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INNOVATION ECONOMY MANAGEMENT: EUROPEAN EXPERIENCE AND WAYS OF IMPLEMENTATION IN UKRAINE

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Abstract. The *subject* of the study is the governance architecture for managing an innovative economy in the European Union and the practical design of an implementation model for Ukraine under conditions of recovery and European integration. The paper examines how institutional design, regulatory frameworks, financial instruments, and coordination mechanisms interact in shaping innovation outcomes, and why innovation policy should be treated as a managed public-policy cycle rather than a set of isolated initiatives. Special attention is paid to the role of public administration and civil servants as carriers of delivery capacity, to analytics as decision infrastructure in the policy cycle, and to the embeddedness of innovation governance in international relations through standards, programme participation, and technology cooperation. The paper also addresses diplomacy and mediation as governance practices for aligning interests within complex innovation ecosystems and for maintaining legitimacy under heightened integrity requirements. *Methodology.* The research is based on a combination of systemic, comparative, and institutional approaches. It integrates analysis of leading innovation-policy models (national innovation systems, Triple Helix, mission-oriented policy, and open innovation) with an examination of EU multi-level governance logic and its delivery instruments, including programme cycles, portfolio financing, innovation procurement, competition and state-aid discipline, and evidence-based monitoring. This methodological design enables identification of institutional interface risks that typically arise between strategy and implementation, as well as assessment of Ukraine's baseline constraints linked to fragmentation of competences, capacity limitations, wartime pressures, and regional heterogeneity. The *aim* of the work is to substantiate a coherent model of innovation governance for Ukraine that is compatible with European approaches and capable of operating under recovery-scale funding, while ensuring controllability, transparency, competition for resources, partnership, and accountability for results. The *results* of the study show that EU innovation governance functions as a portfolio-based management system in which priorities are operationalized through repeatable programmes, predictable funding windows, standardized procedures, and measurable performance signals. The effectiveness of this model is driven by delivery capacity within public administration, disciplined instrument design across the full innovation lifecycle, and analytics-based monitoring that supports policy correction. For Ukraine, the key challenge is the gap between strategic planning and administrable delivery, reinforced by overlaps of mandates and unowned zones at lifecycle transition points. The paper proposes a Target Operating Model built on functional separation between a policy owner responsible for portfolio coherence and specialized delivery agencies responsible for execution; a standing inter-ministerial synchronization mechanism to align innovation tools with procurement, skills, competition constraints, digital transformation, and recovery investments; and a regional contour grounded in smart specialization logic to generate pipelines and provide adoption environments. The proposed roadmap emphasizes innovation procurement as a demand-side scaling lever, standardized stage-gate progression for financing instruments, professionalization of civil-service competencies, data-driven management routines, and a compact KPI framework linking inputs, outputs, and outcomes with public reporting and effectiveness audit. *Conclusion.* Sustainable innovation governance requires shifting from declarative strategies and fragmented initiatives

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toward an integrated operating model that aligns institutional responsibility, procedures, data, and performance accountability in one coherent cycle. For Ukraine, the most feasible path is not replicating EU institutional forms, but reproducing their functional logic: predictable programme cycles, administrable instruments across the innovation chain, procurement-enabled demand creation, disciplined integrity safeguards, and analytics-based monitoring that enables continuous adjustment and strengthens trust in resource allocation during recovery and integration.

Keywords: European Union, innovative economy, international relations, analytics, public administration, civil servants, diplomacy, mediation.

JEL Classification: F15, O31, H83, F50

1. Introduction

Managing an innovative economy within the European Union is one of the key determinants of economic resilience, productivity, and strategic autonomy. An innovative economy does not emerge automatically as a by-product of market dynamics; it requires purposeful governance decisions that combine institutional design, regulatory frameworks, financial instruments, and effective coordination mechanisms. For this reason, the management of innovation goes beyond a narrowly economic debate and becomes a complex task of public policy and governance.

European practice shows that the effectiveness of innovation policy depends on the quality of institutions and on the state's capacity to ensure the implementation of strategic priorities through public administration. In this logic, civil servants act as carriers of administrative capability: they design programmes, ensure inter-agency coordination, organise transparent project selection procedures, conduct monitoring and control, maintain accountability, and support policy adjustment. For Ukraine, this dimension is particularly important because a persistent challenge is the gap between strategic documents and their practical implementation, fragmented competences, weak horizontal coordination, and insufficient institutional capacity across levels of governance.

A critically important component of the contemporary approach is analytics as an infrastructure for decision-making in public policy. In European governance systems, analytical instruments are used to set priorities, assess the impact of regulatory and financial decisions, define performance indicators, monitor implementation, and conduct policy audits. Without a robust analytical base, innovation policy risks turning into a set of unsynchronised initiatives that fail to deliver sustainable outcomes, do not build trust in resource allocation mechanisms, and do not create a predictable investment environment.

An innovative economy is directly embedded in international relations, since technological standards, market access regimes, rules on state support, intellectual property protection, researcher mobility, and competition for talent are shaped through interaction among states and international institutions. Under these conditions, innovation policy acquires a dimension of diplomacy: through international partnerships, participation in cooperation programmes, attraction of funding, joint research, and technology transfer, states strengthen their own capabilities and competitive positions. For Ukraine, which is pursuing European integration while requiring accelerated modernisation and recovery, this dimension serves as a practical instrument of economic transformation rather than merely a sphere of foreign-policy declarations.

Particular importance also attaches to mediation as a governance practice for reconciling interests within complex innovation ecosystems. In the innovation domain, conflicts routinely arise between decision-making speed and legality control, between support for priority sectors and competition requirements, between openness of innovation processes and security needs, and between short-term budget constraints and long-term investment in research and development. Institutionally designed mechanisms for consultation, negotiation, and mediation help reduce transaction costs, prevent decision blockages, ensure the legitimacy and sustainability of policy, and increase trust in public administration.

For Ukraine, studying the European experience of managing an innovative economy is necessary in order to build a manageable, accountable, and effective model of public policy capable of combining reforms, recovery, and integration into the European economic space. The focus should be placed on institutional solutions, the capacity of public administration, the professional potential of civil servants, the role of analytics in the policy cycle, and the use of opportunities provided by international relations, diplomacy, and mediation to attract resources, partnerships, and technologies while ensuring the alignment of interests throughout the implementation of reforms.

2. Analytical Framework for Managing an Innovative Economy

An innovative economy can be understood as an organization of development in which growth in productivity, competitiveness, and welfare is ensured through the systematic creation, diffusion, and commercialization of knowledge, technologies,

products, processes, and managerial solutions. A key feature is the presence of stable institutional channels that transform knowledge into economic value through sustained interaction among science, business, the state, and society (OECD, 1997). It is precisely the stability of such linkages that determines an economy's capacity not only to generate novelties but also to scale them regularly in production and service (OECD, 1997).

Public-sector innovation management refers to the set of political, administrative, and regulatory mechanisms through which the state sets priorities, creates incentives, safeguards the rules of competition, lowers barriers to innovative activity, and guarantees accountability for the use of resources (OECD, 1997). In this logic, the state acts as an institutional designer that establishes predictable rules, supports fair procedures, ensures high-quality data, and organizes coordination mechanisms. This approach shifts the emphasis from isolated decisions to an architecture of instruments and accountability that makes policy manageable over time (OECD, 1997).

To justify innovation policy instruments, an analytical framework is needed that explains how knowledge is converted into economic results and under what conditions this process becomes scalable. In this context, the concept of national innovation systems emphasizes that innovation performance is determined not by isolated measures but by the quality of linkages among institutions that create, finance, and implement knowledge (OECD, 1997). The governance implication is that policy should eliminate gaps between sectors, strengthen technology transfer, develop infrastructure, and improve coherence between regulatory and financial decisions (OECD, 1997).

A systemic perspective on the interaction of key actors is further articulated by the Triple Helix model, which describes the co-production of innovation within the triangle of universities, business, and government (Etzkowitz & Leydesdorff, 2000). Its practical meaning is that decisive importance attaches not only to funding research but also to building partnership formats, hybrid institutions, and commercialization channels capable of linking scientific outputs with market needs and societal objectives (Etzkowitz & Leydesdorff, 2000).

When innovation policy is aimed at achieving socially significant outcomes, the mission-oriented approach becomes particularly relevant. It provides a logic for concentrating resources around specific goals and building a portfolio of programmes with clear indicators, phases, responsible implementers, and adjustment mechanisms (Mazzucato, 2018). In such a design, innovation is treated as a tool for achieving defined transformations, while governance is reduced to a managed cycle of planning, implementation, evaluation, and revision of priorities (Mazzucato, 2018).

At the same time, contemporary innovation increasingly emerges through the circulation of knowledge across organizations, sectors, and countries, which is described by the open innovation approach. For public policy, this strengthens the importance of standards, interoperability, access regimes to infrastructure and data, and balanced protection of intellectual property that simultaneously stimulates investment and does not block cooperation (Chesbrough, 2003).

Because innovation policy combines institutional, regulatory, and financial components, the distribution of competences and responsibility across levels of government becomes decisive. The European approach relies on multi-level governance, where the supranational level forms framework orientations and methodologies, the national level provides strategic architecture and instruments, the regional level develops ecosystems and infrastructure, and the municipal level creates local conditions for innovation and entrepreneurship (European Commission, 2012). In this structure, research and innovation strategies for smart specialization play a distinct role by connecting territorial economic priorities with development programmes and stakeholder partnerships (European Commission, 2012).

The principle of subsidiarity requires decisions to be taken at the level closest to the problem that is capable of delivering results, while preserving coordination, consistency of standards, and the possibility of scaling (European Commission, 2012). For Ukraine, this implies the need to combine centralized strategic steering with genuine implementation capacity in regions and communities, while preventing duplication of functions and diluted accountability (European Commission, 2012).

A multi-level architecture functions only when public administration can translate priorities into procedures, instruments, and measurable results. In the innovation domain, this includes programme design, competitive support mechanisms, transparent administration of funding, data governance, control and audit, and accountability for achieving indicators (European Commission, 2012). This approach is particularly important where innovation policy interacts with regional development and requires calibrated coordination among institutions and sectors (European Commission, 2012).

Within this system, civil servants act as carriers of administrative capacity because they ensure procedural continuity, institutional memory, data analysis, impact assessment, risk management, and stakeholder communication (OECD, 1997). Public procurement, including innovation procurement, also matters because it can generate demand for new solutions and thereby support the scaling of innovations (OECD, 1997).

An innovative economy develops under conditions of international interdependence, where standards, technology chains, access to funding, intellectual property regimes, and researcher mobility shape the opportunities of national ecosystems (European Commission, 2012). In this context, diplomacy in the innovation sphere is expressed through partnership-building, participation in international programmes, development of scientific and technological cooperation, creating conditions for technology transfer, and safeguarding national interests in critical technologies (European Commission, 2012).

The international dimension simultaneously strengthens the need to align interests domestically and in communication with partners. Mediation emerges as an instrument of institutional coordination between the state, business, and society, as well as between national priorities and the expectations of international stakeholders (Mazzucato, 2018). This practice reduces the risk of decision blockages, supports the legitimacy of innovation policy, and increases the sustainability of implementation, especially under conditions of recovery and structural modernization (Mazzucato, 2018).

3. European Union innovation Governance and Comparative Member-State Implementation Models

EU innovation governance is built around a simple but demanding premise: priorities only matter when they can be translated into repeatable programmes, predictable funding windows, and measurable performance signals. In practice, this means that strategic orientation is expressed through EU-level agenda-setting, while operationalization is delivered through programme design, annual or multiannual work programmes, and structured evaluation routines (European Commission, 2022).

This multi-level logic also sets the tone for how Member States are expected to behave inside the system. National and regional authorities are not treated as passive recipients of funding, but as co-implementers who align domestic priorities with EU frameworks, absorb common rules, and adapt delivery mechanisms to local institutional capacity. The result is a governance cycle that prioritizes coherence and continuity over one-off initiatives, because innovation policy is assumed to be cumulative: institutions learn, ecosystems mature, and performance improves only when programmes do not restart from zero every political season (Regulation (EU) 2021/695, 2021).

A defining strength of the EU model is that it does not rely on a single financial instrument. Instead, it combines instruments that cover the full innovation lifecycle, from early-stage exploration to market creation and scaling. This portfolio approach is designed to reduce uncertainty step by step: early-stage grants can de-risk ideas and technologies, while later-stage instruments can bridge the gap between demonstration and commercial scale, where private capital is often cautious or structurally absent (European Commission, 2025).

Within this portfolio, the European Innovation Council is explicitly framed as a pipeline rather than a single call. Its Work Programme specifies how the instrument mix is organized around different maturity levels and risk profiles, and how selection and support are structured, including a combination of grants, investment components, and business acceleration services (European Commission, 2024/2025). The governance value here is procedural: clear eligibility rules, transparent assessment stages, and repeatable deadlines turn innovation support into an administrable system rather than an improvised distribution of funds.

This lifecycle logic also matters for Ukraine in a very practical way. If support instruments focus only on early-stage grants, innovation becomes a "project culture" with weak commercialization; if instruments focus only on later-stage scale-up, the pipeline dries out. The EU model demonstrates that policy coherence depends on maintaining the whole chain, even if different links are managed by different institutions and levels of government (European Commission, 2022).

EU practice treats innovation ecosystems as a governance object, not as a metaphor. Clusters, regional ecosystems, and cross-border cooperation formats are used to reduce coordination costs, accelerate diffusion, and improve the translation of research capacity into firm growth. The point is not to celebrate networks, but to structure them into repeatable formats where collaboration, technology diffusion, and workforce mobility become routine rather than exceptional.

Here, programme design and regulatory design meet. Funding calls can incentivize cooperation, but only an enabling environment can sustain it. That is why EU innovation governance increasingly links ecosystem-building to standardization dynamics, procurement pathways, and legal certainty for collaboration, especially where innovation involves sensitive technologies, safety constraints, or high compliance requirements (Regulation (EU) 2021/695, 2021).

A particularly European feature is the systematic use of public demand as a lever. Innovation procurement is not framed as a slogan, but as a method for turning public bodies into early buyers of novel solutions, thereby reducing market uncertainty for innovators and accelerating adoption where societal needs are clear (European Commission, 2021).

From a governance perspective, the critical element is not the desire to buy innovation, but the procurement design that keeps competition fair, preserves transparency, and still allows space for non-standard

solutions. The Commission guidance stresses practical routes for public buyers to stimulate innovation while respecting the core principles of EU procurement law (European Commission, 2021). For countries undergoing reconstruction and modernization, this tool is especially relevant because procurement often represents one of the largest public spending channels, and therefore one of the strongest opportunities to create early markets for new technologies rather than importing ready-made solutions by default.

EU innovation policy is constrained, deliberately, by competition rules and state aid discipline. This is not a technical detail; it is a governance safeguard that forces public support to be justified, proportionate, and designed to minimize undue distortions. The RDI State aid framework explains how aid measures can be assessed for compatibility with the internal market and what conditions matter in practice, including the logic of market failure, incentive effect, and proportionality (European Commission, 2022).

This discipline shapes how Member States design innovation instruments. It encourages predictable categories of support, clearer targeting, stronger transparency, and better ex ante justification. At the same time, it pushes governments to build administrative competence: if civil servants cannot design compliant programmes, innovation support becomes either legally risky or politically timid. In governance terms, the EU approach institutionalizes a balancing mechanism between acceleration and control, which is exactly the balance Ukraine will need when innovation funding intersects with reconstruction funds and heightened integrity requirements (European Commission, 2022).

EU innovation governance is measurement-heavy by design. The European Innovation Scoreboard provides a comparative performance framework that is used for benchmarking, learning, and political accountability, and it also supports a shared vocabulary for comparing systems rather than isolated projects (European Commission, 2025). This matters because innovation policy can otherwise drift into symbolic success stories that look impressive but do not shift national performance indicators.

Using a unified analytical matrix helps turn the EU comparative experience into policy-relevant lessons. A workable matrix includes institutional architecture and delivery agencies, funding continuity, regulatory approach (including state aid compliance), the role of regions and ecosystems, digital governance maturity, and KPI and monitoring routines (European Commission, 2025). When this matrix is applied, the model differences across Member States become clearer as implementation patterns rather than stereotypes.

Finland is consistently positioned among the leading performers in EU innovation benchmarking, and its transferable advantage is not a single instrument but the coherence between strategic priorities, stable institutions, and a disciplined implementation cycle that does not collapse into constant reform for its own sake (European Commission, 2025). Estonia is frequently used as an illustration of how digital public administration can function as horizontal infrastructure for innovation, because high-quality digital services reduce transaction costs, improve data availability, and accelerate administrative delivery when aligned with innovation instruments (European Commission, 2025). Germany demonstrates how industrial depth and dense applied research and ecosystem linkages can translate into strong innovation performance, while also highlighting a typical governance trade-off: the richer the institutional landscape, the higher the coordination burden across federal, regional, and sectoral layers (European Commission, 2025).

For Ukraine, the key is transferability without institutional cosplay. The most portable elements are procedural and architectural: a repeatable programme cycle, transparent selection and monitoring, procurement pathways that create early demand, legally disciplined public support, and a performance system that allows course correction. What usually requires adaptation is the distribution of competences and the administrative capacity to run complex instruments reliably, because without that capacity, even well-designed tools become either corruptible or purely formal (European Commission, 2022).

4. Ukraine's Innovation Governance Baseline under Wartime Conditions: Constraints, Alignment Pathways, and Regional Levers

Ukraine's innovation policy starts from a layered governance configuration where strategy, regulation, funding, and ecosystem support are spread across several public centres, and the boundaries between them are not always operationally sharp. The formal backbone for the science and RDI domain is the Law of Ukraine on scientific and scientific-technical activity (Verkhovna Rada of Ukraine, 2015) which establishes basic state responsibilities and the institutional logic of the sector. That legal baseline is then complemented by government strategies that set priorities and instruments to the 2030 horizon, including the Strategy for the development of innovation activity (Cabinet of Ministers of Ukraine, 2019) and the Strategy for the digital development of innovation activity with an operational plan for 2025–2027 (Cabinet of Ministers of Ukraine, 2024).

In governance terms, the immediate issue is rarely the absence of documents; it is the operational interface between them. When an innovation strategy (Cabinet of Ministers of Ukraine, 2019) and a digital-development-of-innovation strategy (Cabinet of Ministers of Ukraine, 2024) exist in parallel, overlaps

become likely in areas where digital transformation functions both as an innovation enabler and as a standalone modernization agenda. This is where duplication emerges: several actors can rationally claim leadership over startup support, technology transfer infrastructure, innovation financing instruments, or innovation-related digital platforms, even if each claim is defensible within its own mandate.

The second structural problem is the unowned zone, meaning a stage in the innovation lifecycle where nobody is clearly accountable for outcomes. In practice, these zones typically appear at the transition points: from research output to commercialization readiness, from early-stage support to scaling, and from national programmes to regional ecosystem absorption. When responsibility is not assigned at these interfaces, the system can become good at launching initiatives but weak at sustaining pipelines. A workable diagnostic method is to map responsibilities by lifecycle stage rather than by institution: idea and research, prototyping, commercialization readiness, scale-up, public adoption and procurement, and export or international integration. This approach reveals where the state is present twice and where it is absent entirely, even though the strategies themselves are alid (Cabinet of Ministers of Ukraine, 2019).

Wartime conditions impose hard constraints on innovation policy: elevated security risks, disrupted value chains, infrastructure damage, workforce displacement, and uncertainty that increases the cost of capital. Yet the recovery agenda changes the policy environment in a way that creates a window of opportunity. Reconstruction decisions are not neutral; they predefine the next generation of industrial capacity, logistics, energy infrastructure, digital systems, and public services. In other words, recovery can either reproduce yesterday's economy or become the mechanism for building a more productive structure.

The Ukraine Plan 2024–2027 (Government of Ukraine, 2024) frames reforms and investments as a coordinated package, and it explicitly ties implementation to governance principles such as transparency, accountability, and control and reporting arrangements. For innovation policy, this matters because it moves innovation from a specialized sectoral discussion to a recovery instrument. If recovery funding is channelled through administrable programme cycles, procurement pipelines, and verifiable performance targets, innovation becomes embedded in rebuilding rather than remaining an optional add-on.

A further wartime feature is that innovation demand becomes more mission-driven by default. Needs in resilience, security, logistics, medical systems, and energy efficiency create immediate use cases, which can shorten diffusion cycles if governance is capable of translating needs into transparent instruments. The risk is that urgency can also justify procedural shortcuts. The policy challenge is therefore to keep speed and integrity aligned, so that acceleration does not become a corridor for discretionary decisions that undermine trust and international partner confidence (Government of Ukraine, 2024).

Ukraine's alignment with EU innovation governance is no longer abstract because association to Horizon Europe and the Euratom Research and Training Programme is operationally in force. The European Commission states that the association agreement entered into force on 9 June 2022, and that it applies with retroactive effect from 1 January 2021 (European Commission, 2025). EUR-Lex likewise summarizes the association agreement's entry into force date (European Union, 2022). This alignment is not only a funding channel; it is a governance training mechanism because participation requires compliance with EU-grade norms on evaluation, ethics, dissemination, reporting discipline, and accountability routines.

That compliance effect becomes especially important where Ukrainian innovation policy intersects with regulated domains and critical technologies. Alignment is then determined less by political statements and more by administrative routines: how calls are designed, how evaluators are selected, how conflicts of interest are managed, how monitoring is conducted, and how results are audited. The same institutional logic applies to integration into European networks and standards. In practical terms, EU alignment becomes credible when Ukraine demonstrates predictable procedures, stable programme cycles, and performance-oriented monitoring rather than output counting.

A useful way to view this is that EU integration in innovation is as much about governance comparability as it is about programme access. When domestic instruments mirror EU expectations in transparency and accountability, participation becomes easier, absorption increases, and international partnerships become less risky for counterparts (European Commission, 2025).

The decisive constraint for Ukrainian innovation policy is the capacity of public administration to translate strategy into delivery. The legal baseline (Verkhovna Rada of Ukraine, 2015), and the government strategies (Cabinet of Ministers of Ukraine, 2019), (Cabinet of Ministers of Ukraine, 2024), provide direction, but implementation depends on professional teams and resilient procedures. Under wartime and recovery conditions, this dependence becomes stronger because the volume of decisions increases, time horizons shorten, and integrity expectations from donors and partners intensify (Government of Ukraine, 2024).

Capacity in this context is not only about headcount. It is about procedural reliability: standardized call documentation, clear eligibility rules, documented evaluation trails, conflict-of-interest screening,

complaint and appeal mechanisms, and audit-ready monitoring. It is also about data governance. If programme data are fragmented across institutions or stored in incompatible formats, analytics becomes decorative rather than operational. Conversely, when data is treated as decision infrastructure, policy can be adjusted based on performance rather than on reputational narratives.

Integrity safeguards matter because innovation instruments are structurally attractive to informal influence: selection is competitive, outcomes are uncertain, and experts have discretion. The only sustainable response is to design discretion into controlled procedures, not to pretend it does not exist. For recovery-linked innovation instruments, this is particularly important because reputational damage can directly reduce partner willingness to fund or co-implement programmes (Government of Ukraine, 2024).

Innovation performance is rarely produced by central policy alone. It emerges where local ecosystems connect firms, universities, R&D institutes, investors, and municipal services into pipelines that can test, adopt, and scale solutions. Under recovery conditions, this regional component is amplified because reconstruction needs and economic structures differ sharply across territories.

Smart specialization provides a governance method for structuring regional diversity into actionable priorities. The Joint Research Centre describes smart specialization as supporting regions in designing innovation strategies, and it notes the spread of this approach beyond the EU, including the EU Enlargement and Neighbourhood regions (European Commission, Joint Research Centre, n.d.). For Ukraine, the practical value is to turn regional strengths into programme pipelines that are compatible with national strategy and EU-alignment requirements, rather than producing disconnected local projects.

Cities and regions also offer a critical scaling lever through service infrastructure and procurement demand. When municipal services are capable of piloting and adopting innovative solutions, diffusion accelerates and startups gain reference customers. Universities and R&D institutes, in turn, serve as governance anchors because they host skills pipelines, applied research capacity, and partnership infrastructure. The key is to connect them to territorial priorities and to operational instruments, so that research outputs have credible routes into firms and public adoption rather than remaining within academic reporting cycles.

A realistic division of labour follows from this: central institutions focus on rules, financing instruments, and integrity controls, while regions and cities concentrate on ecosystems, smart specialization priorities, and deployment environments. That division only works, however, when the interfaces are engineered: shared indicators, interoperable data, and routine coordination mechanisms across levels.

5. Implementing Innovation Governance in Ukraine: Target Operating Model and a Sequenced Roadmap

For Ukraine, implementation must be treated not as the final stage of policy, but as the core design constraint that determines whether innovation governance will function under wartime pressure and recovery-scale spending. The first principle is controllability, meaning that each instrument has a clear policy owner, a delivery operator, a decision chain, and a predictable programme calendar that covers calls, selection, contracting, monitoring, evaluation, and termination where necessary. This logic is consistent with the EU better regulation approach, in which policy instruments are expected to be evidence-informed, monitored, and adjusted through feedback rather than protected by inertia (European Commission, 2021).

Transparency and competition for resources should be embedded in procedures rather than communicated as intentions. In innovation policy, discretion is structurally unavoidable because decisions are made under uncertainty, and the only sustainable response is to convert discretion into controlled, auditable procedures. In integrity terms, the relevant benchmark is to treat integrity as a whole-of-government system based on risk management, accountability, and enforcement, not as an episodic compliance exercise (OECD, 2017). Partnership should also be operationalized as a governed interface with business, academia, regions, and civil society, because innovation ecosystems do not self-coordinate at scale without structured incentives and predictable interaction formats. Finally, responsibility for results must be expressed through outcome accountability, which requires indicators that connect inputs to outputs and outcomes, and reporting routines that allow corrections without rewriting the strategic narrative.

A realistic Target Operating Model for Ukraine can be built around functional separation, in which the centre owns the portfolio logic while specialized operators own delivery. At the system core, a coordination centre should act as the policy owner of the innovation portfolio. Its task is not to replace line ministries, but to hold end-to-end responsibility for priorities, the annual programme plan, KPI targets, and conflict resolution at the interfaces where mandates overlap. Without such a portfolio owner, fragmentation becomes the default, because each institution rationally optimizes within its own mandate, while the system as a whole loses cumulative effect.

Delivery should be delegated to specialized executing agencies that run calls, manage contracts, monitor

projects, and report performance through a unified data model. The decisive condition is procedural standardization, because comparability across instruments is what makes portfolio steering possible. In parallel, a standing inter-ministerial synchronization mechanism is needed to align innovation instruments with procurement planning, education and skills policy, competition constraints, digital transformation agendas, and recovery investments. The value of such a mechanism is practical rather than ceremonial: it should produce synchronized calendars, agreed pipeline priorities, resolved ownership at lifecycle transitions, and documented decisions that can be audited.

A regional contour should be treated as an implementation layer rather than an add-on. Regional and city-level project offices and ecosystem platforms are necessary to generate investable pipelines and to provide adoption environments where pilots can be tested, validated, and scaled. In governance terms, the regional contour becomes the intake channel for the national portfolio: it supplies pipelines grounded in territorial priorities and industrial realities, while the centre ensures standardization, integrity, and comparability across regions.

An effective Ukrainian instrument package must cover the full chain from ideas to scaling, otherwise the system will drift into predictable failure modes. If policy concentrates on early-stage grants only, the output becomes prototypes and reports with weak commercialization. If policy concentrates on scaling only, the pipeline eventually dries up. The instrument mix should therefore be staged and connected through progression criteria, so that support is conditional on passing stage gates that are clear ex ante and verifiable ex post.

Financing instruments should include competitive proof-of-concept support, validation and demonstration funding, and scale-up instruments designed to crowd in private capital. The administrative challenge is to avoid project inflation, where activity grows while outcomes stagnate. This requires standardized contracts, uniform reporting logic, and termination rules that are actually used when performance fails.

Innovation procurement should be treated as the main demand-side scaling lever, especially under reconstruction. The EU has formalized innovation procurement as a lawful pathway for public buyers to stimulate innovation while respecting procurement principles, and this guidance is directly relevant as a design reference for Ukraine (European Commission, 2021). Ukraine already has a strong legal procurement baseline in the Law on Public Procurement (Verkhovna Rada of Ukraine, 2015), and international assessments note that the use of the ProZorro e-procurement system has been mandated by law since 2016 and is being strengthened for reconstruction needs (World Bank, 2023). The strategic implication is that Ukraine does not need to invent a new procurement foundation; it needs to add innovation-oriented procurement designs within lawful procedures, with documented pilots and repeatable procurement templates.

Technology transfer and commercialization support should be organized to reduce transaction costs rather than to force outputs. What typically blocks commercialization is not the absence of ideas but the friction of contracting, IP management, and partner selection. Standardized templates, predictable rules for IP and licensing, and measured support for certification and compliance can turn sporadic cooperation into routine.

Business incentives should be targeted, time-bound, and tied to measurable market failures, because broad incentives tend to disperse resources and increase capture risks. Where the goal is EU-market alignment, support that helps firms comply with standards can unlock scaling and export potential, but it must be linked to performance indicators rather than treated as an entitlement. Incubation and acceleration, finally, should function as a pipeline segment integrated into financing and procurement pathways, so that support is assessed by investable outputs and adoption outcomes rather than by event activity.

The most persistent bottleneck in innovation governance is administrative capacity, not strategic intent. Ukraine therefore needs a dedicated competency track for civil servants who design and run innovation instruments, including programme design, evaluation management, contract governance, innovation-oriented procurement, risk management, integrity controls, and performance monitoring. The EU better regulation logic provides a useful procedural discipline here because it treats monitoring and evaluation as normal governance routines rather than exceptional audits (European Commission, 2021).

A data-driven operating model must be mandatory rather than optional. This requires unified registries of instruments and projects, standardized indicator definitions, interoperable datasets across agencies, and routine performance reviews that support portfolio correction. If data are fragmented, analytics becomes decorative and discretion increases. If data are unified, the system gains the ability to correct itself without political resets, which is essential under wartime volatility and donor scrutiny.

Integrity safeguards are not merely compliance, because innovation funding is structurally vulnerable to capture: selection is competitive, outcomes are uncertain, and experts have influence. A sustainable integrity response is to design discretion into controlled procedures and to apply risk-based integrity management at system level (OECD, 2017).

Ukraine's international track should be treated as a delivery pipeline with its own governance rather than as an external communications function. Innovation

diplomacy, in operational terms, means structured partner mapping, portfolio alignment with donor and EU priorities, and the translation of Ukrainian instruments into programme designs that partners recognize as credible. Mediation is not a soft accessory; it is the mechanism that keeps donor conditions, national priorities, and business incentives aligned when interests diverge.

Institutionalizing mediation requires documented stakeholder consultations, transparent escalation routes for contested programme decisions, and clear dispute-resolution protocols. Without these routines, international engagement becomes case-by-case bargaining, which increases transaction costs and undermines predictability for both donors and firms.

A compact KPI system should translate the innovation portfolio into a readable chain from inputs to outputs and outcomes, accompanied by routine public reporting and annual effectiveness audits. An academically defensible set can include, at minimum, budget execution for innovation and RDI instruments; the share of innovation spending allocated through competitive procedures; the share of procurement processed competitively under the public procurement framework; the number of trained and certified innovation-policy civil servants; the proportion of funded projects passing predefined stage gates on time; the number of innovation procurement pilots completed and evaluated; the number of technology transfer agreements concluded by supported universities and R&D institutes; the number of supported startups reaching defined scale milestones; the ratio of private co-financing leveraged per unit of public support; and the share of supported solutions adopted by public buyers or reaching export markets within a fixed horizon. The point of such indicators is not to decorate reports, but to provide a correction mechanism that allows instruments to be rebalanced or terminated without institutional drama.

The core governance risks are predictable and therefore manageable if they are treated as design variables. Corruption and capture risks should be countered through conflict-of-interest screening, publishable criteria, auditable evaluation trails, open data by default, and risk-based controls consistent with OECD integrity principles (OECD, 2017). The risk of innovation imitation, where activity replaces outcome delivery, should be countered through stage gates, outcome KPIs, and enforced termination rules. Resource fragmentation should be countered through portfolio governance under a single policy owner, a unified programme calendar, and instrument consolidation where overlaps persist.

A talent shortage, both in public administration and in regional ecosystems, should be treated as a system risk rather than a human-resources inconvenience. The practical safeguard is to build a professional delivery cadre and to stabilize regional project offices that can develop pipelines and manage adoption environments. In implementation terms, the rule is blunt but reliable: innovation governance cannot be delivered by accidental staffing and improvised procedures, especially under wartime and recovery conditions.

6. Conclusion

This study argues that managing an innovative economy is a core determinant of resilience, productivity growth, and strategic autonomy, especially in the EU context and for countries aligning with it. Innovation scales not by the existence of markets alone, but through a repeatable governance cycle linking priorities to instruments, delivery capacity, and performance feedback. Innovation governance is thus a practical architecture of institutions, rules, procedures, and incentives.

The framework shows that outcomes depend on strong linkages across the innovation system and the state's ability to design and run institutions. National innovation systems, the Triple Helix, mission-oriented policy, and open innovation converge on one point: effective innovation policy is defined less by isolated measures and more by coherence, continuity, and administrability.

European practice demonstrates how this coherence is built through programme cycles, portfolios, ecosystem mechanisms, innovation procurement, and disciplined public support under state aid rules, reinforced by benchmarking and monitoring. For Ukraine, the main challenge is the gap between strategy and delivery, worsened by wartime conditions and recovery-scale spending, but recovery also creates a decisive opportunity to reshape industrial capacity and public services. Horizon Europe association supports institutional learning and EU-grade routines in evaluation, ethics, reporting, and accountability; alignment must become operational comparability in procedures, data, and performance management.

The proposed model recommends a single policy owner for coherence, specialized delivery agencies for calls and contracts, inter-ministerial coordination with procurement, skills, competition, digitalization, and recovery priorities, and a regional smart-specialization contour to ensure adoption. Civil service capacity and integrity safeguards are binding constraints: without professional management and audit-ready procedures, discretion will dominate.

In conclusion, innovation governance is a disciplined system that makes innovation administrable. Ukraine should use recovery to build a coherent operating model, connect finance to procurement-driven demand, institutionalize technology transfer, professionalize delivery capacity, and manage the portfolio under transparent KPIs and monitoring – otherwise it risks high activity with low transformation.

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