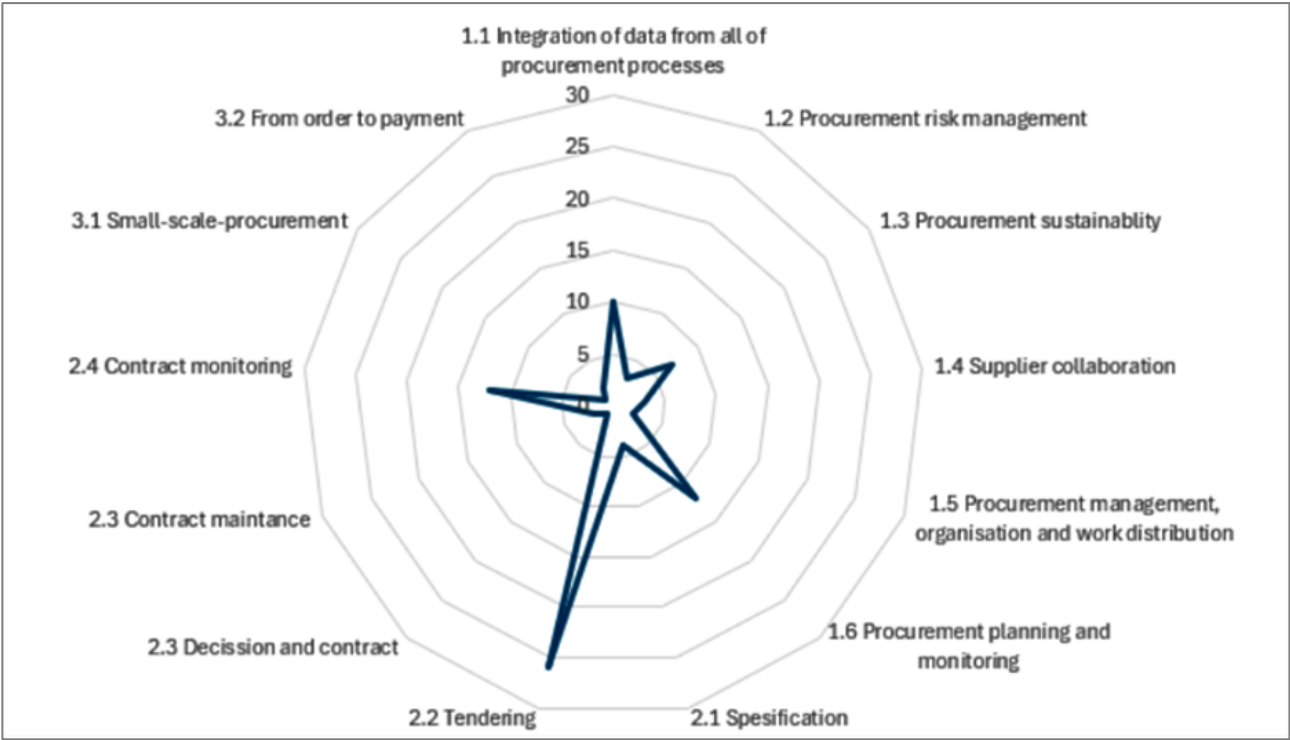
A recurring pattern across cases is the so-called “pilot trap.” Organisations often initiate promising AI projects that fail to scale due to fragmentation, lack of leadership continuity, and siloed governance structures. This fragmentation results in parallel experimentation—multiple departments conducting similar pilots without shared data infrastructures or governance models.

Organisations relying on single-vendor partnerships experience dependency risks and limited innovation, while those adopting open, modular, multi-vendor models show higher adaptability and potential for scaling. However, even in the latter category, transformation remains constrained by limited strategic resources and absence of AI governance mechanisms.

4.3 Potential Areas for AI in Procurement

Interviews identified potential for AI applications across all phases of the procurement lifecycle in integrating of data from various procurement processes. These include AI-support in tendering phase, predictive analytics for procurement planning phase, AI-supported contract monitoring, and AI-support in procurement sustainability efforts. Such applications indicate that AI's greatest potential lies not in replacing human decision-making but in augmenting analytical and coordination capacities.

Figure 1 - Ai potential in procurement process areas (new AI-powered solutions mentioned in interviews)



4.4 Capability Pathway for Responsible AI Deployment

According with preliminary results, successful AI adoption requires in public sector the parallel development of three interdependent capabilities:

1. Data management maturity: standardised data models, open interfaces, and quality control mechanisms.
2. Organisational maturity: leadership commitment, skill development, and establishment of AI governance structures.
3. Ethical and regulatory maturity: transparency, accountability frameworks, and compliance assurance.

Together, these elements allow public organisations to scale AI solutions responsibly and effectively. This integrative model bridges technical and institutional perspectives, providing a practical roadmap for procurement transformation.

5. Conclusions and Implications

This paper contributes to the growing literature on AI adoption in public administration by examining how public procurement organisations evolve from experimentation to integration. The findings underscore the need for multi-level capacity development - technical, organisational, and ethical - to ensure that AI generates genuine value rather than fragmented experimentation.

From a theoretical perspective, the study links AI maturity to public procurement process framework. Practically, it offers an evaluative framework that enables public organisations to assess their AI readiness and identify feasible development pathways.

The “pilot trap” represents a major barrier to transformation, highlighting the importance of strategic alignment, inter-organisational collaboration, and sustained investment in data infrastructure. Building collective learning mechanisms and cross-sector partnerships can facilitate scaling beyond isolated pilots.

Future research should extend the analysis to other sectors and governance systems to assess the generalisability of these findings. Longitudinal studies could further explore how AI-driven procurement transformation impacts efficiency, accountability, and innovation balance in the public sector.

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Xiamen International Convention and Exhibition Center is located on the southeast coast of Xiamen Island, with beautiful scenery and convenient transportation. Facing the small Kinmen Island across the sea, it is only 4500 meters away as a straight line. It is the main venue of the state-level event "China International Fair for Investment and Trade". The convention center has a total construction area of nearly 530,000 square meters, including pavilions A, B, C, D and a five-star leisure and business conference hotel with 248 rooms. There are 23 exhibition halls with a total exhibition area of 200,000 square meters, which can set up 9,000 international standard booths, and 76 middle and high-end meeting rooms and VIP rooms of various types such as multi-function halls and international conference halls. The museum is equipped with customs, commodity inspection, banking, insurance, civil aviation, freight, post and telecommunications service points, and supporting small shopping malls, business office rooms.









XIAMEN INITIATIVE ON GLOBAL SUPPLY CHAIN DEVELOPMENT AND STABILITY

The resilience, smooth functioning, and sustainable development of global supply chains are not only the driving force of global economic prosperity, but also a vital foundation for enhancing human well-being.

Representatives from the global procurement and supply chain community gathered in Xiamen, China, under the theme of “*Link the World, Achieve win-win Cooperation*”, and with the shared goal of “*Jointly Build an Open, Inclusive, Resilient, and Sustainable Global Supply Chain*.”

Through pragmatic dialogue and broad consensus, we hereby jointly issue the following initiative:

1 - Foster an Open and Cooperative Global Supply Chain Landscape

Uphold multilateralism, embrace openness and collaboration, promote market-driven global resource allocation and cross-border cooperation to build an efficient and integrated supply chain ecosystem.

Extend to all tiers of supply chains, ensuring fair opportunities, decent working conditions, and respect for the role of small and medium-sized suppliers.

Deepen multilateral partnerships, advance supply chain connectivity, and contribute to global economic prosperity and human well-being.

2 - Improve a Collaborative and Beneficial Global Supply Chain Mechanism

Establish a mechanism for benefit-sharing among diverse stakeholders, respecting development diversity and balancing interests among all parties.

Commit to integrity and fairness in procurement practices, opposing fraud and corruption, and ensuring professionalism and independence in supply chain governance.

Enhance the global supply chain architecture and drive collaborative innovation for sustainable value chain growth worldwide.

3 - Strengthen a Resilient and Stable Global Supply Chain System Foundation

Enhance policy dialogue and coordination, accelerate connectivity across international supply chain networks, and promote mutual recognition of international supply chain rules and standards.

Improve resilience management and cross-border data flow mechanisms to safeguard the stability and security of global supply chains.

4 - Unleash a Digitally Driven Engine for Global Supply Chain Innovation

Accelerate deep integration of emerging technologies such as AI, big data, IoT across the entire supply chain, and safeguard sustainability goals.

Drive digital transformation to build agile, transparent and responsive global supply networks, reshape the global supply chain landscape.

5. Cultivate a Green and Sustainable Global Supply Chain Ecosystem

Embed ESG principles throughout the supply chain life cycle to promote low-carbon, green, social and sustainable governance.

Advance carbon reduction, carbon sink technologies, and international alignment of green standards, achieving synergy between ecological benefits and economic value.

6 - Ensure a Resilient and Well-Implemented Global Supply Chain Framework

Promote the translation of principles into concrete actions by defining clear success metrics and setting short-, medium-, and long-term milestones. Establish monitoring and reporting mechanisms, and mobilize resources and partnerships.

Explore diverse funding channels to provide sustained support for global supply chain cooperation. Promote shared goals, periodic reviews, and collaborative platforms for dialogue and mutual learning, ensuring the initiative evolves into concrete actions.

We call on all global stakeholders to uphold the principles of inclusiveness and co-existence, remain committed to market-oriented and rules-based cooperation, deepen mutually beneficial partnerships, promote innovation-driven development, and jointly create greater value for global economic prosperity and human wellbeing through collaboration.

Let us work together to foster an open and collaborative international environment and build a global supply chain that is sustainably resilient, efficient, and equitable.

Together, we can inject renewed vitality into global development and shape a more prosperous, sustainable future for all.

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Automation and Artificial Intelligence in Public Procurement - Between Vision and Reality

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Introduction - The Strategic Importance of Public Procurement in the Modern Era

Public procurement is one of the most powerful levers of influence on both the economy and society. In every country worldwide, it accounts for enormous annual budgets - often 15–20% of national GDP - dedicated to acquiring goods and services for government institutions, healthcare systems, education, defense, and infrastructure. Its impact goes far beyond logistics: procurement decisions shape innovation, employment, competitiveness, and, above all, the trust between citizens and government.

Procurement decisions are never just about comparing prices. They affect the competitiveness of SMEs, influence foreign investment, drive innovation within the national economy, and determine whether a country can achieve its strategic goals - from national security to environmental and social sustainability (ESG). In recent years, public procurement has shifted from a bureaucratic necessity to a **strategic instrument for policy-making**.

Yet over the past decade, public procurement has come under unprecedented pressure:

- **There is a growing demand for transparency and accountability** from citizens, the media, and oversight bodies.
- **Heavy regulation** that slows down processes and requires strict compliance with rigid standards.
- **Commitments to ESG goals** - reducing emissions, encouraging diversity and inclusion, and promoting the circular economy.
- **Constant budgetary pressure** - governments must reduce costs against the backdrop of persistent deficits.

At the same time, the global environment has grown more complex. We have moved from an open, globalized system to a multipolar world where protectionism, trade restrictions, and “buy-local” policies are becoming increasingly common.

These trends limit access to external markets and force public procurement bodies to navigate a less stable, more fragmented reality.

Within this context, automation and artificial intelligence (AI) are emerging as transformative forces.

These technologies are not just “nice-to-have” tools but catalysts for fundamental change: converting slow, bureaucratic processes into intelligent, transparent, and efficient systems; enabling real-time risk detection; promoting innovation; and embedding values of sustainability, professionalism, and public trust at the heart of procurement.

The key question is no longer whether AI should be introduced into public procurement, but how it should be deployed responsibly - to strengthen the public interest, guarantee accountability, and unlock the vast potential within governmental and international systems.

The Strategic Advantages of Automation and AI Transparency and Real-Time Oversight

Transparency is at the core of any public system, but in procurement it is absolutely critical.

Complex tenders, lengthy paperwork, and poor documentation have long created fertile ground for inefficiency and suspicion. AI-driven systems are changing the rules:

- **Continuous monitoring:** Every stage - from bid submission to contract signing - can be tracked and analyzed in real time.
- **Intelligent alerts:** Algorithms detect anomalies, such as unrealistically low bids that may indicate unreliable suppliers, or repeated delivery delays.
- **Public accessibility:** Open data allows citizens, journalists, and civil society organizations to monitor processes and ensure equal treatment.

The result is stronger oversight, increased public trust, and a practical management tool that enables decision-makers to respond immediately rather than retrospectively.

Operational Efficiency and Cost Savings

Public procurement processes are traditionally cumbersome, characterized by eligibility committees, manual checks, and lengthy legal procedures. Automation changes this equation:

- **Automated bid intake** - AI can scan documents and perform an initial review without human involvement.
- **Eligibility filtering** - the system instantly identifies which bidders meet mandatory requirements.
- **Dynamic reporting** - instead of manual spreadsheets, dashboards update in real time.

The outcome is significantly shorter timelines and millions saved in overhead. More importantly, professionals are freed from routine administrative work and can focus on strategic activities: supplier management, market forecasting, and the development of innovative procurement strategies.

Data-Driven Risk Management

In today's interconnected supply chains, risk management is not optional – it is essential.

- **Integrating diverse data sources:** AI can combine financial statements, global news, logistics data, and economic indicators to identify emerging risks.
- **Early forecasts:** Supplier bankruptcies, war-related supply disruptions, or unusual price fluctuations can be flagged before they occur.
- **Rapid response:** Procurement teams can activate contingency plans, diversify suppliers, and prepare in advance, rather than reacting to crises after the fact.

This marks a shift from reactive procurement to proactive procurement – enhancing resilience not only in economic terms but also in matters of national security.

Driving Innovation and Sustainability

AI's strength lies not only in analyzing cost and quality, but also in integrating broader values such as carbon footprint, ESG compliance, and social contribution.

- **Sustainability:** Smart systems can directly incorporate carbon emissions or social impact into supplier evaluations.
- **Innovation:** Vendors are encouraged to offer more than the cheapest product – from green solutions to digital services.
- **Circular economy:** AI-enabled procurement policies can prioritize suppliers who recycle materials or reduce waste.

Thus, public procurement becomes a driver of innovation and sustainability, rather than a mere channel for financial transactions.

Key Challenges and Barriers

Data Quality and Reliability

AI is only as strong as the data it relies upon. Incomplete, outdated, or biased data can lead to misleading outcomes.

Governments must therefore invest in building clean, standardized, and reliable data infrastructures.

Cybersecurity Risks

Digital procurement platforms are prime targets for cyberattacks.

A single breach could expose sensitive documents and derail entire tenders.

Robust cybersecurity policies, advanced encryption, and compliance with international standards are non-negotiable.

Skills and Cultural Gaps

Public procurement professionals are often trained primarily in legal and procedural aspects.

Adopting AI requires new competencies: data analysis, algorithmic literacy, and the ability to interpret intelligent dashboards.

This demands cultural change, new training programs, and even the creation of hybrid roles such as “Data Procurement Officers.”

Ethics and Accountability

Who is responsible for a decision made by an algorithm?

How can stakeholders appeal a “machine’s decision”?

Systems must include explainability features (Explainable AI) and governments need clear regulatory frameworks that define accountability, transparency, and citizens’ rights.

International Case Studies

European Union

The EU is leading broad initiatives to digitalize public procurement.

In many member states, data-driven platforms are already mandatory, with AI applied to bid analysis, supplier performance tracking, and measurement against sustainability targets.

Asia – China and South Korea

In China, integrating AI into procurement is considered a matter of national security. Systems monitor supply chains and flag vulnerabilities as part of an “economic security” strategy.

In South Korea, AI tools predict healthcare demand, reduce shortages of essential medicines, and improve the availability of medical equipment.

Israel

Israel's defense sector and leading industries have already embedded AI in inventory management, failure prediction, and early detection of logistics bottlenecks.

These proven use cases can serve as models for civilian sectors such as healthcare, education, and infrastructure.

Personal Case Study

A Success Story from the Field

In a project I led with a major Israeli defense company, we faced the critical challenge of inventory management.

Delays in delivery and uncertainty in supply created real risks for advanced technology development.

The solution was an **AI-driven demand forecasting and inventory management model**:

- Integrating historical data with global market forecasts.
- Real-time analysis of supplier behavior and reliability.
- Simulating alternative scenarios in the event of supply disruptions.

The results were dramatic:

- Spare parts availability increased by **35%**.
- Inventory costs dropped by **millions of shekels**.
- The procurement department was repositioned from a "support function" to a **strategic partner** within senior management.

This project demonstrated that AI in procurement is not a distant vision but a **practical, present-day solution** - capable of delivering tangible results even in complex, high-risk environments.

Practical Recommendations for Implementation

1. **Establish a modern regulatory framework** - with clear boundaries for AI use, mandatory transparency, and mechanisms for appeals.
2. **Adopt a phased approach** - begin with focused pilots (e.g., supplier evaluation, demand forecasting), measure results, then scale.
3. **Invest in human capital** - develop training, certification, and career pathways for procurement professionals in data and AI.
4. **Foster international collaboration** - build common standards, especially through IFPSM, to ensure alignment and transparency across borders.
5. **Create regional "control offices"** - an EU-level model to ensure standardized measurement, oversight, and knowledge sharing.

Conclusion

Balancing Technology with Public Responsibility

Automation and AI are not substitutes for human judgment – they are force multipliers. They enable procurement professionals to focus on leadership, strategy, and innovation rather than being trapped in daily bureaucracy.

Yet challenges remain skills gaps, cybersecurity threats, and ethical dilemmas. To realize the potential, **bold leadership is required** – leadership that recognizes procurement not merely as a technical function but as a **strategic instrument for shaping economies, societies, and nations**.

My own experience in Israel's defense industry, combined with international developments, shows that the right blend of technology, regulation, and human expertise can transform public procurement from a slow, bureaucratic mechanism into a **national strategy for transparency, innovation, and resilience**.



Government AI readiness Index

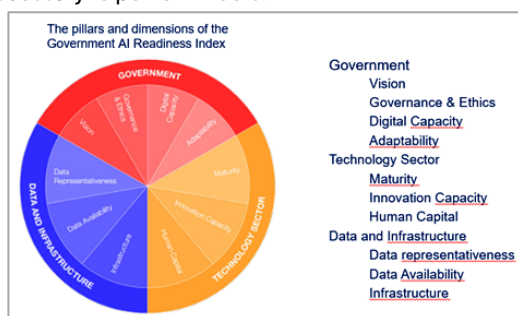
ADACI Research & Development Committee

The Government AI readiness Index, published by Oxford Insights, evaluates how ready governments are to use AI, by analyzing 40 indicators across 10 dimensions constituting 3 pillars: Government, Technology Sector and Data & Infrastructure. It provides insights for policymakers working in integrating AI into public services.

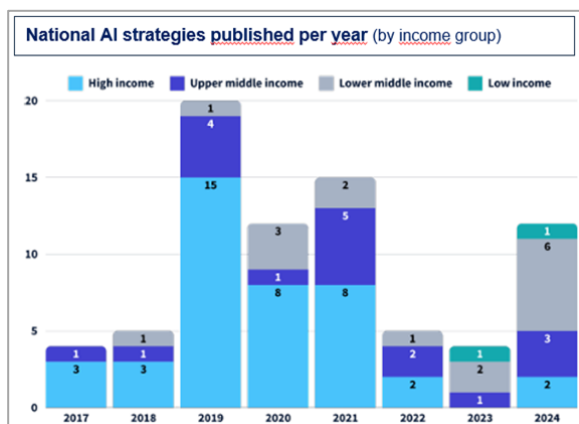
Government: every government should have a strategic vision for how it develops and governs AI, and have a strong internal digital capacity.

Technology Sector: the sector should have high innovation capacity. Equally important are good levels of human capital, which drive the development of advanced AI solutions and ensure the sector can respond to the evolving needs of governments.

Data and Infrastructure AI tools need high-quality data representative of the local context, and the infrastructure necessary to power AI tools.



In 2024, 12 new AI strategies have been published or announced, triple the number of 2023. Notably, more than half of these strategies come from lower-middle-income and low-income countries. For example, Ethiopia has become the second low-income country to release a strategy. Similarly, lower-middle-income economies such as Ghana, Nigeria, Sri Lanka, Uzbekistan, and Zambia have formalised their AI visions this year.

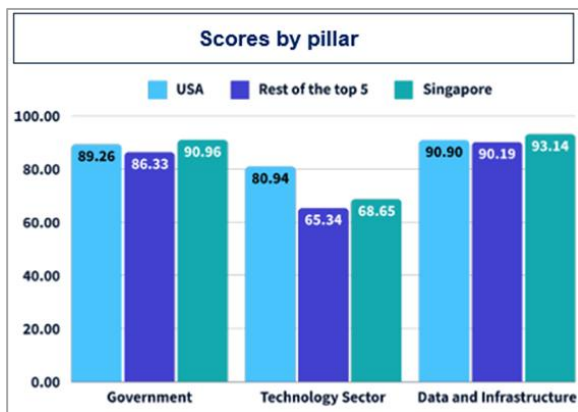


The geographic diversity also persists, with strategies emerging across Sub-Saharan Africa (Ethiopia, Ghana, Mauritania, Nigeria, Zambia), South and Central Asia (Sri Lanka, Uzbekistan), and Latin America and the Caribbean (Costa Rica, Cuba). These regions, historically under represented in AI strategy work, are signalling a commitment to build the foundational governance frameworks necessary to improve AI readiness. Countries like Romania released new strategies in 2024, reflecting steady progress in more developed economies. These developments highlight the increasing recognition of AI as a driver of national development. **International cooperation and knowledge-sharing have likely played a role in supporting this momentum.**

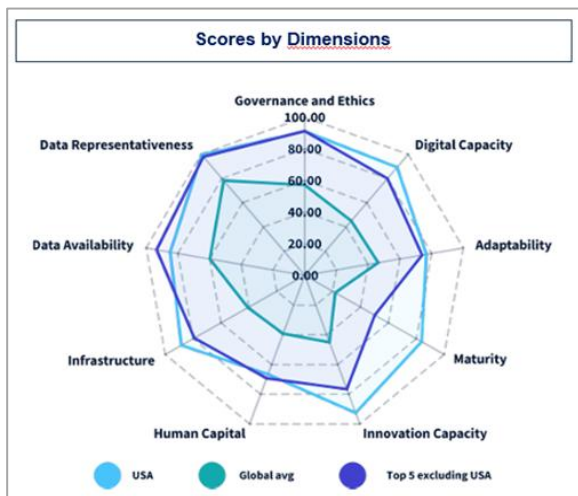
Government AI readiness Index		
Ranking of some of the 188 countries considered		
USA	Rank 1	Total 87.03
Singapore	Rank 2	Total 84.25
Korea Rep	Rank 3	Total 79.98
France	Rank 4	Total 79.36
UK	Rank 5	Total 78.88
Canada	Rank 6	Total 78.18
Netherlands	Rank 7	Total 77.23
Germany	Rank 8	Total 76.90
Finland	Rank 9	Total 76.48
Australia	Rank 10	Total 76.45
Norway	Rank 11	Total 76.12
Japan	Rank 12	Total 75.75
UR Emirates	Rank 13	Total 75.66
Saudi Arabia	Rank 22	Total 72.36
China	Rank 23	Total 72.01
Italy	Rank 25	Total 71.22
Indonesia	Rank 38	Total 65.85
Russia	Rank 39	Total 64.72
Sri Lanka	Rank 85	Total 45.29
Kenya	Rank 93	Total 43.56
Nigeria	Rank 94	Total 43.33
Ghana	Rank 95	Total 43.30
Yemen	Rank 188	Total 16.42

The US leads in AI Readiness, but its advantage rests heavily on the Technology Sector Pillar

When comparing the US to the rest of the top 5, it is clear that its advantage lies primarily in the Technology Sector pillar, having a much larger and more mature market than anywhere else. The advantage it has across the other pillars is less stark. In fact, Singapore is the global leader in both the Government (90.96 compared to the US's 89.26) and Data and Infrastructure (93.14 compared to the US's 90.90) pillars.



This distinction becomes even more evident when examining patterns at the dimension level¹. In Maturity, which looks at the size and development of the tech market within a country, the US scores 83.80, a staggering 62-point difference compared to the global average of 21.86, and in Innovation Capacity, the gap is nearly 48 points (92.48 vs 45.02).

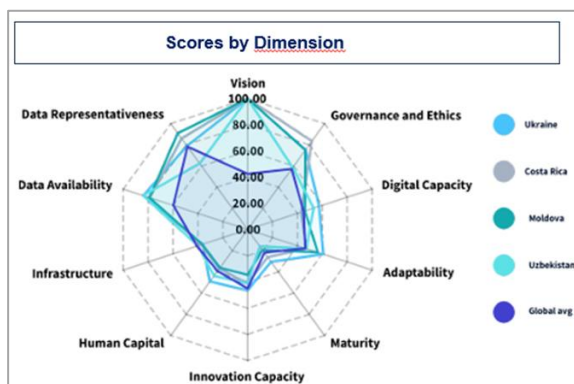


Middle-income economies are closing the AI readiness gap by getting the basics right. This year, a few middle-income countries have emerged as standout performers, making notable strides toward breaking into the top 50. What do these countries have in common?

They have shown significant improvement in the Vision, Governance & Ethics, and Data Availability dimensions, driven largely by targeted efforts in foundational governance. Countries like Ukraine, Costa Rica, Moldova, and Uzbekistan are getting the basics right. By focusing on areas where governments have the most direct influence, they are laying the ground work for effective AI adoption through:

- developing national AI strategies,
- adopting AI ethics principles, and
- strengthening data governance.

These countries now perform above the global average in Vision, Governance & Ethics, and Data Availability.



Global AI governance continues to take shape as regional cooperation

As AI advances, **global governance and international collaboration are becoming essential for effective and responsible adoption**. Shared frameworks, international standards, and regional cooperation provide governments with resources, best practices, and a common understanding of AI's potential and risks. **This year has seen significant progress in advancing international frameworks for responsible AI**. The Council of Europe's AI Treaty, the first legally binding agreement on AI, represents a major milestone. Signed by 11 countries, the treaty establishes a framework to ensure AI upholds human rights, democracy, and the rule of law. Meanwhile, the International Network of AI Safety Institutes, launched at the AI Seoul Summit 2024, unites countries such as the United States, Japan, and France to advance AI safety science.

UNESCO continues to play a central role in ethical AI governance. Its Readiness Assessment Methodology has now engaged 58 governments worldwide, helping them align with UNESCO's AI ethics recommendations. This tool supports effective AI adoption in both developed and developing economies.

Regional collaboration has also deepened, producing notable progress. In Latin America, the Santiago Declaration set the stage for further action. Meanwhile, the African Union presented its continental AI strategy, which aims to harmonise AI policies, foster innovation, and ensure ethical deployment across the region.

Similarly, the Islamic World Educational, Scientific and Cultural Organization (ICESCO) is contributing to AI readiness across its member states through mechanisms such as the Center of Foresight and Artificial Intelligence. These efforts highlight the importance of regional partnerships in tackling shared challenges and opportunities.

¹ The Vision dimension has been excluded because its scoring methodology creates greater data polarization.



The Transformative Power of Artificial Intelligence in Public Procurement

Maurizio Petronzi, *Head of Procurement & Operations, Cassa Depositi e Prestiti*

From Bureaucracy to Strategic Value

Public procurement has long been perceived as a bureaucratic, compliance-heavy function characterized by lengthy procedures and repetitive tasks. Today, Artificial Intelligence (AI) and digital technologies are reshaping this paradigm. The shift goes beyond efficiency: it is about reimagining procurement as a driver of transparency, accountability, innovation, and sustainability.

Automating the Transactional, Elevating the Strategic

One of the most immediate benefits of AI is the automation of transactional activities such as data entry, invoice reconciliation, supplier checks, or compliance verification. Machine learning and natural language processing now perform these tasks with accuracy and speed, reducing errors and freeing professionals to focus on strategic missions: strengthening supply chain resilience, enhancing competition, and embedding sustainability.

For governments, the potential is considerable. BCG estimates that AI-driven “spend smarter” approaches could reduce procurement costs by 25–35%¹. Freed from repetitive work, procurement teams can devote energy to policy goals and long-term planning.

Efficiency, Transparency, and Trust

AI is dismantling historic barriers to efficiency - paper-based systems, fragmented data, and limited interoperability. Real-time analytics and predictive forecasting accelerate procurement cycles, reduce costs, and allow earlier detection of risks.

Transparency, critical in the public sector, is equally reinforced. AI tools can flag irregularities in bidding processes or supplier performance, creating audit trails that strengthen accountability. According to the OECD, citizens and watchdogs can also gain real-time visibility, fostering trust in institutions².

Procurement as a Hub for Innovation

Procurement is evolving into a hub that stimulates innovation. By leveraging AI insights, governments can shape markets and incentivize the development of new solutions. Brazil’s AI Procurement in a Box initiative is one example: it provided agencies with standardized toolkits that included built-in safeguards on ethics and governance.

This shift positions procurement as the connective tissue of a wider ecosystem - governments, start-ups, universities, and corporations - working together to address public needs.

Building Resilient and Sustainable Supply Chains

Global crises have exposed supply chain vulnerabilities. AI supports procurement organizations by mapping networks, predicting shortages, and simulating disruption scenarios. In parallel, it embeds sustainability into purchasing: tracking carbon footprints, monitoring ESG compliance, and turning climate goals into actionable procurement decisions.

As a result, AI is not only a lever for efficiency but also a catalyst for responsible and sustainable practices⁴.

The Human Factor: Change and Governance

Technology alone does not deliver transformation. Integrating AI in procurement requires cultural and organizational change. Professionals need digital skills, agile approaches, and a mindset that views procurement as a strategic enabler of public value. Strong governance of data and AI is essential, along with attention to ethics - algorithmic fairness, transparency, and accountability. A study across seven U.S. cities showed that legacy procurement practices hinder AI adoption, underlining the urgency of modernizing policies and governance models⁵.

¹ Boston Consulting Group, Spend Smarter and Serve Better: A Blueprint for Improved Public Service, september 2024.

² OECD (2024), AI in Public Procurement - AI enables real-time data, audit trails, and stronger transparency in public procurement.

³ World Economic Forum (2022), AI Procurement in a Box - Brazil (cases São Paulo Metrô, Hospital das Clínicas).

⁴ American University (2024), Leveraging AI for Sustainable Public Procurement – translating climate goals into actionable procurement policies.

⁵ Johnson, N. et al. (2024), Legacy Procurement Practices Shape How U.S. Cities Govern AI – study across 7 U.S. cities.

A Transformation Already Underway

Change is no longer a vision: it is reality. Governments worldwide are piloting AI platforms, experimenting with blockchain contracts, and embracing digital marketplaces. Benefits are tangible: reduced lead times, improved compliance, and greater supplier competition.

In New South Wales, for example, AI analyzes \$42 billion in annual spending to detect anti-competitive behavior and reinforce integrity⁶. With global public procurement valued at \$13 trillion annually⁷, even a 1% improvement in efficiency could generate \$130 billion of savings each year.

Our Experience at Cassa Depositi e Prestiti

At Cassa Depositi e Prestiti, we have already implemented several AI-based solutions to support both transactional and negotiation processes. From this journey, we have learned crucial lessons:

- **Continuous experimentation** with an iterative approach is essential.
- **A mindset oriented toward change** enables organizations to fully capture AI's value.
- **Strong governance** of data and AI ensures reliability, accountability, and ethical safeguards.

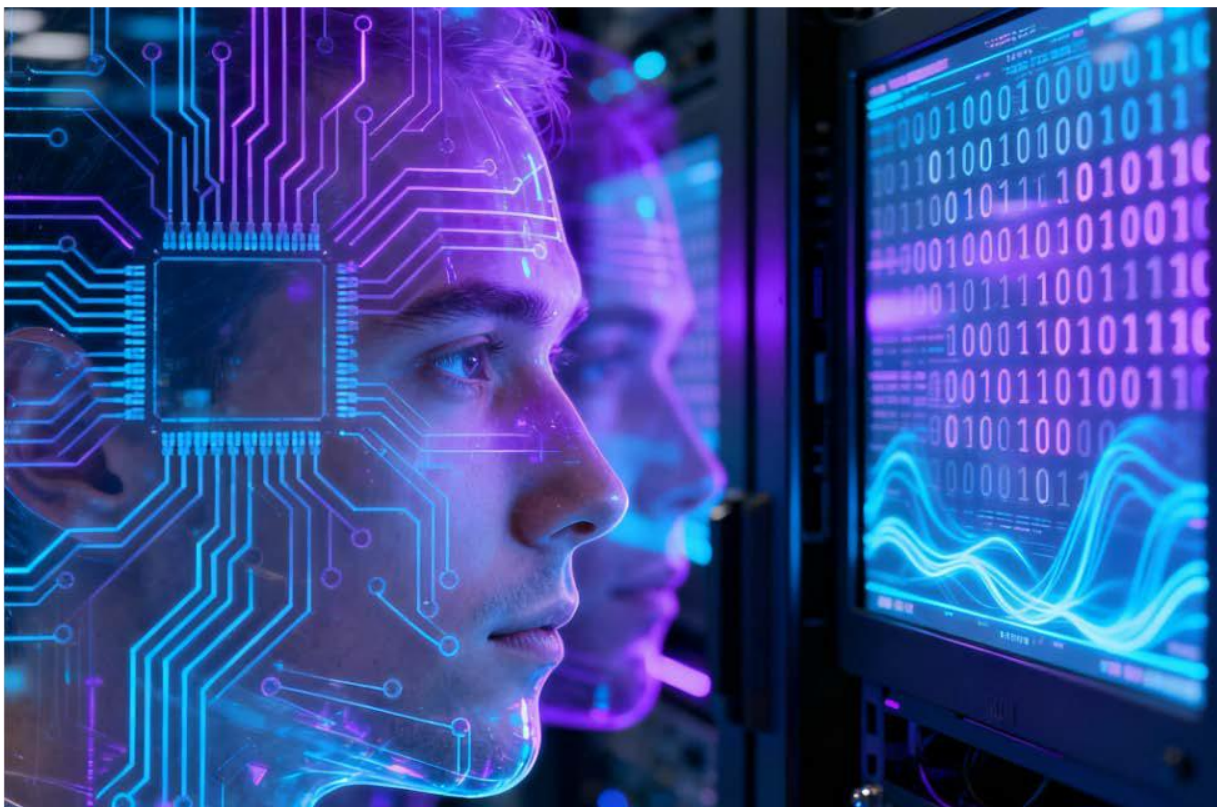
- Processes must be **redesigned to be AI-driven**, not simply digitalized in their old form.
- The involvement of a broader **innovation ecosystem** - start-ups, universities, research centers - has amplified impact and accelerated results.

This combination of experimentation, governance, and collaboration has allowed us to embed AI not only as a tool for efficiency but as a structural element in the transformation of procurement.

Conclusion: From Efficiency to Public Value

Artificial Intelligence and digitalization are redefining procurement across the public sector. By automating routine tasks, AI liberates professionals to focus on decisions that strengthen resilience, sustainability, and innovation. By improving transparency, it reinforces accountability and public trust. By connecting institutions with the broader ecosystem of innovation, it transforms procurement into a platform for collaboration and public value creation. The message is clear: technology is a powerful enabler, but the real transformation comes from people and institutions willing to adopt new mindsets and lead change with vision and responsibility. The future of procurement is already unfolding - and the time to act is now.

⁷ World Bank (2022), Global Government Procurement: Synthesis Report.





Scoring Quality with AI: The North Face

Philippe Maraval, CPO France Travail

The procurement director, by the very nature of the role, must exercise caution when a supplier promotes a new technology. Yet, when it comes to artificial intelligence (AI), one must be ready to open up: its characteristics make it incomparable to any other innovation since the beginning of the Industrial Revolution. Unlike the steam engine, which enhanced mechanical power, AI is capable of producing autonomous decisions.

Today, all your employees are already using it on a regular basis - just three years after the release of large models - without prior training, thanks to natural language interfaces. Its expansion and social diffusion are exponential. For managers, skepticism is no longer an option.

Prospects for Public Procurement

What about public sector procurement? As of September 2025, most applications remain at the prototype stage. But the outlook is clear.

Supplier sourcing will soon surpass simple database consultations. AI will easily analyze expenditures, categorize them by nature, and classify them under a precise nomenclature. Until now, such analyses had to be outsourced to specialized consultancies, often at exorbitant costs.

In tendering procedures, the drafting of rejection letters by AI will pose no difficulty. Similarly, price analysis can be automated, since it is essentially the application of a mathematical formula to a set of financial offers.

But the most decisive contribution will lie in contract monitoring and supplier performance evaluation. Due to lack of time, this task remains marginal in many public bodies. AI will be able to aggregate and exploit complaints, contractual indicators (KPIs), price revision schedules, and steering committee reports. It will enable a genuine renewal of qualitative monitoring without requiring additional resources.

France Travail's Bold Choice

In this exploratory phase, AI deployment cannot be fragmented. It is not a gadget: if misused, it would waste employees' time.

This is why France Travail decided to concentrate its first project on a specific process: scoring candidates' technical offers.

A bold choice, as this step is the most intellectually demanding part of the competitive tendering process. No turnkey tool existed at the beginning of 2025.

The priority given to technical bid analysis by AI rests on two main reasons:

- This phase represents more than half of the time required to award a contract. AI assistance should generate significant time savings and thus reduce the overall duration of procurement procedures. This slowness is the number one criticism of public procurement.
- The time devoted to this analysis is highly variable. The number of bids often exceeds forecasts, while evaluators' efficiency is sometimes overestimated. AI support should help limit these uncertainties.

Transparency and Legal Security

The transparency and relevance of technical scores represent both quality and legal risks. Evaluators may influence the final ranking through voluntary or involuntary bias, or due to lack of expertise. Recently, French administrative courts have started sanctioning what they call "offer misrepresentation," i.e., grossly erroneous evaluations.

With AI, public buyers will be able to compare the automated ranking with that proposed by evaluators, and thus challenge the origin of discrepancies. Without assistance, such control is difficult due to lack of time and expertise for procurement agents.

The model developed by France Travail aims to produce a synthesis of technical offers, including a merit-based ranking, narrative comments per candidate, and precise references to the candidates' technical submissions. In theory, it provides a complete report, ready for decision-making bodies.

Another asset: speed.

For a lot with ten candidates and 100 pages of technical documentation per offer, the report can be generated in just a few minutes.

Methodological Imperatives

However, France Travail's prototype testing revealed essential conditions:

- **Data security:** AI must operate in a closed environment, without external access. It processes only the tender documents and candidate submissions. The scoring mechanism functions entirely in data autarky.
 - **Quality of benchmarks:** AI can only be reliable if scoring criteria are tangible, predefined, and unambiguously linked to a precise scale. Vague or subjective criteria lead to bias or hallucinations.
- A clear chain of correspondence must be established between the response framework

imposed on candidates, the expected deliverables, and the direct link between the presence of these deliverables and the assigned score.

Transforming a technical offer into a score must be handled with utmost rigor.

This new demand for compatibility and robustness of scoring frameworks in relation to AI introduces a new role for public buyers.

Until now, their responsibility was limited to verifying that the evaluation criteria matched those published in the Official Journal of the EU. From now on, with AI, buyers must ensure the reliability of scoring mechanisms.

This implies developing expertise tailored to each procurement category.

- **Human responsibility:** AI must be presented as decision support, never as a substitute for evaluators' judgment. The final scoring outcome must remain under the full responsibility of the human evaluator.

Like all northern facades, the one facing AI applied to bid evaluation remains fraught with obstacles, marked by phases of disappointment. But the path is the right one, and in the end, the reward for procurement departments will be memorable.





Towards a new approach to Public Procurement from a geostrategic perspective

José María Gimeno Feliu, *Professor of Administrative Law, University of Zaragoza, Spain*

Public procurement must be aligned with the objective of good administration, which should be at the heart of all contractual decisions, resulting in a vision based on strategy and public policy. The current global context calls for a new reflection on the prospects in this new geostrategic scenario with the intention of discerning "the North Star" (a term also used by the President of the European Commission when presenting the European Competitiveness Compass document in January 2025), which guides and facilitates the navigation of public procurement in Europe from an effective geostrategic public procurement at the service of citizens.

The various regulatory or economic measures (such as public procurement) must be analyzed in order to prevent them from becoming an undue obstacle, which undoubtedly happens due to strict or overly formal interpretations that are far removed from a correct interpretation of the needs of general interest, which slow down decisions¹. This situation, which slows down contractual decisions without material justification (and in the general interest intrinsic to the service), jeopardizes good administration².

In this context, public procurement, due to its capacity for transformation, insofar as it mobilizes significant public resources, is an element of undoubted importance in order to intelligently and proactively articulate new public policies and their new requirements, where a mere legal declaration is insufficient in itself.

Therefore, public procurement, far from a defensive bureaucratic perspective, is presented as the main lever for modernization and a social shield against more neoliberal tendencies that jeopardize the social model and the principle of equity. Today, a modern and proactive administration must know how to use public procurement correctly.

Public procurement has evolved both normatively and politically. Thus, it has evolved from a bureaucratic and formal vision to one that revolves around good administration, as indicated by the recent CJEU ruling of November 7, 2024,³ in case C-683/22, recalling that, according to established case law, **the contracting authority must respect the general principle of Union law relating to good administration, a principle that Member States must respect when applying Union law**. And from a culture of procurement based on privilege to a geostrategic culture for implementing public policies.

The President of the Commission, in her political program entitled "Europe's Choice," with the political aim of serving as a "shield for European democracy," proposes a major boost to investment in order to advance the objectives of the ecological, digital, and social transitions. To this end, in line with the Council Conclusions on Special Report No. 28/2023 of the European Court of Auditors Improving fair and effective competition for EU public procurement contracts awarded for works, goods, and services (C/2024/3521.OFFICIAL JOURNAL OF THE EUROPEAN UNION 3 JUNE 2024).

¹ The work of C. FELIZIANI, "Quanto costa non decidere? A proposito delle conseguenze delle mancate o tardive decisioni della Pubblica amministrazione" (How much does it cost not to decide? On the consequences of the public administration's failure to make decisions or its delayed decisions), *Il diritto dell'economia*, 1/2019, 155-192, is very enlightening.

² J.M. GIMENO FELIU, "The public administration as a regulatory authority and economic operator in the markets: a brake or a boost for the economy?", in the collective book *Economic governance, regulation, and administration of justice*, Aranzadi, Cizur Menor, 2023, pp. 95-124.

³ I refer to my book *Towards good administration through public procurement. From a culture of bureaucracy and price to one of strategy and value for money*. Marcial Pons, Barcelona, 2024.

Updating the regulatory framework for public procurement is necessary because, after ten years, there are clear weaknesses, as highlighted in *Special Report No. 28/2023 of the European Court of Auditors (ECA) entitled "Public procurement in the EU. Competition in the award of works, supply, and service contracts has declined in the ten years prior to 2021."*

This review must first decide on the regulatory instrument to be used. After four legislative packages based on the model of European directives and national transposition acts, it may be time to move towards effective legal harmonization and standardization at the European level through the use of European regulations, which will facilitate better conceptual interpretation and provide greater legal certainty for economic operators. In this way, greater conceptual certainty can be achieved, eliminating national interpretative singularities that in themselves pose a regulatory risk and a brake on investment. Not surprisingly, this is a dysfunction noted by the CJEU (for example, the CJEU judgment of November 10, 2022, *Sharengo* (Case C-486/21, ECLI:EU:C:2022:868), which states that the **autonomous concepts** of Union law must **be interpreted uniformly throughout the territory of the Union. It is therefore not possible to derive an interpretation of the national rule that differs from that provided for and defined by European legislation.**

A European regulation that must assume the mandatory nature of strategic and socially responsible public procurement, eliminating the unnecessary bureaucracy that has created bottlenecks and is particularly widespread in public procurement.

This idea appears in the report prepared by Enrico Letta, *"Much more than a market"* (April 2024), which emphasizes the transformative power of public procurement in the service of public policies such as social and environmental sustainability and innovation. This implies a clear move towards so-called **preferential⁴ public procurement.**

We can **talk about a transition from the era of strategic public procurement** to geostrategic public procurement. The new north on the compass of competitiveness in Europe is European strategic autonomy⁵. Geostrategy through public procurement to defend European identity in a tense global context marked by considerable uncertainty (but with the need to strike a balance between protecting European interests and maintaining an open and competitive international trading system).

The geostrategic vision through public procurement translates into several aspects:

- a) Considering geostrategic factors when making decisions about which goods and services to purchase and from whom to purchase them (where it is worth looking to Latin America).
- b) Ensuring the supply of goods and services critical to national security, such as military equipment, communications technology, and cybersecurity services.
- c) Protecting critical infrastructure, such as ports, airports, energy networks, and artificial intelligence systems.
- d) Promoting the development of national industries in relevant sectors and avoiding dependence on third countries.
- e) Establish strategic alliances and project influence on the international stage.

It is time for a new approach to public procurement in a geostrategic scenario that allows us to anchor the hallmarks of the European project's values and guide good governance and good administration, through public procurement, towards what the President of the Commission has described as a new North Star.

This requires abandoning a price-focused approach in order to consolidate a new model that takes into account the value of the solution and the principle of results from the perspective of the best quality of service.

⁴ C. BOVIS, Editorial, *European Procurement & Public Private Partnership Law Review* No. 3|2024. It should be noted that the Judgment of the Court of Justice in Case C-652/22, *Kolin İnşaat Turizm Sanayi ve Ticaret*, of October 22, 2024, the Court considers that economic operators from third countries which, like Turkey, have not concluded an international agreement with the Union cannot participate in a public procurement procedure in the Union by claiming equal treatment with tenderers from Member States or third countries bound by such an agreement. Likewise, they cannot invoke the provisions of the relevant public procurement directive to challenge the decision to award the contract in question. This criterion has been confirmed by the CJEU judgment of March 13, 2025, *CRRC Qingdao Sifang Co. Ltd and Astra Vagoane Călători SA* (C-266/22). This CJEU case law reinforces the current geostrategic scenario by validating the EU's commercial position initiated with the regulation of Regulation (EU) 2022/1031 of the European Parliament and of the Council of June 23, 2022.

⁵ This idea can be found in the Council Conclusions of November 2016: "Ability to act autonomously when and where necessary and, as far as possible, with partner countries."



The Global Gateway Initiative and the new phase of European development cooperation mechanism

Gianmatteo Sabatino, *Università di Trento*

Within the context of the current fragmentation of the global political and economic order, the role of transnational cooperation strategies is becoming increasingly important.

Through these strategies, single states or supranational union (such as the EU) not only engage in development cooperation with third countries, but also try to project a certain degree of geopolitical influence and also promote specific regulatory frameworks to manage such cooperation.

The European Union has a long standing tradition of external economic diplomacy, especially towards the African continent, and several agreements – such as the Cotonou Agreement of 2000 – have been signed and several initiatives have been carried out over the past decades.

However, in the wake of the Covid-19 pandemic, the European institutions, and in the first place the Commission, decided to promote a more comprehensive instrument to coordinate development cooperation initiatives and frame them within a strategy holding also a geopolitical significance: the so-called Global Gateway.

The Global Gateway Initiative (GGI) has been heralded by some as a sort of European “response” to the Belt and Road Initiative sponsored by the People’s Republic of China. Indeed, its main geographical scope of application should concern Africa and, on a more limited scale, Pacific and Caribbean countries, in light of the 2021 Partnership with the Organisation of African, Caribbean, and Pacific States.

In 2021, the GGI has been provided with its main operative instrument, i.e. the Neighbourhood, Development and International Cooperation Instrument (NDICI), as determined and detailed in Regulation no. 947/2021.

This Regulation is clearly inspired by the model represented by European Structural Funds.

The NDICI is therefore included in the activity of EU budget planning for the cycle 2021-2027, exactly as the structural funds. Even the operative modalities of the NDICI mirror those already experimented with the structural funds. The NDICI, indeed, functions according to partnership agreements stipulated with third countries, functioning as actions plans for the realization of development projects. On the basis of such plans, the European Union shall then provide co-financing through a wide array of financial instruments.

Furthermore, the GGI does not present itself as an exclusive instrument of cooperation. It instead fosters initiatives and co-financing instruments that single Member States may decide to launch, and provides a general framework of rules and values to promote integration of national and supranational actions.

The perspective of values is, indeed, one of the most relevant but also critical points of the development cooperation mechanism envisaged by the GGI and, in particular, by Regulation no. 947/2021.

The GGI, indeed, links cooperation not only with a dimension of economic sustainability, in direct connection with the UN Sustainable Development Goals, but also with a set of social and political values appealing to the rule of law, the promotion of democratic standards, the protection of fundamental human rights. From an operative dimension, such values are transposed into conditional mechanisms underpinning partnership agreements and action plans, so that, on the one hand, support to development projects is connected with the respect of certain political standards or to the commitment to reforms; on the other hand, the development projects themselves may aim at integrating a more specifically economic purpose with the intention of promoting political and social values.

Such approach has evident legal implications.

Indeed, as the promotion of social and political standards is embedded into conditionality mechanisms, the GGI becomes a clear epiphany of what has been called the “Brussels Effect”, i.e. the process of diffusion of EU regulatory standards outside the borders of the Union.

Empirical observations already offer interesting elements to reflect upon. So, for instance, within the context of several cooperation initiatives active between the European Union and Tanzania, in the recent years there have been efforts to step up projects concerning the modernization of coffee production chains. The EU support has translated, in practice, also in the diffusion of EU regulatory standards concerning certain phases of the production chain, such as for instance the packaging and advertising of products. At the same time, the EU has sponsored, within the context of the same initiatives, training and pedagogical activities targeting local farmers in order to promote “good production practices”.

Other interesting evidence comes from development projects in Ivory Coast, Ghana and Cameroon, concerning cocoa production and value chains. Here the EU support – often mediated by the activities carried out by specific Member States – operates also with regard to the promotion of legal reforms in the field of social rights. In particular, such support translates into legal, technical and financial assistance to reform programmes in the field of sustainable farming, of workers’ protection and of protection of workers’ dignity, for example with regard to the issues of child labour and minimum wages.

Such examples demonstrate the potential that the GGI has concerning the promotion of reforms in third countries, connected with a gradual harmonization of regulatory standards, conducive not only to the facilitation of trade interexchange but also to the establishment of social modernization trends. On the other hand, however, such processes also display some potential weaknesses. In particular, the conditionality mechanism enshrined in Regulation no. 947/2021, when instating on the promotion of certain political standards and certain notions of the rule of law, exposes itself to external criticisms in case partner countries perceive such conditionalities as a potential intromission in their internal affairs.

Indeed, from a global perspective, the development cooperation model based upon legal and political conditionalities – made popular already in the 1970s

by international economic organisations such as the International Monetary Fund or the World Bank – is now subjected to increasing criticisms since it is widely perceived, in some regions of the world, as a tool of “soft” imperialism, aimed at imposing Western liberal-democratic standards to developing countries, regardless of their specific legal and political culture.

Such criticisms have a high relevance in the context of the confrontation among different development strategies: it is known, for instance, that the Chinese doctrine of international cooperation manifestly rejects political and legal conditionalities in the name of the principle of respect of sovereignty and of the principle of non-interference with internal affairs of other countries. As a result, Chinese-sponsored initiatives such as the Belt and Road are built around soft and dynamic legal structures, such as Memorandums of Understanding certifying broad commitments to mutual assistance and cooperation, complemented (in some cases) by specific Bilateral Investment Treaties and supported, from an institutional point of view, by Chinese outward investment policies and by the presence of Chinese enterprises in the partner countries, engaging, for the most part, in infrastructure development projects.

Such cooperation initiatives are not linked to specific reform commitments, nor to the promotion of specific political and legal standards. From a comparative perspective, it should be considered how in some cases certain countries – or their respective political elites – could perceive this approach as more beneficial than the conditionality-based one pursued by the GGI. Furthermore, the degree of regulatory complexity of the European model is also extremely high vis-a-vis the one of the Belt and Road, which is not even based upon a comprehensive regulatory instrument. The GGI, instead, drawing inspiration from the model of EU structural funds, carefully lays out and details the several phases of the cooperation process, as well as the content of partnership agreements and action plans; the financial instruments that can be used; the specific conditionalities of cooperation projects.

The potential interaction of such EU-based regulatory structures with the local institutional environment is also an issue to be taken into account, in order to understand potential conflicts and ensure not only the economic but also the political relevance of such European long-term cooperation strategy.



Circularity and Public Contracts

Scilla Vernile, *Università degli Studi di Milano-Bicocca*

The use of public contracts in order to achieve goals that go beyond simply purchasing the best available product or service into the market is not a recent phenomenon in the European legal framework, especially thanks to the European Commission's commitment to environmental matters and the interpretation of the Court of Justice, which have increasingly oriented public contracts toward the promotion of broader interests, particularly of an environmental and social nature.

With Directives 2004/17/EC and 2004/18/EC, the European Union explicitly allowed contracting authorities to include environmental protection clauses in public contracts, with the goal of promoting the development of a "green market." The idea is to strategically use the public demand, which can influence business decisions by encouraging more sustainable behavior. This approach has been confirmed by the more recent European directives 2014/23/EU, 2014/24/EU, and 2014/25/EU.

As a result, the contracting authority might choose a more expensive good or service, due to environmental considerations, under the condition that the choice still complies with the principles of proportionality, transparency and non-discrimination. In drafting the specific rules of the procurement procedure, contracting authorities may include award criteria for the most economically advantageous offer that aim to encourage sustainable development and strengthen environmental protection, thus favoring contracts that are more environmentally "compatible" and capable of reducing the impact of human activities on the ecosystem, optimizing the use of natural resources, promoting renewable energy and reducing waste production and the emission of pollutants.

In the context of the so called "green public procurement", particular attention should be given to "circular" public contracts, aimed at promoting more efficient use of resources, extending producer responsibility throughout the entire product life cycle and encouraging investment in innovation to make products more durable and more easily reusable.

The scope is to preserve the "value" of products and materials for as long as possible, through more rational use of resources. Beyond recognizing the economic value of waste (as an example, "secondary raw materials" can be obtained through end-of-waste processes), extending the useful life of products and promoting broader reusability also means expanding the market for services related to the product. Products should be redesigned to maximize their functionality (i.e., their ability to serve multiple uses intensively and efficiently) and their durability over time.

Circularity in public contracts does not only concern the definition of the object of the contract and the drafting of the procurement documents, but also comes into play from the very beginning—during the decision-making phase on the type of contract to be used. The transition toward circular production models can, in fact, be supported through the adoption of contractual tools aimed at identifying innovative solutions. One such example is the innovation partnership, which is useful when the market does not yet offer supplies, services, or works that meet the needs of the contracting authority and which allows for the identification of the product's technical and functional characteristics during the negotiation phase. Also encouraging investment in less attractive sectors.

The principle of circularity implies the need to consider the "cost" (and only secondarily the price) of goods, which involves an assessment covering the entire life cycle of the product, anticipating considerations related to the disposal phase and, therefore, the impact of disposal methods on the actual cost of the good. Even before the contractual phase, the principle of circularity influences preliminary assessments, guiding the analysis of actual needs and the most sustainable solutions to meet them. For example, it involves evaluating whether a repair service would suffice or whether the purchase of a new item is necessary.

Only after confirming the necessity of the purchase and defining the type and object of the contract the *lex specialis* can be drafted and the contracting authority may request specific requirements that make the contract more sustainable, under the condition that these requirements are clearly and thoroughly expressed so that competitors can fully understand the administration's needs. The contracting authority, therefore, has wide discretion in setting technical specifications that contribute to reduce the environmental impact of the procurement, as long as they comply with the principles of reasonableness and proportionality and are suitable for the contract.

Alongside optional clauses, there are mandatory ones. Under Article 57 of the Italian Public Contracts Code, contracting authorities are required to include in the tender documentation at least the technical specifications and contractual clauses set out in the CAMs (*Criteri Ambientali Minimi* or Minimum Environmental Criteria), standards established at the national level by decree of the Ministry of Environment and Energy Security for specific product or service categories.

More specifically, according to paragraph 4.3 of the National Action Plan on Green Public Procurement, the CAMs consist of “both general and specific considerations, primarily of an environmental nature and, where possible, of an ethical-social nature, connected to the different phases of the procurement procedures (subject of the contract, technical specifications, award criteria for the most economically advantageous offer, conditions for contract execution)”, adopted at the ministerial level. These requirements are expressed in a way that not only defines the necessary characteristics but also the verification methods that allow economic operators to prove compliance.

Furthermore, these tools enable the contracting authority to verify conformity during the tender procedure or, if the criteria apply to a later phase, to ensure compliance with obligations during the contract's execution.

When relevant CAMs exist in relation to the subject of the contract, Article 57 makes their application mandatory, requiring the contracting authority to include them in the tender documentation.

The usefulness of CAMs in steering public contracts toward circularity is supported by the Opinion of the European Economic and Social Committee, “*Towards*

Circular Public Procurement”, dated 9–10 June 2021, which clarifies that: “Public procurement that includes mandatory minimum criteria for green public procurement (EU GPP criteria) falls within the scope of circular economy policies, as established in the Circular Economy Action Plan (CEAP)”.

To fully understand the potential of public contracts in implementing circularity, it is helpful to examine a concrete example, such as the CAMs introduced by Ministerial Decree No. 254 of 23 June 2022, which relate to the provision of rental services and the extension of the useful life of indoor furniture.

The decree, after emphasizing that the environmental impact of furniture primarily depends on the materials and components used, as well as on energy consumption, encourages eco-friendly furniture design.

This includes the use of renewable or recycled materials, the ability to disassemble products without damaging them and modularity, with the goal of promoting the reuse of parts as spare components or the recycling of materials in authorized facilities, in accordance with applicable regulations.

This reflects a kind of “procurement hierarchy,” which should guide contracting authorities toward more sustainable and circular options.

In this regard, preliminary market consultation is a very useful tool that allows contracting authorities to better understand the availability of circular products and services.

However, public employees training is also essential, not only to ensure proper management of the procurement procedure but, above all, to accurately identify the public administration's needs and, depending on the procedure adopted, to manage any negotiations with economic operators effectively.

In conclusion, both through optional and mandatory tools, public contracts represent an opportunity to integrate the primary objective of acquiring goods or services with the need for environmental protection.

This is achieved by transferring to economic operators the costs necessary to make those goods and services more circular and sustainable, fully leveraging the potential of public procurement to promote the purchase of more durable and long-lasting products.

In doing so, it becomes possible to preserve the value of resources for a longer period, generating both economic and - above all - environmental benefits, for the advantage of future generations.



AC.TI.VA - Intelligent Automation of Public Contracts: The INPS-IBM Case

Innovation, transparency, and efficiency
in public procurement through Artificial Intelligence and digital integration

Roberto Grisci, INPS, Head of IT Services Area, Central Purchasing Department

Loredana Martullo, INPS, Team Manager Acquisition and Management of System Support Services, Mainframes, and Related Software Licenses

Collaborators: Anna Esposito and Eleonora Gambacurta, social protection consultants of the IT Services Area, Central Directorate of Instrumental Resources and Central Purchasing Department

In the world of procurement and supply management, managing the lifecycle of public contracts is a challenge that combines operational complexity with institutional responsibility. Each step – from planning to awarding, from signing to closure – requires strict compliance with regulations, meticulous controls, and constant attention to transparency. Often, these processes involve repetitive, low value-added activities that nonetheless have a crucial impact on the correctness of administrative actions.

In this context, the **AC.TI.VA project - Automazione Contratti Tecnologie Intelligenti per la Valorizzazione Amministrativa** ("Contract Automation and Intelligent Technologies for Administrative Enhancement"), conceived by the IT Services Area of the INPS Department named "Direzione Centrale Risorse Strumentali e Centrale Unica Acquisti" and developed by IBM, demonstrates how the adoption of digital technologies and Artificial Intelligence can radically transform the management of the execution phase of public contracts, delivering measurable benefits in terms of efficiency, reliability, and governance capability.

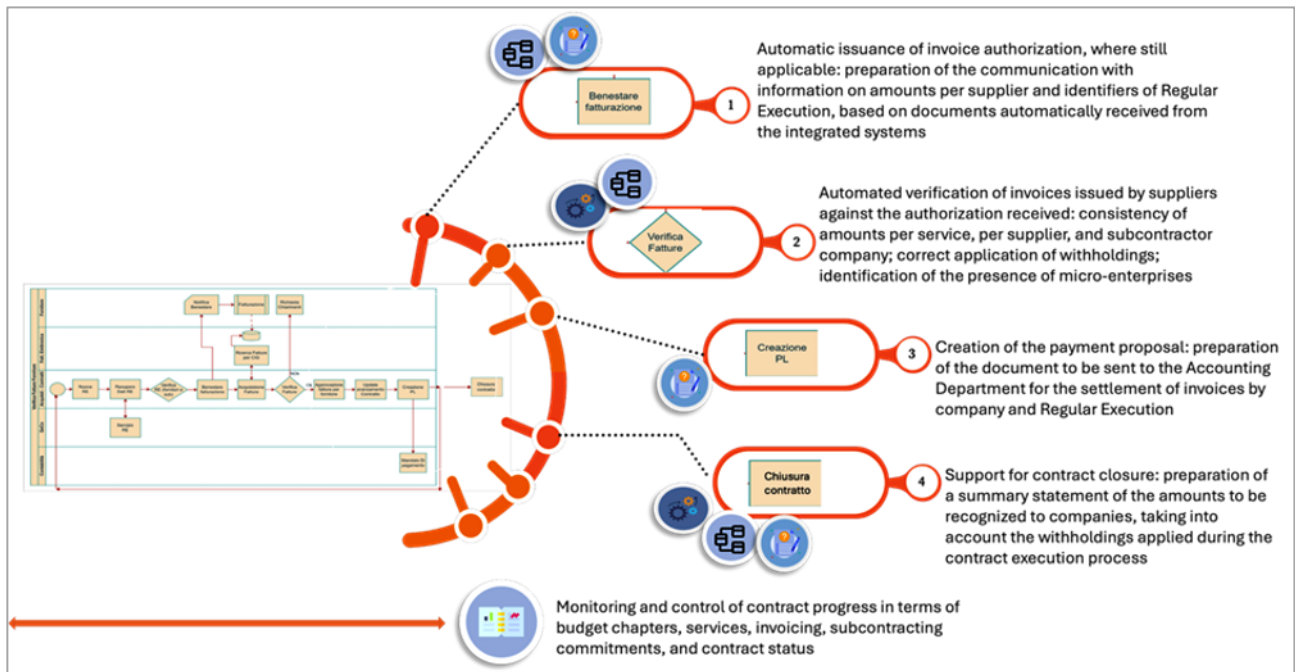
Intelligent automation and AI do not simply speed up activities or reduce errors: they represent a fundamental building block in the **digital transformation** of Public Administration. By integrating systems and data, these technologies enable more transparent, traceable, and consistent processes, improving the quality of services provided to citizens and economic operators.

However, their adoption must address **ethical issues**: ensuring that algorithms are free from bias, that automated decisions are always understandable and verifiable, and that human oversight remains central in decision-making processes. In an era when trust is a strategic asset, balancing technological innovation with ethical responsibility becomes the key to sustainable and widely accepted AI adoption.

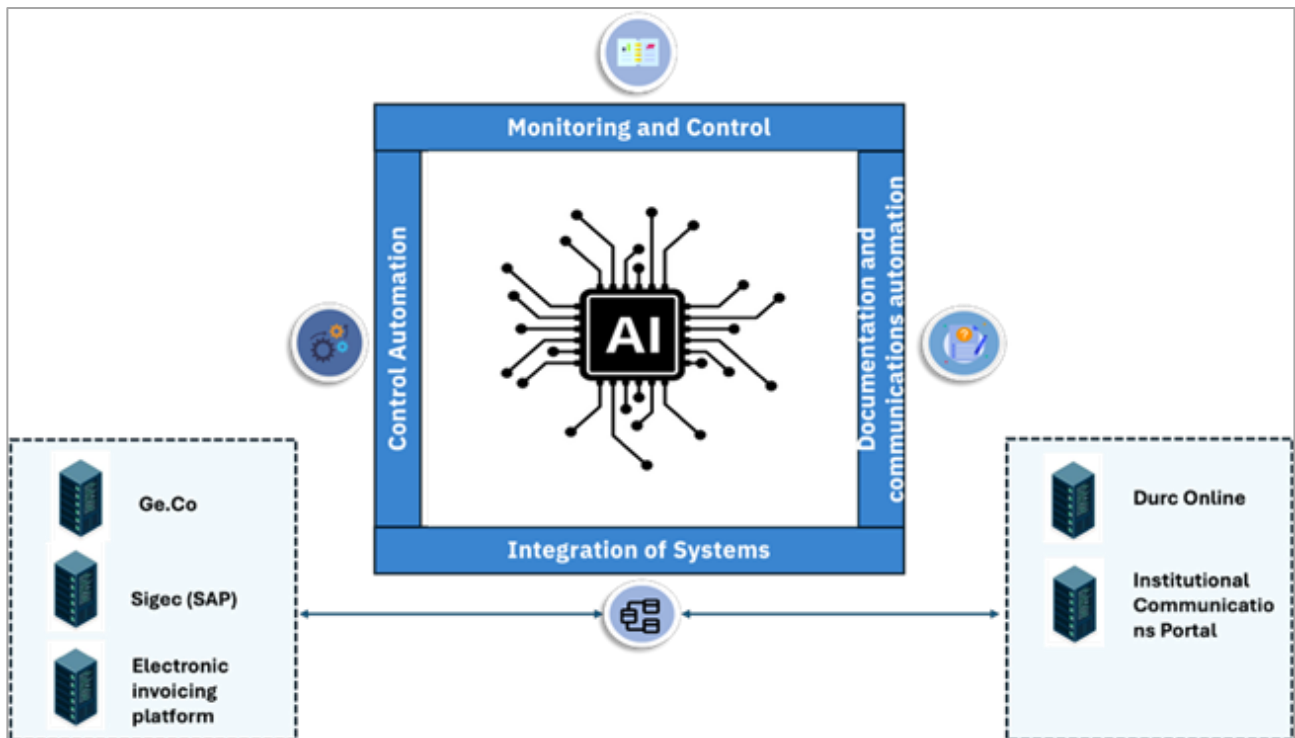
The involved INPS business area manages thousands of invoices and payments each year: in 2024 alone, over 5,000 documents – including certificates of Regular Execution and invoices – and 2,000 payment orders were processed. Processing times can vary significantly: from one hour for simple invoices to an entire day for complex ones requiring cross-checks on contract conditions, budget chapters, subcontracting authorizations, and types of companies involved, in relation to the specific public procurement code applicable to each contract. Additional specific controls are required for strategic initiatives such as Italy's PNRR (National Recovery and Resilience Plan) or participation in EU-funded programs, where traceability and speed of execution are even more critical.

AC.TI.VA was created for automating critical stages of the process, reducing the risk of human error and freeing up internal resources from repetitive tasks. The system can:

- Automatically prepare communications to suppliers and invoice authorizations ("benestare"), including amounts and references based on a "Regular Execution" certificate.
- Automatically verify the consistency of invoices issued by suppliers against the authorization received, checking amounts per service, supplier, and any subcontractor, and verifying the correct application of withholdings as per the public procurement code.
- Identify the presence of micro-enterprises and manage any direct payments.
- Automatically create the payment proposal ready for submission to the accounting department.
- Support monitoring of contract progress and consumption by budget chapter, service, invoicing, and subcontracting quota.
- Assist in contract closure with detailed summary reports enabling settlement of residual amounts and verification of the full delivery of services.



The integrated process is made possible through the full integration of existing INPS platforms such as SIGeC (Sistema GEstionale amministrativo Contabile - Administrative and Accounting Management System), which manages contract records and accounting; Ge.Co, dedicated to contract management, the electronic invoicing portal, DURC Online and the institutional communications portal. Integration is essential for retrieving data, performing checks, authorizing payments, and updating contract status in real time, creating a continuous and reliable digital workflow.



The EU AI Act (Regulation EU 2024/1689)

introduces a risk-based approach, classifying artificial intelligence systems into four levels: unacceptable risk, high risk, limited risk, and minimal risk, each with specific obligations.

In Italy, the **D.lgs. 36/2023** (Legislative Decree 36/2023) – the new Public Contracts Code – introduced, for the first time, specific rules on automation in administrative processes. These regulations require that automated processes be understandable, documented, and always supervised by a human operator, thus ensuring accountability for decisions and preventing algorithmic discrimination.

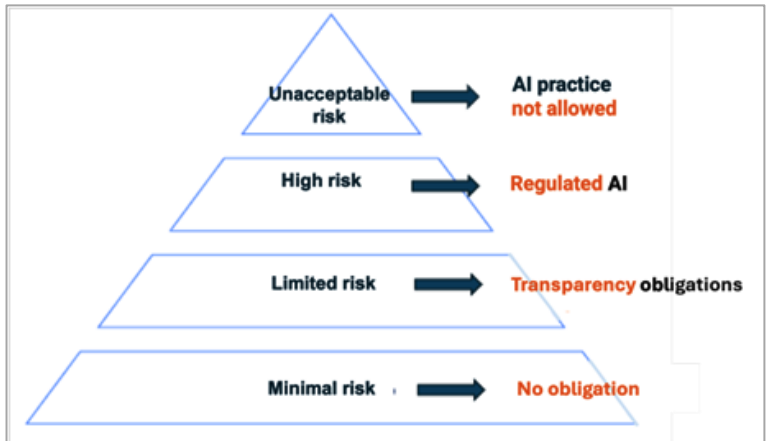
AC.TI.VA applies all these principles: every automated decision is reviewed by a human operator following the Human-in-the-Loop (HITL) approach, ensuring constant oversight and the ability to validate or correct the system's output.

The algorithmic logic is documented clearly and comprehensibly, and data is monitored to avoid bias and inaccuracies. Technology does not replace human judgment but supports it, creating a reliable, transparent, and compliant system that strengthens the trust of suppliers and citizens.

From a results perspective, the benefits are tangible: reduced processing times, greater accuracy in checks, complete traceability of operations, and better use of internal resources.

The success of AC.TI.VA has been made possible thanks to strong governance, collaboration among multidisciplinary teams integrating technical, legal, and administrative expertise, and constant investment in training.

Process standardization has made the model replicable and scalable, paving the way for adoption in other public entities.

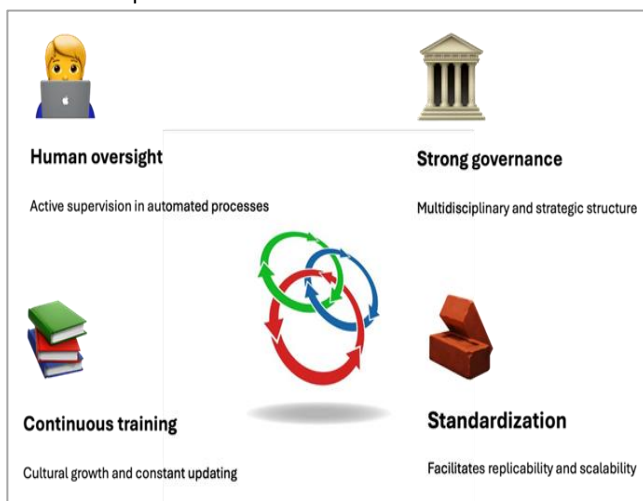


Key success factors are not abstract concepts but everyday operational practices:

- **Strong governance:** clear definition of roles, responsibilities, and decision-making flows, with constant monitoring tools.
- **Human oversight (HITL):** every automated decision is validated or corrected by an operator, ensuring accountability and control.
- **Continuous training:** periodic updates for staff on regulatory changes, new system features, and best practices.
- **Standardization:** replicable procedures and templates that reduce implementation times and costs in other contexts, maintaining operational consistency.

In a global context where procurement challenges demand efficiency, transparency, and sustainability, AC.TI.VA demonstrates that Artificial Intelligence, when used responsibly, can become a powerful ally. This is not just about introducing technology, but initiating a cultural change that places service quality, decision traceability, and regulatory compliance at the center. It is a concrete step toward a more modern, efficient, and citizen-oriented Public Administration, able to face future challenges with innovative tools and a solid governance foundation.

The value and innovation of AC.TI.VA have also been recognized nationally. The project was nominated by INPS for the prestigious **Excellence Award 2025**, promoted by **ADACI – the Italian Association of Purchasing and Supply Management** – which annually honors the best initiatives in procurement and supply chain. AC.TI.VA won the **first place** in the Public Sector category of the competition, distinguishing itself for its ability to integrate intelligent automation, regulatory compliance, transparency, and measurable performance improvement. This recognition rewards INPS strategic vision and teamwork and represents an exemplary case that can be replicated in other Public Administration contexts, reinforcing the role of technological innovation as a lever for more efficient, ethical, and sustainable public contract management.





Digital public procurement: interoperability and prospects following the launch of the new ANAC platform

Paolo Mezzetti, CEO & Co-Founder at BeeLiveIT Srl

Driven by the need for simplification and the obligations introduced by the new Public Contracts Code, digitisation has made significant progress in recent years, and in January 2024, the new digital procurement ecosystem was launched, which the National Anti-Corruption Authority (ANAC) has schematically represented with the following images (Fig. 1, 2).

Fig. 1
National digital procurement ecosystem

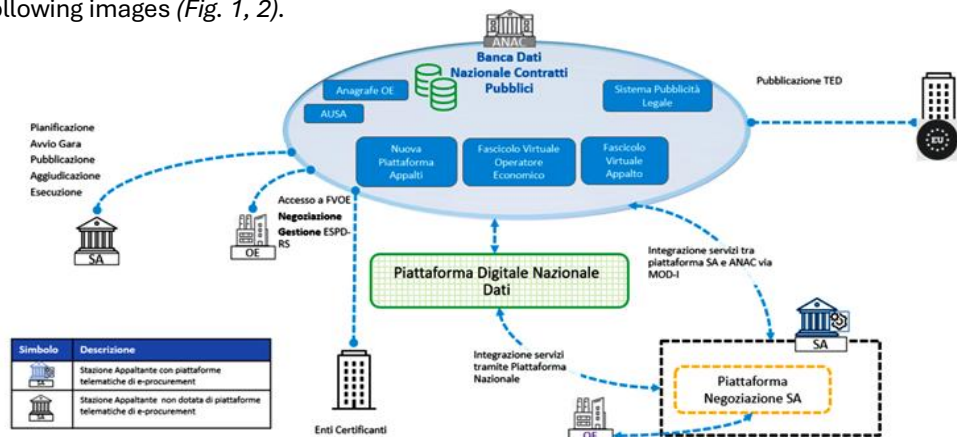
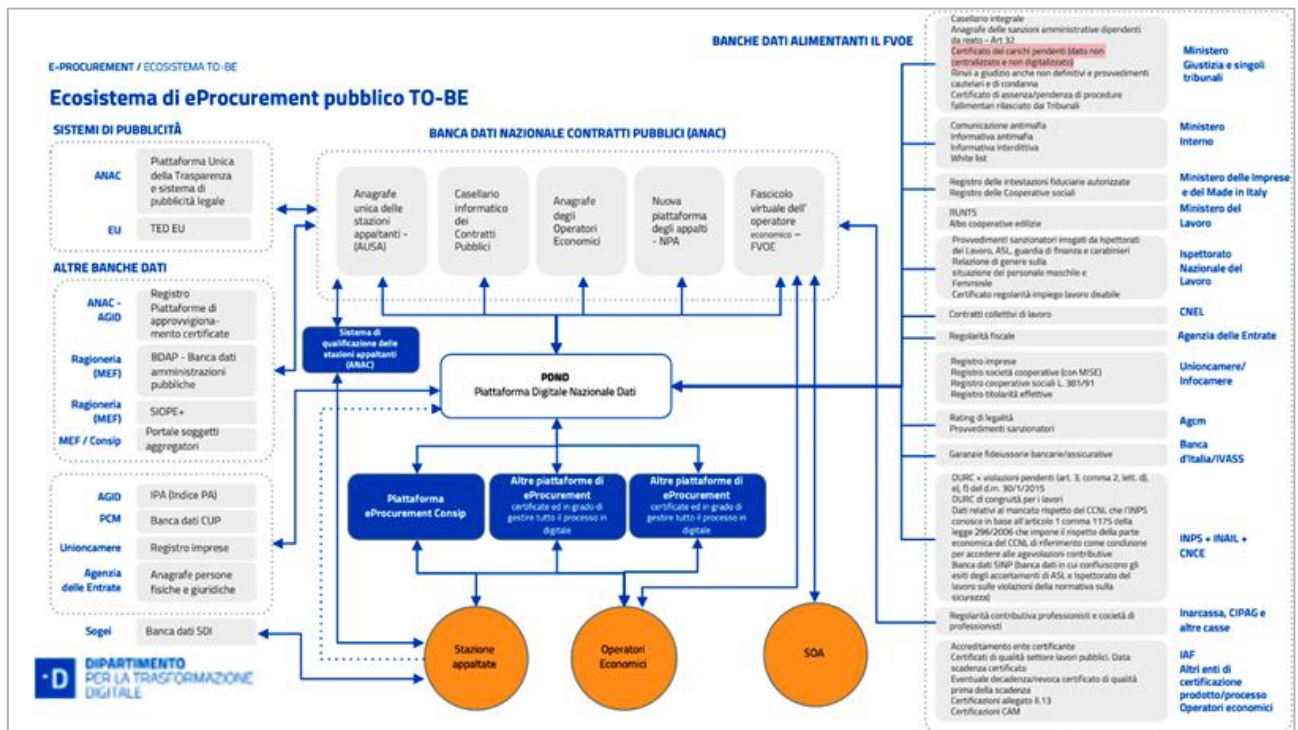


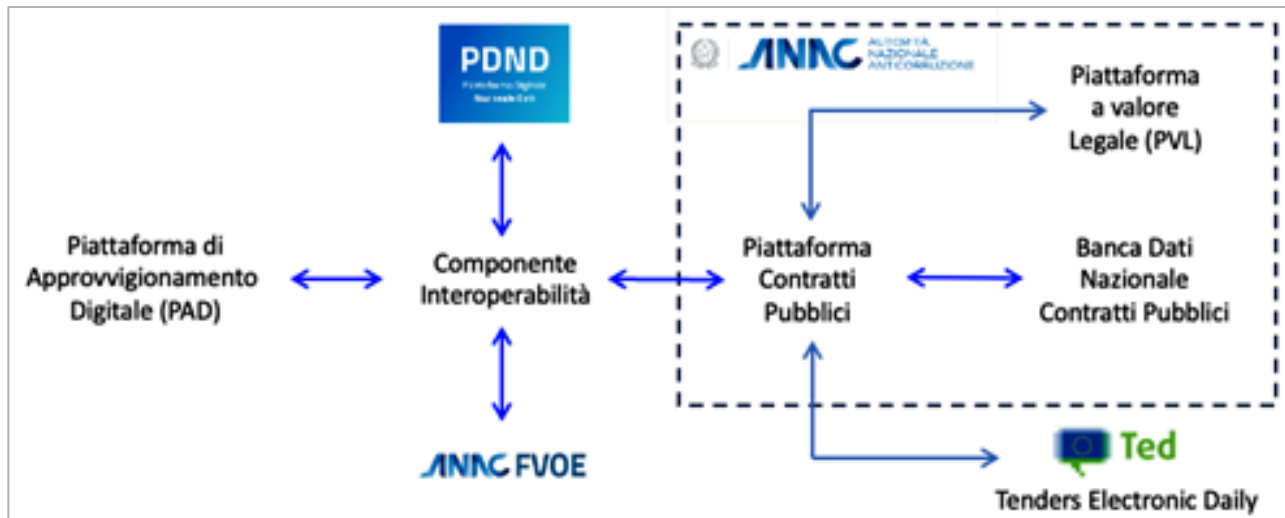
Fig. 2 - Ecosystem architecture



The priority objective was immediately clear: *to enable the automatic exchange of data between e-procurement platforms and central databases, minimising duplication and burdens for contracting authorities and economic operators by following the 'once- -only' principle, i.e. the possibility of providing information only once and seeing it reused by all the relevant administrations.*

A key element in achieving this objective was undoubtedly the interoperability between systems, a principle known since the early 1990s, which guarantees the transmission of information characterising the life cycle of the procurement procedure to the new public procurement platform, but also interaction with other systems, through the use of services made available by the National Digital Data Platform (PDND), according to the rules clearly described in the ANAC orchestrator.

Fig. 3 – Interoperability between the PAD and ANAC systems



Certified digital procurement platforms therefore use their interoperability component to transmit all information characterising the procurement procedure lifecycle to ANAC's new Public Procurement Platform (PCP) during the tender procedure, and the PCP, following its own operating rules, sends this information to other systems such as: the Legal Value Platform (PVL), Tenders Electronic Daily (TED) and the National Public Contracts Database (BDNCP).

With its new platform, ANAC has therefore changed its approach by directly entering the procurement procedure management process and introducing fundamental steps that are essential for completing the tender process.

The advertising component, for example, is managed exclusively by ANAC through its Legally Valid Platform (PVL) and dialogue with the TED when necessary.

The Contracting Authority no longer has the option of proceeding independently at this stage but is required to publish the tender through ANAC's systems.

The Sole Project Manager (RUP), or their delegate, after authenticating themselves through the Public Digital Identity System (SPID), must transmit all the information required by law during the tender process, according to an operational process that is very different from the one used for transmitting data to SIMOG (Tender Monitoring Information System), which was based on 'ex-post' reporting.

The CIG request has also undergone significant changes.

The information to be provided in order to obtain it is extensive and, depending on the type of procedure, concerns:

- the basic data set for the procedure, including the URL for the publication of the documentation and the list of contracting authorities involved in the management;
- the European Single Procurement Document (ESPD) in XML format;
- the eNotice for publication on the TED, which significantly reduces management times as it can no longer be published more than 24 hours after its validation.

These important changes in ANAC's approach have led contracting authorities to review their procurement management processes, rethinking them in light of these new constraints and initiating a process that is set to continue over time, as digitisation is objectively in its early stages.

The new Public Contracts Platform is a constantly evolving system, seeking to fully meet even those needs that are not easily predictable during the design phase. It is therefore not a point of arrival, but a starting point: the digitisation of public procurement has gained momentum, but there is still a long way to go.

In fact, ANAC has announced many new developments concerning:

- the revision of certain parts of the orchestrator to make it more consistent with the operational needs of users;
- the updating of certain types and the creation of new types to replace fields that are currently free text, such as the national collective labour agreement;
- the adjustment of certain mandatory requirements and the completion of the information set for certain forms;
- the possibility of accessing the FVOE (Virtual Economic Operator File) even in the absence of a purchase procedure using specific forms;
- the review and activation of phase managers, which will allow the RUP to delegate activities to its collaborators according to the phase of the purchasing procedure;
- the possibility of cancelling a confirmed form, although only for final forms;

and more.

Finally, when analysing the 2024 figures, we cannot fail to point out that, as is often the case in transformation processes, the start-up phase was not without its difficulties.

While digitalisation can be considered a widespread reality, in the early months of 2024 it represented a clear obstacle to spending for contracting authorities.

The figures released by ANAC show that the decline compared to previous years stood at:

- - 4.1% on 2023
- - 7.3% on 2022

This reduction is partly attributable to the reduced use of PNRR (National Recovery and Resilience

Plan) resources but, as anticipated, also to the introduction on 1 January 2024 of the ' ' regulations on the digitisation of public contracts, which initially slowed down the publication of tenders.

The total economic value of public contracts was approximately €271.8 billion, for a total of 267,000 tender procedures.

Spending on works decreased, while spending on services and supplies increased:

- Works: €60.8 billion, down -38.9% on 2023;
- Supplies: €116.1 billion, up +18.9%;
- Services: €94.9 billion, up +10.1%.

With regard to the methods of awarding contracts, there was a reduction in open procedures in terms of both value and number, and a reduction in negotiated procedures:

- Direct awards:
 - 54.3% of the total, +9.3% compared to 2023
 - 6.1% of the total value (over €40,000)
 - 92% of total contracts if those above €5,000 are also included: without public tender
- Open and restricted procedures: +66.9% in total amount:
 - Restricted procedures: +35.1% in value, +40.6% in number
 - Open procedures: -15.1% in value, -9.3% in number
- Negotiated procedures:
 - Following publication of the tender notice: - 29.7% in value, but +154.6% in number
 - Without prior publication: +15.1% in value, - 20.2% in number

The total value of contracts equal to or greater than €40,000 was €271,849,043,161.

In conclusion, the digitisation of public procurement is reshaping the way administrations and businesses interact. The launch has not been without obstacles: new rules, processes to be reviewed and adaptation times have required a significant effort from all parties involved.

However, the expected benefits are significant: less bureaucracy, greater transparency, and faster and more secure data exchanges. The new Public Procurement Platform therefore represents the beginning of a journey which, if accompanied by vision and collaboration, could make the procurement system simpler, more modern and more effective.



Trump's "Brain Tariff": When Protection Becomes Economic Self-Harm

Federica Dallanoce, National Vice President and General Secretary of ADACI

Summary - This analysis demonstrates how Trump's "brain tariff" represents not just an American policy error, but a historic opportunity for Europe to become the new global center of innovation and talent attraction.

An American Paradox: Protecting Jobs by Eliminating Those Who Create Them

America in 2025 finds itself in a paradoxical position: while Donald Trump signs executive orders to "protect" American workers with his "brain tariff," the U.S. economy risks inflicting a deep wound upon itself precisely in the sectors that sustain its global competitiveness. Sectors that, for Europe until 2024, had ensured stable supply chains and good international trade relations. This phenomenon prompts reflection on private and public decisions that will have a certain impact in the coming months for the USA, Europe, and other countries that will be involved.

The Ruthless Mathematics of Numbers

The data speaks clearly and paints a complex picture that challenges a country of great numbers:

- **450,000 H-1B workers** currently employed in the USA.
- **920,000 open positions** for engineers alone according to ASME.
- **4.3% unemployment** - practically full employment.
- **71% of H-1B specialists** come from India.
- **Two-thirds of visas** concentrated in the IT sector.

The surprise decision by U.S. President Donald Trump to increase the H-1B visa application fee to \$100,000 has left companies struggling to understand the potential implications. As part of a campaign to protect American jobs, the Trump administration increased, on Friday, September 19th, the application fee for qualified foreign workers. The decree, which came into effect on Sunday, requires companies to pay the fee to obtain the necessary visas for new employees entering the country.

In addition to financial companies, Big Tech has long relied on H-1B visas to fill highly qualified roles with personnel recruited from various countries, including India and China.

Amazon is currently the company employing the largest number of H-1B visa holders: over 14,000.

Microsoft, Meta, Apple, and Google each have over 4,000. According to many experts, this could be an opportunity for the United Kingdom, the European Union, and places like Dubai to attract new talent.

"Trump has offered Europe the greatest opportunity," commented Harry Stebbings, founder of 20VC Fund, as reported by CNBC.

Impact Assessment on American Supply Chain in Key International Economic Sectors

The Technology Sector: The Beating Heart of the Economy

American tech companies - from Google to Apple, from Microsoft and Meta to Tesla - have built themselves on global talent excellence. The \$100,000 "tariff" per H-1B visa doesn't just hit multinationals: it devastates the entire innovation ecosystem.

Big Tech has long relied on H-1B visas to fill highly qualified roles with personnel recruited from various countries, including India and China. Microsoft, Meta, Apple, and Google each have over 4,000.

Expected immediate consequences:

- Slowdown in software development projects.
- Loss of competitiveness in AI and semiconductor sectors.
- Migration of research headquarters to Canada, United Kingdom, and Singapore.

Manufacturing and Engineering: The Reverse Brain Drain

With over 920,000 open positions for engineers, America simply doesn't have enough domestic talent. The million-dollar "gold card" transforms what should be a talent magnet into an insurmountable barrier.

Sectors at risk of paralysis:

- Aerospace and defense.
- Renewable and nuclear energy.
- Biotechnology and pharmaceuticals.
- Electric automotive.
- Amazon is currently the company employing the largest number of H-1B visa holders: over 14,000.

Public Employment: When the State Self-Sabotages

Foreign Communities: Invisible Pillars of America

Contrary to the dominant narrative, foreign worker communities don't "steal" jobs - they create them. Each H-1B specialist generates an average of **2-3 additional jobs** for Americans through:

- **Entrepreneurship:** 40% of Fortune 500 companies were founded by immigrants or their children.
- **Domestic consumption:** 450,000 H-1B families generate billions in internal consumption.
- **Innovation:** 25% of U.S. patents have at least one foreign inventor.

Essential Services: Taxi, Delivery, Security

While the debate focuses on "brains," thousands of foreign workers keep essential services operational in:

- Urban transport and delivery (particularly in large metropolitan areas).
- Private security and law enforcement support.
- Cleaning and maintenance services for critical infrastructure.

Digital Public Administration: The Collapse of Modernization

The digitization of American public services critically depends on foreign IT specialists:

Federal departments at risk of paralysis:

- **IRS (Internal Revenue Service):** 40% of specialized IT personnel are H-1B.
- **Social Security Administration:** Computer systems managed primarily by contractors with foreign personnel.
- **Department of Homeland Security:** Cybersecurity and digital intelligence.

Immediate consequences:

- Blocking of digital modernization projects.
- Growing vulnerabilities to cybercrime.
- Inefficiencies in citizen services (taxes, pensions, documents).

Public Education: The Collapse of Excellence

The American public education system, already under stress, would lose thousands of qualified educators:

Public universities: 38% of STEM professors in state universities were born abroad:

- Loss of chairs in engineering, computer science, and sciences.
- Collapse of international enrollments (crucial revenue source).
- Decline in government-funded applied research.

High schools: Over 15,000 mathematics and science teachers with specialized visas:

- Acute shortage of qualified STEM teachers.
- Widening educational gap with international competitors.

Infrastructure and Transportation: Maintenance in Crisis

State and local transportation departments depend on foreign engineers for:

Critical infrastructure projects:

- Maintenance of federal bridges and highways.
- Development of intelligent transportation systems.
- State-scale renewable energy projects.

Personnel at risk of loss: 25,000+ civil engineers and infrastructure specialists:

- Delays in multibillion-dollar federal projects.
- Increased external consulting costs.
- Infrastructure safety risks.

Public hospitals and VA (Veterans Affairs): 28% of doctors in veterans' hospitals were born abroad. Their loss would mean:

- Closure of specialist departments in rural areas.
- Longer waiting lists for critical care.
- Collapse of medical training programs.

CDC and NIH: The Centers for Disease Control and National Institutes of Health heavily depend on international researchers:

- 35% of NIH post-doctoral researchers are of foreign origin.
- Loss of expertise in infectious diseases and pharmaceutical research.
- Delays in vaccine and innovative therapy development.

Future Scenarios: Economic Consequences

Pessimistic Scenario (Probable)

- Mass exodus of 300,000+ specialized workers within 18 months.
- Loss of 15-20% of innovative capacity in key sectors.
- Company migration to more welcoming hubs (Toronto, London, Singapore).
- Decline in U.S. technological competitiveness vs China and Europe.

Expected Macroeconomic Impacts

- GDP slowdown of 0.5-1% annually.
- Inflation of specialized services by 15-25%.
- Loss of positions in global innovation rankings.
- Reduction of foreign investments by 20-30%.

The Great Irony: When Nationalism Damages the Nation

The "brain tariff" represents perhaps the greatest irony of contemporary economic policy: in attempting to protect American workers, it risks damaging the entire economic structure that sustains them.

The uncomfortable truth: In a globalized and technological economy, talent is the scarcest resource. Rejecting it is equivalent to giving the future to competitors.

Conclusions: The Price of Isolation

While inflation bites and living costs rise, the temptation to find scapegoats is understandable. But economic history teaches that isolation doesn't protect - it impoverishes. America has always prospered as a global magnet for the best talents. Transforming this magnet into a barrier could be the most costly strategic error in modern economic history.

The question that remains is simple: Is it worth sacrificing America's future on the altar of a policy that promises to protect jobs that, without foreign "brains," might simply disappear?

The Devastating Impact on American Supply Chain and Production

Tech Supply Chain: The Collapse of Digital Supply Chain

Modern American supply chain critically depends on complex software systems managed by specialists. The analysis shows how this policy would not only damage innovation but literally paralyze the modern productive capacity of the United States, which critically depends on:

1. Complex digital systems managed by foreign specialists.
2. Advanced industrial automation designed by international engineers.
3. Integrated supply chains requiring global expertise
4. Manufacturing technologies developed by multicultural teams.

The central paradox emerges clearly: in attempting to "protect" American production, there's a risk of making it obsolete and uncompetitive, since modern manufacturing cannot exist without the "brains" that Trump's policy wants to exclude.

Concrete Case Studies of Immediate Success

Case 1: London AI Startup

- **Before tariffs:** 3 U.S. candidates per senior position.
- **After tariffs:** 25+ qualified candidates in one week.
- **Result:** Hiring of former Google AI researcher.

Case 2: Berlin Fintech

- **Strategy:** Complete relocation package offer.
- **Target:** Blockchain experts from Silicon Valley.
- **Success:** 5 senior engineers hired in 2 weeks.

Case 3: Danish Biotech

- **Opportunity:** U.S. pharmaceutical researchers.
- **Incentive:** State-of-the-art laboratories + work-life balance.
- **Result:** Complete team formed for new oncology drug.

These examples demonstrate how Europe is transforming the American crisis into an extraordinary opportunity for growth and innovation.

Concrete Competitive Advantages: Europe vs USA

Operating Costs

Position	USA Salary	Europe Salary	Savings
Senior Developer	\$180,000	€85,000 (~\$92,000)	~49%
Data Scientist	\$160,000	€75,000 (~\$81,000)	~49%
Product Manager	\$200,000	€95,000 (~\$103,000)	~48%

Quality of Life

- **Vacation:** 25-30 days vs 10-15 USA
- **Healthcare:** Public vs \$20,000+ annually USA
- **Parental leave:** 12+ months vs 0-3 months USA
- **Transportation:** Efficient public vs car dependency

Growth Projections

Conservative Scenario (2025-2027)

- 50,000 H-1B specialists migrate to Europe.
- €10 billion new R&D investments.
- 25% growth in innovative startups.
- 200,000 new positions in tech spillover.

Structural Strategies: European Tech Cities Network

Each European city specializes in a specific sector, creating a complementary ecosystem that leverages the American brain drain to build Europe's technological future.

According to many experts, this could be an opportunity for the United Kingdom, the European Union, and places like Dubai to attract new talent. "Trump has offered Europe the greatest opportunity," commented Harry Stebbings, founder of 20VC Fund, as reported by CNBC.

Conclusion:

We help European institutions and companies **win the global talent race** by turning policy, data, and cross-cultural insight into **actionable workforce strategies**.

Europe competes for high-value talent in a world shaped by AI, geopolitics, and new regulation. We synthesize fragmented data, decode EU and national policies, and translate them into clear talent strategies—covering attraction, mobility, skills, and retention. Our edge is the blend of **policy intelligence + economic analysis + narrative design**, delivered in practical toolkits and programs that leaders can apply immediately.

The work showcases capabilities in data synthesis, strategic thinking, cross-cultural communication, and narrative construction - all essential skills for thought leadership in the intersection of policy, economics, and technology.

Moving forward, the writer should leverage these demonstrated strengths whilst addressing identified limitations to establish authority as a strategic analyst and policy interpreter in the evolving landscape of global talent competition.

Conclusion

Europe is built for high-value talent. We combine strong research ecosystems, stable rule-of-law markets, and modern mobility pathways with a quality of life that retains people long-term. We take the opportunity to use the Expert from American countries, and buy knowledge people. We have lost some opportunities and taking advantage in procedure and new rules. Our edge is now, **policy-into-practice**: we translate EU and national frameworks into clear routes for hiring, upskilling, and cross-border teams. With Human+AI skills, green leadership, and deep industrial know-how, Europe helps organizations attract the right people faster, reduce risk, and scale innovation - sustainably and at global standards.

Innovation isn't just about technology - it's about mindset. Two are the fundamental elements creates a truly innovative context: **competition** and the **freedom to make mistakes**.

Competition drives continuous improvement, raising the bar and seeking increasingly effective solutions. But without the freedom to commit errors, no real innovation can emerge. It's precisely from mistakes that learning is generated, and every attempt - successful or not - becomes a knowledge asset for the organization.

President Trump and his leading team offer an emblematic example: an engineer who encourages a young colleague to pursue their idea, even when it differs from their own. The reasoning is simple: one of them will be right, but in any case, both will have learned something new.

This approach demonstrates how true innovation isn't just the result of brilliant intuition, but the outcome of a culture that values dialogue, accepts risks, and transforms errors into resources - a message that's current and crucial for all enterprises competing in a global market.

By embedding Trump's innovation principles into team selection, you're not just choosing project participants - you're building a learning organization capable of thriving in the dynamic EU funding ecosystem.

Procurement is no longer a support function: it is the company's strategic radar.

It scans the market, reads weak signals, and turns volatility and complexity into actions and, above all, into competitive advantage.

When Procurement sits at the decision table - upstream, not downstream - the company anticipates disruptions, speeds up innovation with suppliers, and makes the value created across the whole chain measurable.

Organizations that embrace competitive innovation while learning from every attempt will dominate the global project landscape.

Link to Procurement Function

Those who lead Procurement today also lead the company's adaptability and reputation.

Resilience and brand are not only about communication or production: they start from purchase choices and from the ability to manage reliable, inclusive, and sustainable supplier ecosystems.

A Procurement function that combines business, sustainability, and technology - Human+AI - becomes the guardian of operational reliability and of alignment with the company's values.

Mastering compliance and risk means controlling uncertainty.

"Compliance by design" is not bureaucracy: it is a process architecture that prevents fines, stoppages, and reputational damage, while freeing time and resources for growth.

A structured approach to risks - financial, ESG, geopolitical, and supply - supports informed decisions, ready alternatives, and operational continuity that becomes an advantage in critical moments.

Acting with agility and precision unlocks hidden value.

Data, analytics, and automation speed up negotiations, improve specifications, reduce waste, and optimize TCO and CO₂.

But speed alone is not enough: we also need disciplined execution, clear metrics, strong vendor rating, and a shared cycle of continuous improvement with the supply network.

In this mix of speed and rigor, the most durable value emerges.

This is the Procurement we need: proactive, skilled, and connected to both business results and ESG commitments.

And it is also the Procurement we deserve: able to link strategy and operations, technology and professional judgment, efficiency and responsibility.



The New Trade War: How US Tariff Policy Redefines Global Commerce

Marco Sella, Customs & Global Trade Director, Cross-Border | Global Trade Solutions

The Cascade Effect: Understanding America's Tariff Waterfall

Recent headlines fixate on reciprocal tariffs, but this narrow focus mystify a far more complex reality. Since February 2025, the United States has implemented a multi-tiered tariff architecture that functions less like a single policy instrument and more like a cascading waterfall of trade restrictions, each layer amplifying the disruption below.

The baseline reciprocal tariff represents merely the first drop. Beneath it flow country-specific exemptions for USMCA partners, sectoral duties under Section 232 targeting steel and aluminum, copper, lumber restrictions extending to derivative products including machinery and furniture, legacy Section 301 measures on Chinese imports, and targeted executive orders affecting partners like Brazil. This labyrinthine structure creates what customs professionals name it a "tariff waterfall" - a term that captures both the sequential nature of these measures and their cumulative force.

The Trump administration frames this as reciprocity, correcting decades of perceived exploitation. Yet this narrative conveniently overlooks what the United States extracted in return: near-universal adoption of American technical and legal standards that advantaged US producers, access to low-cost inputs that strengthened domestic supply chains, and broad compliance with US sanctions regimes targeting Russia, China, and Iran - amongst others. The irony is stark - the countries suffering most are precisely those that played by American rules.

Consider Japan, a stalwart ally that absorbed these rules most completely. The September trade deal¹ imposed a 15% tariff burden² - ten times previous levels - devastating automotive, auto parts, steel, and other core Japanese industries³. This represents not just economic recalibration but a fundamental breach of trust with America's most reliable trade partners.

¹ See <https://www.whitehouse.gov/presidential-actions/2025/09/implementing-the-united-states-japan-agreement/>

² This tariff rate applies retroactively back to August 7.

³ Importantly, for autos and aircrafts and parts thereof, the EO allows for CBP to define what it considers "products of Japan" (i.e. the substantial transformation test may not apply).

U.S. TARIFF RATES ON TRADING PARTNERS

Tariff rates announced since July 31, currently in effect

TRADING PARTNER	MODIFIED RATE	APRIL 2 ANNOUNCED RATE
CANADA	35%	
MEXICO (PAUSED)	25%	
EUROPEAN UNION*	0%	20%
EUROPEAN UNION**	15%	20%
UNITED KINGDOM	10%	10%
INDIA	50%	26%
JAPAN	15%	24%
INDONESIA	19%	32%
AFGHANISTAN	15%	10%

Figure 1 - Source: yahoo finance |The White House • *goods with column 1 duty rate less than 15% (15% minus column 1 duty rate) • **goods with column 1 duty rate greater than 15%.

The Bureaucratic Nightmare: When Trade Compliance Becomes Trade Barrier

President Trump campaigned on slashing red tape, yet for importers and customs brokers, 2025 has delivered precisely the opposite - a regulatory labyrinth that transforms every shipment into a compliance minefield. This administrative burden represents an often-overlooked dimension of protectionism: when documentation requirements become sufficiently onerous, they function as effectively as tariffs themselves.

Bloomberg's investigation⁴ in early September exposed the reality facing small and medium enterprises in US. Beyond direct tariff costs, these companies now navigate mountains of paperwork, regulatory uncertainties, and exponentially complex compliance requirements that evolve monthly. The steel and aluminum tariff regime exemplifies this bureaucratic nightmare. These duties now extend beyond raw materials to encompass hundreds of finished and semi-finished product categories - motorcycles, child seats, construction equipment - each requiring detailed documentation proving the percentage and origin of metal content.

The compliance standard has become draconian. Importers must trace not merely the metal percentage but the specific smelter or production facility. When aluminum origin cannot be definitively proven, customs authorities default to assuming Russian provenance, automatically triggering the punitive 200 percent duty rate. Foreign suppliers, often unable or unwilling to provide such granular supply chain intelligence, effectively block entire trade channels.

In addition, the elimination of the US *De Minimis* exemption⁵ for packages under \$800 particularly hammers e-commerce and small businesses, requiring customs declarations and duty payments on previously exempt shipments. Since US Customs and Border Protection began enforcing this suspension on August 29, 2025, the impact has been immediate and substantial: 3.7 million shipments that would have entered duty-free now undergo full customs processing, generating \$130.5 million in duties - revenue that flows directly to government coffers while imposing disproportionate compliance costs on small importers.

Public Procurement in the Crosshairs

The tariff regime's impact on public procurement deserves particular scrutiny, as government purchasing represents a massive economic lever now caught in this trade war's machinery. When tariffs raise input costs by 15 to 200 percent, public sector budgets face impossible arithmetic. Infrastructure projects dependent on steel and aluminum - bridges, public buildings, defense installations - suddenly require budget supplements or scope reductions.

Government procurement officers, bound by competitive bidding requirements and often by "Buy American" provisions, find themselves in a vise. Domestic suppliers, protected by tariffs, can raise prices with impunity. Foreign suppliers face prohibitive duty costs.

The result is inflationary pressure on public budgets precisely when governments face mounting fiscal constraints. European and Asian governments face parallel dilemmas. As exporters to the US market, their companies absorb tariff costs that compress profit margins and threaten competitiveness. As importers from the US, they confront retaliatory pressure to impose countervailing duties, further inflating their own public procurement costs. This creates a self-reinforcing spiral: trade restrictions drive up government costs, forcing either tax increases or spending cuts, which dampen economic growth and ultimately reduce the tax base funding public services.

Corporate Pricing Strategies in Flux

For multinational corporations, the tariff waterfall has triggered fundamental reassessments of global pricing strategies. The traditional model - optimize production location based on cost efficiency, ship components freely across borders, maintain consistent global pricing - has collapsed. Companies now face a complex optimization problem: absorb tariff costs and accept margin compression, pass costs to consumers and risk market share, or restructure supply chains entirely.

Evidence suggests corporations are pursuing all three strategies simultaneously, depending on market conditions and competitive dynamics. In commoditized sectors with thin margins, companies pass costs directly to buyers, fueling inflation. In competitive markets where pricing power is limited, corporations absorb costs, compressing profitability and potentially triggering consolidation as weaker players exit. Most significantly, major manufacturers are reconfiguring supply chains to minimize tariff exposure - reshoring production, nearshoring to tariff-advantaged jurisdictions like Mexico and Vietnam, or establishing redundant production capacity across multiple tariff zones.

This supply chain reconfiguration represents massive capital reallocation. Factory construction, equipment installation, workforce training, and logistics network rebuilding require multi-billion dollar investments with decade-long payback horizons. Companies making these commitments essentially bet that the current trade regime persists - a wager that locks in fragmentation regardless of future policy changes.

The pricing power dynamic has shifted dramatically. Industries with consolidated market structures and limited competition - aerospace, semiconductors, specialized machinery - can more easily pass costs downstream.

⁴ Cfr. <https://www.bloomberg.com/news/articles/2025-09-05/trump-s-tariffs-leave-us-business-tied-up-in-costly-red-tape>

⁵ Effective August 29, 2025, the Executive Order suspends duty-free treatment for low-value shipments (valued at or under \$800) from all countries, that would otherwise qualify for duty-free *de minimis* treatment under 19 U.S.C. 1321(a)(2)(C). Beginning on such date, these shipments are no longer be eligible for this treatment and be subject to all relevant admissibility requirements as well as the assessment of specified duties.

Fragmented industries with numerous competitors find margin compression unavoidable. This asymmetry accelerates market concentration, as larger firms with stronger balance sheets weather the transition while smaller players struggle. Analysis by Global Trade Alert reveals winners and losers in this new landscape by comparing tariff rates across competitors⁶.

With China, India, and Brazil absorbing the steepest increases, their competitors gained relative advantages. Fourteen of the top twenty trading nations emerged with net benefits. The United Kingdom leads with a 12.3 percent advantage, followed by Mexico at 10.8 percent and Vietnam at 6.1 percent. On the losing side, China faces a devastating 28.5 percent disadvantage, with India at -14.8 percent, Brazil at -11.9 percent, Switzerland at -6.5 percent, and even Canada at -4.0 percent.

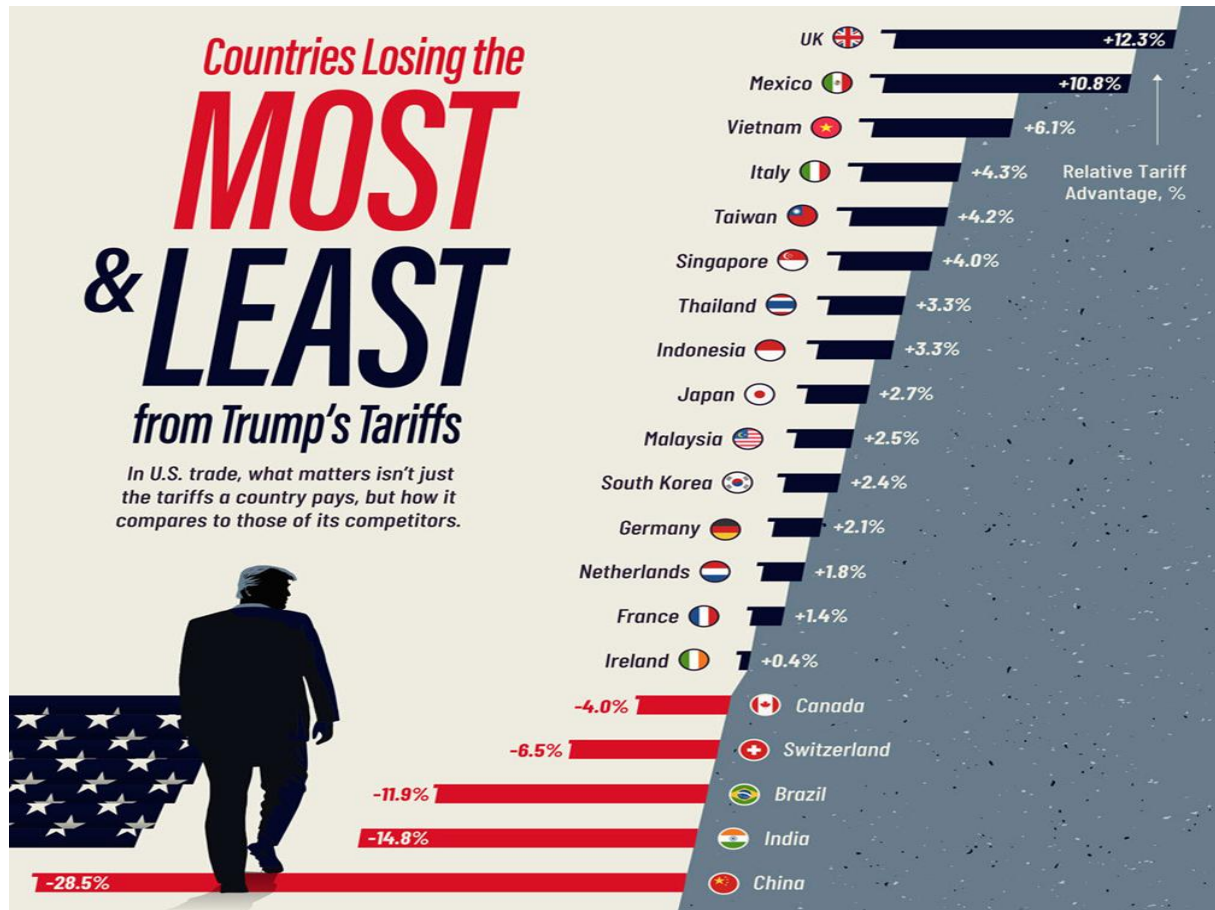


Figure 2 - Source: Infographic Deborah Elms and Visual Capitalist - Hinrich Foundation, September 2025

The EU-US Trade Deal: Compromise and Concession

The August 21, 2025 Framework Agreement on Reciprocal, Fair and Balanced Trade⁷ between the United States and European Union represents the most significant attempt to manage this trade disruption, yet its terms reveal the unequal bargaining dynamic. The EU eliminated tariffs on all US industrial goods and granted preferential access for American agricultural products - tree nuts, dairy, fruits, soybean oil, pork, and bison. In return, the US merely capped tariffs at 15 % on most EU goods, with immediate exemptions only for unavailable natural resources, aircraft, and generic pharmaceuticals effective September 1, 2025. Strategic sectors received targeted treatment. Section 232 tariffs on pharmaceuticals, semiconductors, and lumber were reduced but not eliminated. Automotive tariffs face reduction contingent on EU legislative proposals - a significant concession requiring Brussels to modify internal regulations. Steel and aluminum cooperation aims to "ring-fence markets from overcapacity," language that signals continued restrictions rather than genuine liberalization.

⁶ Global Trade Alert data on "Relative Trump Tariff Advantage: Chart Book" – September 2025

⁷ https://policy.trade.ec.europa.eu/news/joint-statement-united-states-european-union-framework-agreement-reciprocal-fair-and-balanced-trade-2025-08-21_en

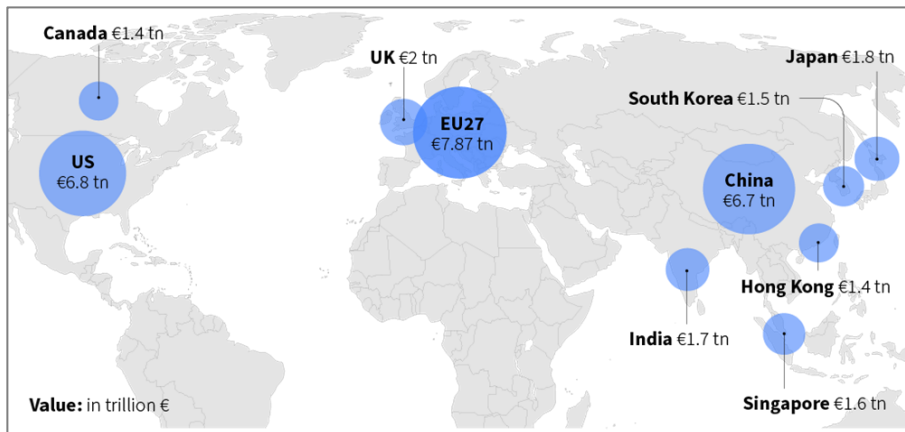


Figure 3
2024, the total value of EU's trade (goods and services combined), in trillion of Euro.
Source:
Council of the EU
and the European Council, 2025

Perhaps most revealing are the EU concessions on environmental policy.

The *Carbon Border Adjustment Mechanism* (CBAM), cornerstone of European climate strategy, will provide – based on the Trade Deal – "additional flexibilities" for American small and medium businesses beyond the recently increased de minimis exception. The EU Council's reform⁸ stack on sustainability step-back, with the aim to reduce administrative burdens by exempting small importers below 50 tons annually as well as Certificates purchase for 2026 postponement to 2027. It represents an additional response to growing business pressure, weakening a mechanism designed to prevent carbon leakage.

The EU *Deforestation Regulation* (EUDR) faced even more dramatic rollback. Recognizing US production as posing "negligible risk to global deforestation," Brussels committed to address American concerns "with a view to avoiding undue impact on US-EU trade." Latest EU Commission insights also pave the way as the regulation's implementation going to be postponed an additional year, from end-2025 to end-2026 - a delay that undermines the policy's environmental objectives to preserve trade flows. These concessions signal that Europe, despite its economic scale, lacks leverage to resist American tariff pressure. The Green Deal's ambitious climate policies are subordinated to trade considerations, revealing the limits of European regulatory sovereignty in a world where the United States weaponizes market access.

Export Controls: The Parallel Compliance Crisis

While tariffs dominate headlines, an equally disruptive transformation is unfolding in the export control landscape. The US *Bureau of Industry and Security* (BIS) has fundamentally altered compliance calculations with its updated 50% Rule for Entity List

and Military End User (MEU) determinations.

This seemingly technical adjustment carries profound operational implications: companies must now verify ownership structures down to the 50 percent threshold, requiring forensic investigations into corporate hierarchies often deliberately obscured in opaque jurisdictions. Resolving red flags or securing BIS licenses before proceeding with transactions threatens to slow commercial velocity and disrupt finely calibrated supply chains. This demands not merely enhanced screening capabilities but comprehensive contractual safeguards that shift liability and create audit trails sufficient to satisfy increasingly aggressive enforcement.

Simultaneously, the European Union has launched its own strategic export control offensive. On September 8, 2025, the European Commission updated Annex I of Regulation (EU) 2021/821, introducing - for the first time - unilateral controls on emerging technologies including quantum computers, semiconductor manufacturing equipment, and advanced computing hardware. This marks a watershed moment: Brussels has traditionally deferred to multilateral export control regimes like the Wassenaar Arrangement, preferring consensus-based restrictions. The decision to impose unilateral controls signals European recognition that existing multilateral frameworks move too slowly to address strategic technology competition with China.

This dual regulatory escalation - American tightening of entity-based controls and European expansion into unilateral technology restrictions - creates a compliance minefield for multinational corporations. Companies operating across Atlantic markets must now navigate divergent control lists, varying licensing thresholds, and potentially conflicting strategic priorities between Washington and Brussels.

⁸ (see source: <https://www.consilium.europa.eu/en/press/press-releases/2025/09/29/cbam-council-signs-off-simplification-to-the-eu-carbon-leakage-instrument/>)

The compliance burden extends beyond direct exporters to encompass entire supply chains, as downstream manufacturers must verify that components incorporate no controlled items exceeding de minimis thresholds. For industries like semiconductors, aerospace, telecommunications, and advanced manufacturing, export compliance has evolved from specialized legal function to core strategic constraint shaping product design, vendor selection, and market access decisions.

Europe's Strategic Response: Seeking Stability in Instability

As Adam S. Posen, President of the Peterson Institute for International Economics, argued in September at the European Systemic Risk Board⁹, Europe is well-positioned to manage financial stability risks from this "remaking of the global economic regime." However, resilience requires action. Posen advocates rapidly increasing European self-insurance by promoting global euro usage, reducing dependence on dollar-denominated trade and dollar-based payment systems¹⁰.

This strategic pivot reflects recognition that American trade policy has become fundamentally unpredictable. Close US allies - Australia, South Korea, Canada - are already expanding ties with China, the EU, and ASEAN¹¹ nations. Commercial realities drive this reorientation: ASEAN and the EU maintained stronger commercial ties with China than the United States even before current tensions, and that gap is widening as Washington restricts technology exports and investment flows to China.

The data is striking. From 2000 to 2024, US trade grew 167 percent (4.2 percent compound annual growth), while Chinese trade surged 1,200 percent (11.3 percent CAGR), overtaking America in 2012. By 2024, total trade reached \$5.3 trillion for the United States versus \$6.2 trillion for China. Looking forward, China is expected to deepen relationships with emerging markets - importing fuels, minerals, and agricultural commodities while exporting manufactured products - creating alternative trade networks that bypass American intermediation.

The most promising scenario involves European and Asian countries, excluding China, creating a new zone of relative stability. The EU and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) - an alliance of mostly Indo-Pacific states - are exploring deeper cooperation. These nations have demonstrated willingness to join US sanctions and export controls, albeit inconsistently, while directly supporting American defense industries.

This suggests potential for a middle bloc that maintains security ties with Washington while pursuing economic diversification.

Conclusion: The Self-Reinforcing Fragmentation

The Trump administration's tariff policies mark a decisive rupture in the postwar trade order. For seventy-five years, expanding trade reduced global income inequality, stabilized national incomes, and delivered broadly shared prosperity. That architecture is crumbling, replaced by a fragmented system where market access depends on political relationships and commercial advantage derives from tariff engineering rather than productive efficiency.

The damage extends beyond immediate economic costs. Trade-restrictive policies targeting supply chains impose substantial losses, particularly on lower-middle-income countries least able to absorb the shock. Economic fragmentation threatens to entrench inequality both within and between nations, reversing decades of convergence.

Most concerning is the self-reinforcing nature of this fragmentation. As companies restructure supply chains, they create facts on the ground that persist long after current policies expire. As governments adopt retaliatory measures, they trigger escalatory dynamics difficult to reverse. As alternative trade blocs coalesce around China, the EU, and ASEAN, they develop institutional momentum independent of American leadership.

Many of these phenomena will prove irreversible even after the current Momentum. On top of that, the emerging Export Control policies, in EU, US and China, prove that transaction costs are substantial and rising - compliance departments expand, licensing timelines extend, and commercial opportunities vanish when regulatory uncertainty renders risk calculations unmanageable.

The critical question is not whether this trade war continues, but rather what new trade blocs emerge from the turmoil and whether governments, public sector institutions, and international organizations can develop policy responses that preserve the benefits of global commerce while managing legitimate security and economic concerns.

The answer will determine whether we witness a temporary disruption or a permanent restructuring of the global economic order where customs compliance becomes not merely technical implementation but a strategic battleground where corporate survival and national prosperity hang in the balance.

⁹ Cfr. <https://clicks.piie.com/e/709263/-9th-annual-conference-en-html/4714p3/1435691903/h/GaFCf0nfyX4gebeJRR-hyLBIsH2QhZk4EbPog4PMCOM>

¹⁰ The New Economic Geography Who Profits in a Post-American World? – Adam S. Posen, Foreign Affairs, August 2025

¹¹ The Association of Southeast Asian Nations, commonly abbreviated as ASEAN, is a regional grouping of 10 states in Southeast Asia that aims to promote economic and security cooperation among its ten members.



Public procurement in EU and competitiveness

Sašo Matas and Mitja Medvešček, Directorate for Public Procurement, Ministry of Public Administration, Slovenia

At the end of 2023, the European Court of Auditors conducted an audit of the European public procurement system and prepared a special report entitled **'Public Procurement in the EU'**.

The report found that the level of competition in public procurement in the European Union's single market has decreased over the last ten years. The European Court of Auditors warned that insufficient awareness exists of the fact that competition is one of the key conditions for cost-effective public procurement, and that neither the European Commission nor the Member States have systematically used the available data to identify the root causes of the low level of competition.

This report has probably had the greatest impact on the European public procurement system in the last 10 years.

Last year, this audit was followed by a special report for the European Council prepared by the former Italian Prime Minister, who proposed a number of measures in the field of public procurement.

Then came the much-discussed Draghi report, which also made a number of proposals in this area, such as introducing mandatory quotas for innovative procurement.

Encouraged by the findings of the European Court of Auditors and both reports, Slovenia has also analyzed the public procurement system and possible improvements at legislative and organizational levels, as well as the use of information tools.

Our analysis reveals that the public procurement system is dominated by inexperienced contracting authorities who rarely use the system.

This work is primarily carried out by small contracting authorities whose responsibilities extend beyond procurement.

In our opinion, this can cause numerous problems, with inadequate training being just one of them.

We also note that the constant stream of new rules and changes to legislation (on average every year and a half) reduces the ability of contracting authorities (i.e. public institutions) to perform their work to a high standard. Throughout history, the body of legislation has only grown; it has never been optimized.

Conversely, we observe a highly saturated supply market.

When our colleagues in Scandinavia analyzed the supplier market, they found that more than 80% of public contracts were awarded to just 1% of companies.

Additionally, we identify numerous challenges in individual contracts and procurement categories, where non-transparent negotiation-based procedures are widely used.

Conversely, we recognize the importance of the timing of contract awards and its effect on competitiveness: the longer a contract is advertised, the less likely it is that we will receive only one bid.

To improve the EU's public procurement system, we believe that much more investment is needed in professionalizing staff working in these institutions, improving the business and regulatory environment, and developing digital tools to enhance competitiveness and transparency in public procurement procedures.

Innovation and Value-Based Procurement in EU Healthcare

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An international team of innovation and procurement experts from policy, practice and education recently co-developed a roadmap for improving innovation and value-based procurement in their national and regional healthcare ecosystems. This article is an outcome of this collaborative effort. The named authors wrote the article. They wish to acknowledge the contribution of all team members to the ideas and information presented.

Executive Summary

By driving adoption of novel technologies and care models, innovation and value-based procurement can help healthcare systems respond to demographic pressures, rising costs, and the need for more personalised, integrated services. Innovation Procurement (IP) enables healthcare organisations to procure novel solutions that satisfy unmet needs while delivering better outcomes for patients, service users, and society. Value-Based Procurement (VBP) focuses on buying outcomes rather than products. It is a powerful instrument for "reshaping commercial relationships and models to move beyond price and allow holistic appraisal of medical products through real-world evidence"¹. VBP aims to maximize overall value for patients, health systems, and society. These complementary approaches drive product and process innovation, yet both remain underutilised in healthcare across the European Union.

There are multiple root causes which limit uptake of IP and VBP, including risk aversion among public buyers, skill gaps in innovation management, regulatory and administrative complexities, insufficient funding, and significant fragmentation across the healthcare ecosystem. Overcoming these barriers requires fostering entrepreneurial behaviours: embracing calculated risk-taking, encouraging iterative experimentation, and promoting genuine collaboration through public-private partnerships.

Equally important is multi-stakeholder engagement and education. Such programmes must target procurement professionals, healthcare providers, policymakers, and innovative enterprises, equipping them with the knowledge and skills to navigate IP and VBP complexities and cultivate a culture of innovation.

1. Introduction: The Imperative of Innovation Procurement and Value-Based Procurement in EU Healthcare

European Union (EU) healthcare systems face many, interconnected challenges and escalating demands that call for innovation. Healthcare is being reshaped by an ageing population, the rising incidence of chronic diseases, advances in technology and innovation, and upward pressures on wages, energy, and medical supplies generated by sustained inflation. These forces change how services are delivered, coordinated, and experienced in hospitals, care homes, and old people's homes. As staff shortages and rising demand put pressure on systems, care delivery must become more flexible, efficient, and patient-centred. This transformation is driven by a combination of demographic pressures, evolving technologies, and changing governance models.

Innovations, from AI diagnostics to community prevention, must be embedded within new care pathways and supported by proactive innovation procurement (IP) and agile, value-based procurement (VBP) strategies.

The ultimate aim of IP is to enable healthcare organisations to procure novel solutions that satisfy unmet needs while delivering better outcomes for patients, service users, and society. Complementing this, the main aim of VBP is to deliver better, fairer outcomes for citizens in a way that is financially viable, environmentally responsible, and socially inclusive.

The ultimate aim of VBP is to deliver better, fairer outcomes for citizens in a way that is financially viable, environmentally responsible, and socially inclusive.

Innovation is increasingly systemic, cutting across functions and sectors and requiring collaboration among hospitals, community providers, municipalities, funding bodies, and SMEs.

¹ Implementing Value-Based Healthcare in Europe: handbook for pioneers – EIT Health – European Commission.

Models such as hospital-at-home and community-based care are breaking down traditional boundaries, highlighting the need for integrated solutions that respond to real-world needs. We witness three overarching and intersecting themes/challenges which shape the policy landscape, all of which require new approaches in both IP and VBP:

- **Digitalisation of Health**

Digital technologies, including AI, telehealth, and data analytics, are transforming healthcare delivery by improving efficiency and access, though implementation faces challenges around costs, resistance to change, and sustainability concerns.

- **Environmental and Social Impact, and the Circular Economy**

The healthcare sector accounts for nearly 5% of global greenhouse gas emissions, driving efforts to implement green procurement, circular economy practices, and social value requirements that reduce environmental impact while promoting equity.

- **Security of Supply and Healthcare Resilience**

The COVID-19 pandemic exposed critical vulnerabilities in Europe's medical supply chains, prompting strategic initiatives to strengthen resilience through technological innovation, circular solutions, and strategic procurement rather than simple reshoring.

This article examines why a new approach to procurement, embracing IP and VBP, is needed within the EU healthcare sector.

Each of the three policy landscape themes above are set out in more detail, before illustrating the current state of IP and VBP adoption across several member states, and describing the multifaceted challenges hindering their implementation. Suggestions to improve their adoption are provided.

Furthermore, the article explores the critical role of fostering entrepreneurial behaviours within healthcare administrations and outlines the implications for education, including identifying key stakeholders and necessary content for robust capacity building.

The overarching objective is to provide actionable insights and recommendations for policymakers and stakeholders committed to harnessing IP's and VBP's transformative potential for a more innovative and resilient EU healthcare landscape.

2. The Policy Landscape

2.1 Digitalisation of Health

The demographic shift in Europe, with an ageing population and increased burden of chronic illness, is putting pressure on care systems and care budgets².

Simultaneously, there is a staffing crisis; in 2022, there was an estimated shortage of approximately 1.2 million doctors, nurses and midwives³.

Digital solutions can reshape healthcare delivery by enhancing efficiency, personalisation, and access:

- **Artificial Intelligence (AI)** is streamlining operations, forecasting patient needs, and enabling remote and personalized care. AI promises efficiency, but also raises sustainability concerns due to energy use, material demands, and e-waste, underscoring the need for greener innovation.
- **Telehealth and Remote Care** expand access to and reduce strain on hospitals by enabling care at home, particularly for underserved communities. These technologies enable early intervention and promote proactive, inclusive service models. However, their implementation demands significant managerial time and financial investment, and they do not necessarily reduce the overall costs of care.
- **Data Utilisation** enables predictive planning, personalised treatment, and better financial management. Interoperable and secure systems are essential to realising the full value of health data. Addressing data privacy and security slows the rate of uptake.
- **Innovation in Clinical Practice**, such as minimally invasive procedures and image-guided therapies, is improving outcomes and recovery. These advances rely on integrated systems and innovation ecosystems tailored to local needs. Some new technologies involve significant changes to clinical practices and can generate resistance.
- **Workforce Support** through digital tools and robotics is easing administrative burdens, supporting healthcare professionals and helping extend care delivery in both clinical and home settings. Such technologies can be met with resistance where they are seen as threatening jobs or reducing social interaction between care givers and recipients.

² OECD/European Commission (2024), *Health at a Glance: Europe 2024: State of Health in the EU Cycle*, OECD Publishing, Paris, <https://doi.org/10.1787/b3704e14-en>.

³ Ibidem

2.2 Environmental and Social Impact and the Circular Economy

The environmental impact of health and social care delivery is significant. The sector is estimated to account for about 4.4% of greenhouse gas emissions worldwide and, without radical action, it is expected to grow in the coming years. Furthermore 71% of emissions are Scope 3 (i.e., in care providers' supply chains), so engagement with suppliers is essential⁴. Addressing this challenge is closely aligned with the United Nations Sustainable Development Goals, particularly SDG 3 (Good Health and Well-being) and SDG 13 (Climate Action), which call for integrated approaches to protect both human health and the planet. A wide range of interventions have proven effective but require strategies for systemic change to the organization of healthcare⁵. These include three strategies:

- **Green Procurement and Environmental Impact:** Health systems need to reduce their environmental footprint across multiple dimensions, from emissions and energy use to material extraction and pharmaceutical pollution. This includes prioritising low-emission materials, efficient production processes, and cleaner distribution models in procurement. Digital tools can support greener decision-making.
- **Circular Economy:** New models focused on reuse, refurbishment, and longer product lifecycles are helping to reduce waste and material dependency. Digital platforms and tracking systems enable circular practices such as equipment leasing, remanufacturing, and resource-efficient procurement. Embedding these approaches into public procurement criteria is key to scaling impact and stimulating market innovation.
- **Social Value and Inclusion:** Procurement can also be a lever for social change, promoting fair labour practices, equitable access to care, and better working conditions. Embedding social value requirements into tenders helps ensure that innovation benefits diverse communities and supports a more inclusive health and care system.

2.3 Security of Supply and Healthcare System Resilience

The COVID-19 pandemic and the invasion of Ukraine highlighted the reliance of the EU on non-European sources for critical medical supplies, pharmaceuticals and digital infrastructure.

The European Commission and national governments now aim to strengthen EU resilience as a strategic priority.⁶

- **Strategic Autonomy and Global Dependencies:** The EU is advancing a model of open strategic autonomy, prioritising resilience while maintaining international cooperation. Rather than focusing solely on reshoring, efforts within the EU are turning to innovation and advanced technologies to strengthen supply security across health and social care.
- **Technological and Circular Solutions:** Digital tools and AI are being used to map risks, forecast shortages, and optimise logistics. At the same time, modular and automated manufacturing systems support more flexible, localised production. Circular economy models - enabled by digital tracking and refurbishment platforms - help extend the life of equipment and reduce dependency on raw materials.
- **Strategic Procurement and Investment Alignment:** Building robust supply systems requires more than physical infrastructure. Smarter procurement strategies, pricing reforms, and coordinated public investment are essential to aligning resilience with innovation and equitable access.

In this context, strong capabilities in IP and VBP are essential. While procurement has traditionally been viewed as an operational function focused on acquiring goods and services and directed at minimising costs, it is now emerging as a powerful mechanism to tackle these 'wicked problems' within healthcare⁷. Advances led by care providers working in consortia or individually do not just benefit the direct participants; there are 'positive spillover' effects as novel technologies become better established in a market, or clinicians and procurement experts share new practices through their professional networks.

To unlock this mechanism, procurement staff, innovation experts and care providers must adopt an entrepreneurial mindset and work closely together to mobilise suppliers to provide innovative products and services which truly address unmet needs. Likewise, innovative firms need to collaborate effectively with care providers throughout the innovation cycle. In the highly regulated context of health and social care, working across disciplinary, functional, professional and organisational boundaries to articulate unmet needs, is especially challenging.

⁴ *Health Care Without Harm (Global). (2024). Retrieved from <https://global.noharm.org/resources/health-care-climate-footprint-report>*

⁵ Zeynep Or, Anna-Veera Seppänen, *The role of the health sector in tackling climate change: A narrative review*, Health Policy, Volume 143, 2024, 105053, ISSN 0168-8510, <https://doi.org/10.1016/j.healthpol.2024.105053>.

⁶ *CRMs for medical devices - RMIS - Raw Materials Information System* - European Union, accessed April 17, 2025, <https://rmis.jrc.ec.europa.eu/crms-for-medical-devices-17d964>

⁷ *Environmental & Social Value in Procurement* - MedTech Europe, accessed April 17, 2025, <https://www.medtecheurope.org/environmental-and-social-sustainability/environmental-social-value-in-procurement/>

And many care providers and their suppliers need to navigate public procurement regulations, which involve a steep learning curve and substantial up-front resources despite the fact that some (of these regulations) are designed specifically to facilitate innovation⁸.

3. Defining Innovation and Value-based Procurement in Healthcare

3.1 Outcomes vs Process in Innovation Procurement

IP is the process by which healthcare organisations procure novel solutions to satisfy unmet needs, fostering innovation while delivering better outcomes for patients, service users and society at large. By driving the uptake of novel technologies and care models, IP helps health and social care systems respond to demographic pressures, rising costs, and the need for more personalised, integrated services. IP can take two main forms⁹:

Buying the outcomes of innovation: Public Procurement of Innovation

In the public sector procuring new-to-market solutions with substantially novel characteristics is known as Public Procurement of Innovation (PPI). In PPI, public authorities act as early adopters, leveraging their purchasing power to shape markets and accelerate the diffusion of innovation. PPI facilitates the adoption of cutting-edge, market-ready innovations, enabling healthcare systems to quickly integrate advanced solutions into their operations.

Buying the process of innovation: Pre-commercial Procurement

Pre-Commercial Procurement (PCP) is the procurement of R&D services to co-develop solutions that do not yet exist. PCP specifically focuses on the R&D phase of innovation procurement. The public buyer describes an unmet need for a product/service which does not yet exist on the market, prompting businesses and researchers to develop a novel products/service to meet the need¹⁰. It enables public buyers to procure R&D services in a phased approach (solution exploration, prototyping, and testing) without committing to acquiring the final product. PCP helps de-risk innovation and supports SMEs and start-ups in bridging the "valley of death" between research and commercialisation¹¹.

PCP is ideally suited to addressing grand challenges that necessitate breakthrough solutions, pushing the boundaries of what is currently possible.

3.2 A shift towards value-based procurement

IP, through PPI and PCP, calls for a shift from a transactional approach to value-driven and outcomes-based approaches to procurement, and for the need to be able to measure the impact of innovations either directly on patient outcomes or on wider goals. This is what VBP is all about.

VBP is an innovative approach that moves beyond traditional volume- and price-based purchasing to focus on achieving outcomes that matter most to the (health) service in question. It aligns procurement with broader goals like quality of care, sustainability, and equity. It often requires new business models and collaborative supplier relationships. Within healthcare, VBP is an emerging approach in which there is a shift in emphasis from a reduction in product costs to working with clinical staff, industry and patient associations to consider technologies and drugs that can influence a reduction in total costs within the patient pathway. Though the development of VBP has tended to focus on existing or near-market solutions, VBP capabilities match the shift in perspective and new expertise needed for effective IP. Together, these approaches aim to use public spending, which accounts for around 14% of EU GDP, to deliver not just cost-efficiency but also broader societal value.

4. Current Landscape of Innovation and Value-Based Procurement in EU healthcare

Despite the strategic imperative for innovation, and its compelling benefits, uptake of IP and VBP within the EU public sector, including the critical healthcare domain, remains low. This section provides a brief overview of adoption and challenges encountered within four European countries.

THE NETHERLANDS

The Dutch health and social care system involves a diverse but fragmented ecosystem of stakeholders. Public procurers include university hospitals, municipalities, and national agencies, while most hospitals operate privately and fall outside EU procurement rules.

⁸ *Public procurement contracts; Public tendering rules in the EU - Your Europe*

⁹ *Guidance on Innovation Procurement (2021/C 267/01) Commission Notice — Guidance on Innovation Procurement. See also: Andrews, M. R., Long, P. A., Ahlberg, M., Balvert, F., Alessandrello, R., Lazzari, A., Timmermann, M. M., Nouri Janian, M., Rantaniska, M., & Spence, A. (2023). A European arena for joint innovation in healthcare: The Platform for Innovation of Procurement and Procurement of Innovation (PiPPI). *Frontiers in public health*, 10, 1000590. <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.1000590/pdf>*

¹⁰ Ibidem

¹¹ Ellwood, P., Williams, C., & Egan, J. (2022). Crossing the valley of death: Five underlying innovation processes. *Technovation*, 109, 102162. <https://doi.org/10.1016/j.technovation.2020.102162>

Group Purchasing Organizations (GPOs) are common but decentralized, limiting coordinated strategy. Private actors, especially health insurers and care providers, play a central role in contracting with providers for care services. On the supply side, SMEs and startups drive innovation but face barriers such as limited access to piloting, unclear reimbursement pathways, and high entry costs.

Despite the Netherlands' strong overall innovation capacity, healthcare IP lags behind. Key national strategies acknowledge innovation but often overlook procurement as a lever for system change. The sector remains risk-averse and resistant to disruptive solutions, particularly from startups. Challenges include fragmented procurement practices, underdeveloped training tailored to daily practice, staff shortages, and weak cross-sector collaboration. Meanwhile, shifting toward preventive, citizen-driven care is gaining momentum but is hampered by structural limitations and financial constraints. A further source of momentum comes from a growing number of initiatives on green procurement, which are often necessarily tightly linked to innovation and value mapping.

SPAIN

In Spain, the health and social care system is shaped by a multi-level structure involving national, regional (Autonomous Communities), and local stakeholders¹³. Public procurers include regional health ministries (e.g., Servicio Madrileño de Salud) and public hospital consortia (e.g., Consorci de Salut i Social de Catalunya), municipal governments, and national agencies like the Ministry of Health and INGESA. Centralised and regional purchasing bodies are gaining importance. Entities like AQUAS (Catalonia) and Fundación Progreso y Salud (Andalusia) act as enablers in innovative procurement in Spain. Essentially, they function as knowledge brokers, capacity builders, and facilitators of EU-aligned innovation procurement. Private actors, particularly in mixed health systems, also influence procurement practices. While SMEs and startups in digital health and medtech are active innovators, they face significant barriers in accessing complex public procurement pathways.

Despite promising initiatives, particularly in regions like Catalonia, Andalusia and Galicia, IP remains fragmented, administratively rigid, and insufficiently embedded in national health strategies. Key challenges include risk-averse procurement cultures, siloed institutions, and limited piloting opportunities for startups.

¹³ <https://www.projectprocure.eu/observational-study>

¹⁴ *Performance Hospitalière pour des Achats Responsables*

¹⁵ *Agence Nationale d'Appui à la Performance*

¹⁶ *Fédération Hospitalière de France*

¹⁷ *Patient-Reported Outcomes Measures*

¹⁸ *Patient-Reported Experience Measures*

Yet, there is growing momentum to shift toward preventive, person-centred care supported by digital innovation and improved procurement professionalism.

FRANCE

France's publicly funded health and care system combines universal coverage with a mix of public and private service provision. While most hospitals are publicly owned, physicians typically operate independently, reimbursed by the state. IP is increasingly recognised as a strategic policy lever and is supported by advanced legal, regulatory, and managerial tools, including value-based and innovation-oriented procurement approaches.

Key actors include PHARE¹⁴ and ANAP¹⁵, which set and support procurement policy, alongside powerful Group Purchasing Organisations (GPOs such as UniHA, RESAH, UniCancer). The GPOs drive large-scale, innovation-led purchases. Supporting institutions like Agence Innovation Santé, FHF¹⁶, and the Digital Health Delegation, along with academic partners and patient advocacy groups, strengthen the broader ecosystem and ensure user-centric, collaborative approaches. UniHA in France has demonstrated innovation readiness through concrete projects, such as VBP using PROMs¹⁷ and PREMs¹⁸, performance-based hospital lighting contracts, and environmentally responsible sourcing for anti-infective drugs.

However, challenges persist, legal complexities hinder early supplier engagement; hospital IT systems suffer from poor interoperability; and eco-innovation is limited by difficulties in assessing environmental impacts. Fragile supply chains and a funding imbalance, where support such as grants and subsidies often prioritises companies over care providers, also constrain progress. Still, France stands out for its strong institutional commitment, active experimentation, and systemic alignment of procurement with health innovation, sustainability, and resilience goals.

SWEDEN

Sweden's publicly funded, decentralized healthcare system is managed by 21 self-governing regions responsible for health services. Key public procurers include regional health authorities (e.g., Region Skåne, Region Västerbotten, Region Stockholm, and Västra Götalandsregionen), municipal care departments, and shared procurement centres like Inköp Gävleborg. National coordination and guidance are provided by SALAR (Swedish Association of Local Authorities and Regions) and Upphandlingsmyndigheten (National Agency for Public Procurement), while innovation policy support is led by Vinnova, Sweden's innovation agency.

Despite Sweden's strong performance in the European Innovation Scoreboard, the use of IP tools, such as PCP, innovation partnerships, and outcome-based approaches, remains limited and inconsistently applied across regions. Key actors in the ecosystem include healthtech SMEs, academic institutions like Karolinska Institutet, Chalmers, and Umeå University, and network organisations such as Medtech4Health, Swelife, and Swecare. Regional innovation hubs and testbeds, like those found in Skåne and Västra Götaland, offer promising platforms for co-creation, yet they are often disconnected from formal procurement processes. Challenges include a lack of strategic procurement capabilities, limited SME access, fragmented responsibilities between regions and municipalities, and weak integration of innovation into procurement pipelines. Furthermore, IP tends to rely on short-term projects without lasting institutional anchoring, and circularity and digital interoperability are rarely embedded in tendering. Despite these barriers, regions like Skåne are beginning to institutionalize IP through dedicated units, offering a model for broader systemic adoption. Addressing fragmentation, therefore, requires entrepreneurial and systemic strategies that promote cross-organizational and cross-border collaboration. This could involve joint procurement initiatives, the establishment of shared platforms for knowledge exchange, and the development of harmonized strategic visions that transcend individual institutional boundaries.

5. Navigating the challenges

The limited adoption of IP and VBP in EU healthcare is not due to a single factor but rather a complex web of interconnected challenges. Looking at this holistically highlights four shifts that need to occur:

From risk aversion to entrepreneurial dynamism

Public buyers tend to be risk-averse; they often prefer well-established, proven solutions over innovative ones. This stems from a pervasive fear of failure, potential accountability issues, and the perceived complexities associated with new technologies and uncertain outcomes. To effectively engage in IP and VBP, public procurers must cultivate a more entrepreneurial mindset, actively embracing calculated risk-taking and iterative experimentation. This necessitates a fundamental shift away from a rigid "zero-failure" mentality towards one that views learning from setbacks, coping with uncertainty and adapting strategies as integral to the innovation process. It requires a culture that supports exploration, recognising that innovation is an iterative journey. This implies that promoting entrepreneurial behaviour as part of future education programmes is needed, along with senior management encouraging these new ways of working.

From fearing complexity to systemic transformation

IP and VBP involve long timelines, complex tender processes, and extensive stakeholder coordination, all of which strain limited public resources. To be effective, IP and VBP need to move beyond isolated and opportunistic projects to become part of an integral, coherent, long-term strategic vision for healthcare innovation that addresses the systemic challenges described above. A systemic approach ensures that entrepreneurial behaviours are not isolated efforts but are systematically supported, scaled, and integrated into the broader fabric of public healthcare. This includes bringing different stakeholders together to shape the future, with a clear recognition of the vital role of suppliers and, consequently, of procurement professionals. This also requires re-evaluating performance metrics, developing new incentive systems, and fostering leadership styles that actively encourage innovation and provide psychological safety for experimentation across the stakeholder ecosystem.

From fragmentation to harmonisation

While healthcare systems are inherently fragmented within and across national borders, new initiatives need to aggregate demand effectively in order to attract significant innovation from the supply side. Successful IP and VBP are collaborative endeavours, requiring sustained, deep cooperation not only between procurement professionals and healthcare practitioners but also with innovative companies, including SMEs, and research institutions. Companies' long term success depends on the widespread adoption of high-value innovation; stakeholders within the healthcare system must establish pathways for scaling up.

Ideally, such collaboration should involve early market engagement, co-creation processes, and iterative development cycles, actively shaping the innovation process, providing feedback, and contributing to the development of solutions rather than merely purchasing finished products. Such changes require open dialogue, trust-building, and shared understanding of objectives. Collaboration is key to bridging the demand-supply gap, leveraging external expertise, and ensuring that innovations are truly fit for purpose within the healthcare context.

From a lack of expertise to collective intelligence

A critical skills gap exists across IP and VBP. Group Purchasing Organizations (GPOs) are common but decentralized, limiting coordinated strategy. Private actors, especially health insurers and care providers, play a central Stakeholders frequently lack expertise in areas essential for success, including deep understanding of the innovation process, the legal complexities of IP, techniques for assessing value and effective market engagement strategies.

Recent research has highlighted roles that make healthcare procurement a driver of innovation such as acting as a strategic business partner, innovation matchmaker, sustainability and innovation coordinator¹⁹. Education bodies must therefore adopt a comprehensive, ecosystem-wide approach that recognizes successful innovation as a collaborative effort involving diverse actors with distinct roles and knowledge requirements.

- **Public Procurers:** As the primary actors responsible for designing, managing, and executing IP processes, these individuals require specialized and in-depth training. Their education must cover IP and VBP methodologies, the specific legal frameworks governing IP, and advanced contract management skills tailored for innovative projects.
- **Healthcare Providers and Clinical Staff:** As the ultimate end-users of innovative solutions and often the individuals best positioned to articulate unmet needs, clinicians, nurses, and healthcare managers need to understand how to define problems in a way that can be addressed by potential suppliers of innovative solutions. They also require training in how to effectively collaborate with procurers and industry innovators throughout the IP lifecycle and anticipating and valuing the impact of innovation.
- **Policymakers and Legal Experts:** Individuals responsible for setting strategic policy directions, allocating budgets, and interpreting legal frameworks need a comprehensive understanding of IP's strategic potential, its economic and societal benefits, and the practical implications of regulations. This knowledge is crucial for creating and maintaining an enabling policy and legal environment, which depends on long term thinking and extending the time horizon of decision making.
- **SMEs and Innovators:** The supply side, particularly innovative small and medium-sized enterprises (SMEs), needs targeted education on how to effectively navigate complex public procurement processes, understand the specific needs and challenges of the public healthcare sector, successfully participate in IP tenders and contribute to VBP initiatives.

The VBP.O case study on orthopaedics below illustrates some of the key shifts described above, exemplifying how IP can transform healthcare: by unifying stakeholders around patient-centric value, it transforms procurement from a transactional process into a catalyst for systemic innovation.

¹⁹ See Stek, K., Lefers, L., & Pedrosso, C. B. (2025). *Strengthening Innovation Capacity in Health and Care Workforce: A Role-Based Framework for the Procurement Professionals*. Health Policy, 105423.

<https://doi.org/https://doi.org/10.1016/j.healthpol.2025.105423>

²⁰ <https://eithealth.eu/product-service/vbpo/>

Case Study: VBP.O project A European model for VBP in orthopaedics

The challenge

With 300,000 hip and knee replacements performed annually in France alone, costing €2.5 billion, orthopaedic surgery faces two crises: 20% of procedures are clinically unnecessary, and 20% of patients report suboptimal outcomes. Traditional volume-based procurement models fail to address these inefficiencies, leaving healthcare systems burdened by avoidable costs and unmet patient needs.

A Systemic solution

UniHA and EIT Health launched VBP.O (Value-Based Procurement Orthopaedics), a €1M+ EU-funded initiative, to pioneer a unified, outcomes-driven procurement model across France, Denmark, and Spain. The project unites hospitals, surgeons & scientific society, innovators, and policymakers to:

- Shift from volume to value, tying payments to patient-reported outcomes (e.g., mobility, pain reduction) rather than procedure counts.
- Leverage real-world data via Digikare's Orthense platform, which has collected 15M+ data points to predict surgical success and personalize care pathways.
- Break down fragmentation through cross-border collaboration, aligning procurement practices with clinical evidence from RENACOT's national implant registry.

Keys to success

1. Entrepreneurial Risk-Taking: Public hospitals (CHU Lille, CHU Toulouse, CHU Nice, Vejle hospital, I. Leonor Madrid hospital) partnered with SMEs like Digikare to co-design contracts rewarding innovation, not just cost savings.
2. Unified Stakeholder Action: Surgeons, payers, and tech providers jointly defined outcome metrics, ensuring shared accountability.
3. Data-Driven Culture: Predictive AI models, trained on pre-peri-post-op data, now guide patient selection, reducing unnecessary surgeries.

Impact & lessons

- Early results show improved patient satisfaction and reduced surgery revision rates, and there are plans to liaise those outcomes with pricing models in the medium-term.
- VBP.O proves that overcoming fragmentation calls for aligned incentives, multidisciplinary education, and trust in data, all enabled by collaborative procurement.
- Data-driven economic models are the most appropriate approaches to objectivize performance.

6. Strengthening Education for Innovation and Value-Based Procurement in Healthcare

Education as a Catalyst for Systemic Change

The widespread adoption of IP and VBP in EU healthcare requires more than procedural adjustments; it demands a fundamental shift in mindsets and capabilities. Education can serve as the enabler of this transformation, bridging the gap between current practices and the systemic changes outlined earlier. To be effective, this education must move beyond technical training and become a strategic tool for cultural change, fostering the entrepreneurial mindset, collaborative approaches, and risk intelligence needed to overcome entrenched barriers.

The Multidimensional Approach to IP Education

Effective innovation and VBP education integrate four key dimensions, each reinforcing the necessary shifts in procurement culture.

First, it must combine technical learning and change management. While legal frameworks, procurement methodologies and risk management remain essential, programs should equally emphasise innovation strategy, stakeholder alignment, and leadership in uncertainty. This balance ensures that professionals can navigate both the procedural and human complexities of IP and VBP.

Second, education must be continuous rather than episodic. Lifelong learning pathways—peer exchanges, and digital knowledge platforms—help sustain competency development as IP and VBP practices evolve. Just-in-time learning, such as mentorship during live procurement processes, further embeds skills in real-world contexts.

Third, cross-stakeholder learning breaks down institutional silos. Joint training for procurers, clinicians, policymakers, and suppliers fosters shared understanding, while simulation exercises build empathy for each group's constraints. Communities of practice at national and EU levels can then institutionalize collaboration beyond individual initiatives.

Finally, practical application cements confidence. Case-based learning, pilot project mentoring, and innovation labs allow professionals to test approaches in low-stakes environments, reducing the fear of failure that often stifles innovation. Equally important is the systematic sharing of lessons learned from projects, highlighting how barriers and challenges have been overcome, so that good practices can be replicated and scaled across different contexts.

Aligning Education with Systemic Transformation

The four educational dimensions directly support the broader shifts required for IP success:

- **Entrepreneurial dynamism** emerges when education reframes risk as a component of innovation rather than a threat, using real-world examples to demonstrate entrepreneurship
- **Systemic transformation** is accelerated by training leaders in line with long-term strategies, enabling them to align IP and VBP with overarching healthcare innovation goals.
- **Unification across fragmented systems** is strengthened through curricula that emphasise coalition-building, with interdisciplinary training as a standard component.
- **Collective intelligence** replaces isolated expertise when education platforms facilitate cross-border knowledge exchange, creating a living repository of best practices.

7. Conclusion

Innovation procurement and value-based procurement remain underused levers for strengthening European healthcare.

Both mechanisms can accelerate the uptake of novel technologies and care models, enabling systems to cope with demographic pressures, rising costs, and the demand for more integrated, personalised services.

Achieving this potential requires more than procedural change. It calls for a cultural and organisational shift.

Key Directions for Action

- **Foster entrepreneurial behaviours**
Encourage calculated risk-taking, iterative experimentation, and authentic collaboration between public procurers and innovators.
- **Build multi-stakeholder engagement**
Involve procurement professionals, healthcare providers, policymakers, and enterprises in shared learning and decision-making.
- **Invest in education and skills**
Create continuous training pathways that combine technical expertise with leadership, change management, and entrepreneurial behaviours.
- **Go beyond classic education**
Develop platforms, mentorship schemes, and communities of practice to embed new competencies and disseminate lessons from successful projects.
- **Transform procurement culture**
Position procurement as a strategic driver of innovation rather than a procedural hurdle.

Finally, scaling up IP and VBP in Europe requires stronger regulatory alignment. Beyond Directive 2014/24/EU and its MEAT contract award criteria, life-cycle costing, and innovation tools, EU guidance should promote risk-sharing contracts, outcome-based payments, and data-driven evaluations to demonstrate performance objectively.

Linking procurement practices with health evaluation frameworks including the EU HTA Regulation and the Medical Devices Regulation on real-world evidence, and the backing of national health authorities will be essential. IP and VBP can support investment in more effective technologies rather than merely cheaper forms of care, thereby reducing waiting times and generating long-term savings. However, only when procurement frameworks, evaluation policies, and cultural change advance together will IP and VBP move from pilots to routine adoption across European healthcare systems.



Procurement in Healthcare: the silent revolution that changes care

Monica Quaroni, Purchasing and General Services Planning Unit Contact of CNAO and Councilor of ADACI Lombardia/Liguria

From administrative function to strategic lever to innovate, save and take better care. Healthcare procurement is redefining the future of the public health.

Introduction: : when purchases make a difference

In the midst of the Covid-19 pandemic, while intensive care units were collapsing, the lack of a ventilator could change forever a patient's destiny. In moments like these we realized that **procurement is not just an administrative matter, but a clinical one**. When it works well, it goes unnoticed; but when it fails, it can have irreversible consequences. Silently, healthcare procurement is in constant transformation, from a tool to “buy at the lowest price” to a **strategic lever to improve care, innovate services, and ensure sustainability, preparedness, and readiness of the system**. A “silent” revolution that echoes!

From cost to value: the face of procurement

Traditionally, the concept of healthcare procurement is ruled by strictly norms and rigid procedures, and costs traced by cost center. The goal of reducing costs in this increasingly complex context shows all its limits, pushing professionals in the purchasing sector to pursue new purchasing practices aimed at generating **added value for the patient**, who, as already happens in clinical practice, must be placed “at the center” even in purchasing decisions. Thus, the concepts of **Value-Based Procurement** and **HTA-Health Technology Assessment** are introduced, namely the first as the procurement of a product that, in the long term, offers the best cost-clinical efficacy and, the latter the multidisciplinary process aimed at systematically analyzing the medium- and long-term clinical, economic, organizational, ethical, and social impacts associated with the adoption of new health technologies.

This approach aims to stimulate markets to produce technologies that can increase patients' life expectancy and improve their quality of life, thereby generating value, that only multidisciplinary teams can cultivate. This is how the CNAO project began more than 20 years ago, conceived by visionary minds who dreamed of an innovative therapy and which, still today, remains the only lifesaving solution for certain oncological rare pathologies.

Such a huge project required substantial investments and was possible thanks to the support of the Ministry of Health and the Lombardy Region. The adoption of co-design procurement actions, aimed at close collaboration among scientific researchers, technicians, medical physicists, and procurement professionals, proved fundamental for designing tenders and, in particular, for drafting the specifications that had to detail ambitious technical requirements - such as the ultra-tight tolerances that the accelerator (the dose-delivery device for clinical therapy to patients) would need to meet for the therapeutic goal to be achieved. Fondazione CNAO is the father of hadrontherapy in Italy, a role that echoes internationally. The range of therapies that, in the short term, will be developed thanks to procurement activities for cutting-edge new technologies (e.g., the Hitachi particle accelerator, the integrated positioning and volumetric imaging system for treatment of patients in an upright position with a horizontal radiation beam line, the BNCT Boron Neutron Capture Therapy system) requires the teamwork of professionals from diverse fields: bioengineering, medical physics, clinical practice, and lawyers.





The revolutionary aspect that is confirmed is the **direct involvement of clinicians in the co-design of procurement projects, thus arriving at solutions that truly work and improve the care experience.**



Procurement resilient: the lesson from COVID-19; the Healthcare Supply Chain is National Security

COVID-19 pandemic taught that public health does not depend only on clinical care activities, but on something much quieter and invisible: **the supply chain**. When surgical masks and ventilators become rarer than gold, **we are no longer in the realm of healthcare alone, but in the geopolitics of survival. The health supply chain is, undoubtedly, a critical component of national security.** Treating it merely as an administrative function or a simple cost center is a systemic error. A cultural and political reorientation is needed: resilient logistical architectures, intelligent strategic stockpiles, production autonomy for essential goods, international agreements for solidaristic sharing of supplies in crisis and for high-value critical supplies stockpiles (e.g., high-tech spare parts for medical devices). The use of **artificial intelligence** for demand forecasting and dynamic flow management should be a strategic priority as well as cyber defense. In an unstable world, the future of health care also depends on the ability to anticipate, protect, and produce. Whoever controls health logistics, controls the country's system resilience.

Action! Building tomorrow's health security today

Governments worldwide must act with urgency and vision to transform the health supply chain from vulnerable to a national security bulwark. How to do it? The recurring theme is global cooperation, for example with a national governance body that integrates health, defense, industry and technology, procurement, with rapid and coordinated decision-making powers.

Other equally important themes include:

- **Investments in resilient and digitized logistics infrastructure** capable of monitoring real-time stock levels, needs, and flows, leveraging artificial intelligence and big data;
- **Ensuring strategic production autonomy** for essential medical devices and medicines, **reducing dependence on fragile and politically unstable global supply chains;**
- **Develop international mutual aid and collaborative procurement agreements to share resources fairly and promptly during global health crises,** for harmonized management of critical, high-value stock and to ensure the resilience of health systems;
- **Promoting training and a culture of logistical resilience in health organizations** and among public decision-makers, overcoming the emergency-management mindset.

The healthcare supply chain is no longer a technical detail to delegate; it is the heart of our ability to survive and thrive as a society. The governance bodies of national health systems must take on the responsibility of transforming the supply chain from a silent weak point into a cornerstone of global health.

Leading procurement, leading change

Public health is under pressure. Budgets are limited, demand is growing, challenges are multiplying. In this scenario, **procurement becomes a strategic lever for transformation.**

It's not just about purchasing, but about **choosing what we want for the health system: quality, safety, effectiveness, and innovation.**

 IFPSM Europe - ADACI International Convention on Public Procurement ROMA-NOVEMBER 6-7/2025	Agenda Thursday 6th november Round tables (1-6)
Greetings from: FABRIZIO SANTINI, President of ADACI - Chris Oanda, President of IFPSM MIRELA SENICA, IFPSM Regional Chair of Europe - FEDERICA DALLANOCE, ADACI Vice President and General Secretary Introduction by: GIOVANNI ATTI, ADACI Former President and IFPSM Member of the Board	
1. HOW TO ENHANCE COMPETITION IN PUBLIC PROCUREMENT Moderator: GIUSEPPE FRANCO FERRARI, Professor Emeritus of Constitutional Law at Bocconi University, Milan; Vice President and Board Member of the IACL: International Association of Comparative Law How to expand the bidder list to maximize the effects of competition. Engaging SMEs and startups: opportunities, challenges, and implications. Promoting competition among suppliers, ensuring fair evaluation processes, and preventing anti-competitive practices. Towards more strategic public procurement to promote effective and participatory competition. Speakers: MILDRED MAINA, Ag. Manager, Supply Chain Management at the Media Council of Kenya Enhancing competition in public procurement	
2. P.P. PERFORMANCE MANAGEMENT: A FRAMEWORK FOR MEASURING EFFICIENCY, COMPLIANCE AND PLANNED TARGETS Moderator: DAVIDE VANNONI, Full Professor of Applied Economics, Director of the School of Management and Economics, University of Turin Importance of performance measurement & evaluation and most commonly used indicators. Tools and methods for performance analysis: balanced scorecard and capability maturity models. OECD indicators and identified weaknesses. Systemic issues and inefficiencies in public procurement in Europe. Speakers: FEDERICA DALLANOCE, ADACI Vice President and Member of IFPSM Board - Data and KPIs for a more strategic procurement.	
3. ENHANCED PROFESSIONALISM AND DISCRETION OF PUBLIC PROCUREMENT OPERATORS Moderator: IVO LOCATELLI, Senior Expert & Team Leader for Strategic Procurement, European Commission Allowing regulatory exceptions to optimize procurement process outcomes? Focus on regulatory compliance, but above all on performance and results! Increasing the professionalism of public buyers to unlock their potential. Training, certifications, and career development. The role of the Marketing Decision Support System (MDSS). Speakers: GIL ZEFONI, CEO IPLMA - Risk Management 4.0 – Proactive Procurement in the Public Sector ENZO GELATI, Procurement Director of the Italian Institute of Technology The bright side of bureaucracy - the dilemma of the fair balance: reach objectives in a timely manner, respecting rules. FRANCESCO RIZZI, Associate Professor of Management, University of Pisa	
4. GREEN PROCUREMENT AND ESG Moderator: PASQUALE PANTALONE, Associate Professor of Administrative Law, Department of Italian and Supranational Public Law, State University of Milan Are environment targets still a priority? Are ESG and circular economy truly sustainable businesses? How to assess the carbon footprint at the company and product level? Detailed sustainability reporting or due diligence process? Do ESG requirements constitute barriers to trade? ESG and the role of suppliers? Speakers: VIVI HERLIANI, Central Management Board IAPI Indonesia, Vice Chairman IAPI Banten - Adoption of ISO 20400 by Indonesia Public Procurement. FEDERICA DALLANOCE, ADACI Vice President and Member of IFPSM Board - Sustainable procurement: a value-creation engine.	
5. AUTOMATION AND AI TO IMPROVE EFFICIENCY, TRANSPARENCY AND PRODUCTIVITY IN PUBLIC PROCUREMENT Moderator: Maurizio PETRONZI, Director Procurement & Operations Cassa Depositi e Prestiti (CDP), Rome From basic e-procurement to artificial intelligence applications. The importance of data and interoperability of public administration platforms. Prerequisites, risks, and benefits of traditional and generative artificial intelligence. Positive and negative experiences in designing and implementing artificial intelligence projects. Speakers: MAURO DRAOLI, Responsible for coordinating AGID's activities in public procurement sector. Adjunct Professor of Digital Government at Guglielmo Marconi University - Overview of the Italian public procurement digitalization system. JYRI VILKO, Academic Director of the Innovation and Logistics Master's Program LUT University Finland, CEO of Logy MARINA LINDIČ, Vice President of Purchasing Association Slovenia, Secretary General IFPSM	
6. GOALS AND PRINCIPLES FOR THE MODERN PUBLIC PROCUREMENT Moderator: ROBERTO CARANTA, Full Professor in Administrative Law, Department of Law University of Turin, Italy. Coordinator of SAPIENS Network Basic principles that guiding public procurement: - principle of results (effectiveness and efficiency); - safeguarding competition; - transparency and traceability; - equal treatment/fairness and integrity; - proportionality and social utility. Does "best value for money" justify forms of regulatory flexibility? Speakers: GIOVANNI ATTI, Former President ADACI and Member of IFPSM Board - The rationale behind the principles and their validity also in the private sector MARCO CARLOMAGNO, MEF FRANCESCO RIZZI, Associate Professor of Management, University of Pisa	

7. INNOVATION IN PUBLIC PROCUREMENT AND POTENTIAL ADDED VALUE OF SUPPLIERS IN THE PRE-TENDER PHASE

Moderator: **NADER SABBAGHIAN**, *Adjunct Professor Department of Management and Technology Bocconi University of Milan, Italy, Partner @ 360 Capital*

What does innovation mean in public procurement and why is it necessary? Innovation in procurement regulations and procedures. Product and service innovation and the role of suppliers. Preliminary investigations in public procurement (pre-tender marketing). The OECD model for the effective use of innovative procurement.

Speakers: **MAURO DRAOLI**, *Responsible for coordinating AGID's activities in public procurement sector. Adjunct Professor of Digital Government at Guglielmo Marconi University - Innovation as a public procurement strategy.*

GIOVANNI ATTI, *Former President ADACI and Member of IFPSM Board - The importance of innovation and the progressive adoption of private sector best practices in public procurement.*

8. GOVERNANCE AND ORGANISATION OF CONTRACTING AUTHORITIES

Moderator: **MARIO COMBA**, *Lawyer and Full Professor in Comparative Economic Law and Comparative Public Law, Department of Law of University of Turin, Italy*

Balancing and synergies between national, regional, and local contracting authorities. Central coordination or centralized procurement? Clear definition of roles and responsibilities and greater integration between roles. Collaborative approaches and open dialogue with suppliers. More flexible processes and automation enhanced by AI.

Speakers: **ENZO GELATI**, *Procurement Director of the Italian Institute of Technology - Centralization or distribution of responsibilities: an organizational or ego issue? Core competencies in the process automation era.*

Agenda Friday 7th november

*Greetings from: **FABRIZIO SANTINI**, President of ADACI - **Chris Oanda**, President of IFPSM*

***MIRELA SENICA**, IFPSM Regional Chair of Europe - **FEDERICA DALLANOCE**, ADACI Vice President and General Secretary - **GIOVANNI ATTI**, ADACI Former President and IFPSM Member of the Board*

9:20 **CAI JIN**, *Vice President of IFPSM and President of CFLP China - 'Features of Chinese Public Procurement'*

9:40 **IVO LOCATELLI** *Former Senior Expert at European Commission and Public Procurement Policy Unit*
'The review of EU Public Procurement Directives'

10:00 **LILANTHA SUBASINGHE**, *President ISMM - Institute of Supply and Materials Management Sri Lanka*

10:20 **ERIC KIMUTAI KORIR**, *Director Public Procurement Kenya*

10:40 **CLAUDIO CONTESSA**, *President of the Jurisdictional Section of the Council of State*

'Discretion and Results in the Public Procurement Sector: The Role of Professionalism among Practitioners'

11:00 *coffee break*

11:20 **MITJA MEDVEŠČEK**, *Secretary at Ministry of Public Administration Public Procurement Directorate of Slovenia*
'Competitiveness and Challenges of the EU Public Procurement System'.

11:40 **MARLENE GRAUER**, *Senior Project Manager BME Germany*

'Market Management Techniques for Innovation in Public Procurement'

12:00 **UGO MONTELLA**, *Deputy Secretary General and President of the Regional Audit Section for Abruzzo, Court of Auditors*

'Public finance and P.P. contracts: key levers for the development of the national economic system. How to simplify and speed them up without compromising the expected performances.'

12:20 **INDRANI DHARMAYANTI**, *Head International Relations at IAPI Indonesia - 'Beyond Efficiency: Indonesia's Digital Transformation of Public Procurement to Foster SMEs Growth and Domestic Product Utilization'*

12:40 *Lunch Buffet*

13:40 **CONSUELO DEL BALZO**, *Advisor to the Italian National Anti-Corruption Authority*

'Italian Public Contracting Authorities: Digitalization and Qualification of Contracting Entities'

14.00 **PHILIPPE MARAVAL**, *Director of DAFG, Direction des Achats et Marchés France*

'Payment by Results: 15 Years Feedback from France Travail'

14:20 **LAWRENCE KAIRU KANYINYI**, *Project Manager and Director of Government Procurement System, Kenya*

14:40 **FRANCESCO LICCI**, *Director of Institutional Relations and Communication, Consip Spa*

'Consip, the National Purchasing Agency - Activities, Results, and Perspectives'

15:20 **ROBERTO GRISCI**, *Category Manager Inps*

15:40 **Summary of the research of ADACI Working Group on Public Procurement**

16:40 *Closing of the Convention*

MEMBERS OF IFPSM

