e-ISSN 3083-6018

SOCIAL DEVELOPMENT: Economic and Legal Issues

https://www.eu-scientists.com/index.php/sdel

Economic-Legal Incentives as a Tool of State Policy for the Production and Use of Autonomous Systems: Doctrine, Instruments, and Effectiveness Criteria

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ARTICLE INFO

Research Article

DOI: 10.70651/3083-6018/2025.10.12

ABSTRACT

Autonomous systems are moving from labs to production lines and public services, exposing mismatches between traditional innovation incentives and heightened demands for safety, transparency, and accountability. This paper reframes economic-legal incentives not as a scatter of perks but as an integrated architecture of mutual obligations among the state, developers, and procurers. The objective is to design a risk-oriented framework for selecting and combining instruments–tax, financial, regulatory, procurement, and infrastructural–across classes of autonomy and contexts of use while preserving procedural legitimacy. The study blends doctrinal legal analysis with comparative law, policy design, and regulatory impact reasoning. Empirical inputs include recent scholarly debates, data on innovation-oriented public procurement, case studies of regulatory sandboxes and fiscal incentives in peer jurisdictions, and sectoral examples from transport, healthcare, and industrial automation. Results are operationalized via three indicator groups: innovation outputs, procedural-legal quality, and safety outcomes. The paper proposes a taxonomy of instruments with criteria for legal fitness and conditions of use, and advances a model of "contingent incentives" linked to conformity assessment, algorithmic audit, data traceability, and rapid recall mechanisms. It develops an algorithm for composing instrument bundles from risk profile and autonomy level to a trio of sandboxing, mission-oriented procurement with control gates, and fiscal levers tied to verifiable milestones. The analysis shows that innovation procurement acts as a demand multiplier, whereas tax incentives are effective only when they "read" the technology lifecycle and the availability of testing infrastructure. A set of indicators sensitive to both innovation output and procedural quality is articulated. Effective stimulation of autonomous systems is not the sum of benefits but an architecture of "stitches" between support, responsibility, and oversight. The most successful bundles accelerate innovation while ensuring adjacent risks and preserving the capacity to stop or recalibrate without collapsing entire programs. The proposed framework is directly implementable in procurement documentation and R&D support schemes, strengthening verifiability, procedural legitimacy, and public trust.

KEYWORDS

autonomous systems, economic-legal incentives, regulatory sandboxes, innovation-oriented public procurement, risk-based regulation, R&D tax incentives, accountability and safety, effectiveness indicators.

e-ISSN 3083-6018

СОЦІАЛЬНИЙ РОЗВИТОК: економіко-правові проблеми

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Економіко-правові стимули як інструмент державної політики щодо виробництва та використання автономних систем: доктрина, інструменти та критерії ефективності

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СТАТТЯ

Дослідницька

DOI: 10.70651/3083-6018/2025.10.12

АНОТАЦІЯ

Автономні системи переходять із лабораторій у виробництво й публічні послуги, оголюючи нестиковки між традиційними інструментами підтримки інновацій та підвищеними вимогами до безпеки, прозорості й підзвітності. У статті пропонується читати господарсько-правове стимулювання не як розсип пільг, а як інтегровану конструкцію взаємних зобов'язань держави, розробника й замовника. Мета дослідження – створити ризик-орієнтовану рамку добору й поєднання інструментів (податкових, фінансових, регуляторних, закупівельних, інфраструктурних) під різні класи автономності та контексти застосування, зі збереженням процедурної легітимності. Застосовано поєднання догматичного аналізу, порівняльно-правового підходу, policy design та оцінювання впливу регулювання. Емпіричний матеріал включає сучасний масив доктринальних праць, дані про інноваційні закупівлі, кейси «пісочниць» і фіскальних стимулів у суміжних юрисдикціях, а також секторальні приклади з транспорту, охорони здоров'я та промислової автоматизації. Операціоналізація результатів здійснюється через три групи індикаторів: інноваційні, процесуально-правові та безпекові. Запропоновано таксономію інструментів із критеріями правової придатності та умовами застосування; обґрунтовано модель «умовних стимулів», прив'язаних до оцінювання відповідності, аудиту алгоритмів, трасованості даних і механізмів швидкого відкликання. Сформовано алгоритм добору комбінацій: від профілю ризику й рівня автономності – до «зв'язки» регуляторної пісочниці, місіє-орієнтованих закупівель із контрольними точками та фіскальних важелів, прив'язаних до верифікованих етапів прогресу. Показано, що інноваційні закупівлі виконують роль мультиплікатора попиту, тоді як податкові стимули демонструють ефективність лише за умови «читання» життєвого циклу технології й доступності інфраструктури тестування. Виведено набір індикаторів, чутливих одночасно до інноваційного виходу і до якості процедур. Ефективне стимулювання автономних систем – це не сума пільг, а архітектура «швів» між підтримкою, відповідальністю й наглядом. Найкраще працюють комбінації інструментів, де кожен елемент не лише прискорює, а й страхує ризики сусіднього, зберігаючи можливість зупинки та корекції курсу без руйнування програми. Запропонована рамка придатна до прямої імплементації в політику інноваційних закупівель і програми підтримки R&D, забезпечуючи перевірність, процедурну легітимність та збереження довіри.

КЛЮЧОВІ СЛОВА

автономні системи, господарсько-правове стимулювання, регуляторні пісочниці, публічні закупівлі інновацій, ризик-орієнтоване регулювання, податкові стимули R&D, відповідальність і безпека, індикатори ефективності.

1. Introduction

Autonomous systems are no longer an exception and are increasingly becoming the infrastructure of everyday economies – invisible "engines" of production lines, logistics networks, service platforms and public services. That is why both public policy and economic and legal mechanisms to support innovation can no longer operate by inertia: they must learn to adapt to the risks that autonomy generates, as well as to the opportunities it presents – from accelerating industrial modernization to increasing productivity and resilience of supply chains [1–3]. In this plane, stimulation is not a purely fiscal or administrative technique; This is a legal matrix of choice, in which support tools must be internally aligned with the regimes of product safety, cyber defense, liability for damages and integrity of public procurement, so that the innovation impulse does not turn into a regulatory "corrosive environment" [4–9].

The Ukrainian context adds to this task the dimension of speed and strategic autonomy. The need for economic recovery, the technological breakthrough of the military-industrial complex, the digitalization of the public sector, and the emergence of special regimes for the food industry raise the question: what should be the dimensional and weight formula of legal incentives in order not only to create "greenhouse" conditions for developers, but also to sew into the fabric of the market responsible procedures for access to the operation of autonomous systems [10; 11]. Such a task is not solved by "one lever" of tax preferences or grants; It requires a flexible combination of tools – from innovative procurement to regulatory sandboxes, from contractual liability standards to data infrastructures that are open as safe as possible and closed as required by law [2; 7–9].

The European evolution of frameworks – from artificial intelligence to data, from general product safety to machines and cyber resilience – offers useful optics for Ukrainian law and order. Harmonized approaches to risk and compliance assessment, the principles of transparency and accountability of developers and users, new models of experimental regulation make it possible to turn incentives into conditional, gradual and verifiable – with reference to the level of autonomy, scope of application and safety evidence [1; 4–6; 8; 12]. At the center of such a model is not a "subsidy as such", but an incentive that is both a filter and a contract: it accelerates innovation, but for this, it requires higher standards of verification, algorithm auditing, and readiness to withdraw in case of detected flaws [12–14].

The scientific discourse of recent years only reinforces this thesis. The analysis of regulatory sandboxes in EU law, the relationship between innovation and security, the debate around models of responsibility for the actions of autonomous systems, as well as the study of public procurement of innovations as a policy – all this points to the advantages of risk-oriented, mission-oriented and adaptive capacities of the state compared to "flat" support instruments [12; 15–17]. Empirical work on the effects of tax incentives on R&D and startup markets shows that design matters: the same benefit works differently depending on the phases of the technology life cycle, funding structure, human resources and availability of test sites [18; 20]. In the legal plane, in the end, any stimulation of autonomy must be stitched with responsibility: otherwise, the "innovation debt" turns into external costs for the consumer and society [19; 13; 14].

The Ukrainian scientific conversation, which is growing around "sandboxes", European integration of standards, procurement of innovations and human rights in the context of the expansion of AI, suggests another framework – the framework of legitimation. Incentives should not only be legitimate from the point of view of economic law and related industries; They must be legitimate for the communities affected by autonomy: medical patients, urban communities, workers, and defense users. This requires high-quality communication, procedural guarantees of participation and supervision, as well as the integration of human rights standards into technical protocols and contractual terms [22–24; 27; 28]. As a result, we are faced with a research question that determines the trajectory of this article: how to design an economic and legal system of incentives for the production and use of autonomous systems in such a way that it simultaneously increases innovation output, reduces systemic risks and strengthens trust in public policy [7; 8; 16; 21; 25; 26].

The purpose of the study is to develop a risk-based, evidence-based framework for the selection and combination of economic and legal incentives – tax, financial, regulatory, procurement and infrastructure – for different classes of autonomous systems and scenarios for their use in Ukraine, taking into account European and global dynamics. Such a framework is designed to combine the efforts of rule-making with policy instruments, to create conditions for experimental, but responsible

implementation of autonomous systems and create mechanisms for evaluating effectiveness sensitive to security, human rights and competition [1–3; 6; 7; 12; 15; 17; 18; 22–24].

2. Literature Review

The thesis that the innovativeness of autonomous systems does not contradict security, but requires a different design of legal incentives, is consistently argued in modern European doctrine. Thus, T. Buoc, together with A. Fernandez et al. convincingly show that regulatory "sandboxes" can serve not as a "privilege to experiment", but as a procedural form of matching the speed of testing with verification, transparency and conditional admission to the market; To do this, the "pilot" status must be associated with increased requirements for supervision, data tracing and readiness for product recall [12]. The arguments of T. Moraz and co-authors are also consonant with these considerations, emphasizing that ethical "sandboxes" in AI ecosystems work only when they are embedded in the conformity assessment cycle and provided with feedback channels with users and the regulator [15].

In the plane of risk and responsibility distribution, A. Sáenz et al. rightly note that in the absence of algorithm audit procedures and clear rules for interaction between the developer and the operator, economic incentives "wash out" responsibility, shifting external costs to the consumer or the budget [13]. A view from a specific industry is added by M. L. Kubitsa, showing on the material of transport law how delicate differences in the doctrine of torts and insurance affect the distribution of risks between the manufacturer, integrator and operator of autonomous solutions; Therefore, any incentive scheme should be aligned with the national model of responsibility [19]. In the medical and legal context, A. Eldakak and co-authors emphasize that autonomous systems in healthcare increase the need for evidence-based safety and clear accountability routes; otherwise, the "legal debt" is rapidly growing in proportion to the scale of implementation [14].

When it comes to public policy instruments, S. F. Grimber et al. convincingly demonstrate that it is public procurement of innovations – in their "conventional", adaptive and mission-oriented forms – that becomes a key multiplier of demand for autonomous technologies, provided that the state has the procedural capacity to deal with uncertainty and risks [16]. O. Chiappinelli et al. summarize the state of knowledge in a broad overview: without strategic task setting and qualitative procurement performance metrics, even generous incentives are not converted into an innovative output [17]. This picture is complemented by the conclusions of J. S. Chen et al.: the effects of tax credits on R&D significantly depend on the phase of development of companies, access to venture capital and local knowledge infrastructure – so the same fiscal benefit gives different results in different sectors [18]. In a related plane, P. Hayek draws attention to the specifics of the tax credit for software development: the legal design of the benefit must "recognize" the immateriality of the result and the iterativeness of the development cycle, otherwise the incentive becomes a regulatory fiction [20].

Ukrainian scientific discourse adds localized accents. V. Ustymenko et al. conceptualize the regulatory sandbox as an innovation-oriented legal experiment, for which clear access criteria, time limits, exit procedures, and mechanisms of public control are critically needed, so that the experiment does not replace law and does not create asymmetries in the market [22]. A. Hachkevych rightly notes that "adaptation to EU standards" is not only technical harmonization, but synchronization of ethical and human rights requirements with engineering practices, especially for high-risk applications of autonomous systems [23]. V. Chubenko, continuing the line of demand policy, shows how public procurement in Ukrainian realities can (and should) become a channel for deep-tech innovations – provided that competitive neutrality, contestability and standardization of technical requirements are observed [24].

At the intersection of technology and human rights, V. Ignatusha emphasizes: contexts with increased humanitarian risk (in particular, defense) require an even stricter procedural framework of legitimation – transparency, accountability, external control – and the acceptability of any economic and legal incentives depends on it [25]. M. Popovych et al., analyzing privacy in the world of AI, actually set an "ethical barrier" beyond which stimulation loses its social license if it is not built into the mechanisms of data protection and procedural fairness [26]. S. Kravchuk focuses on general recommendations for the sustainable implementation of AI, where the key is the institutional design of safeguards – from algorithm audits to user complaint mechanisms [27]. Y. Volkova, reflecting on the right to use AI technologies through the prism of human rights, leads to an important point for our story: state incentives are legitimate only to the extent that they are integrated into the processes of assessing the impact on rights and freedoms and are accompanied by transparent communication practices [28].

Summarizing this body of work, we can derive a common denominator: mature stimulation of autonomous systems is not a "scattering" of benefits, but a design connection between experimentation (through "sandboxes"), state demand (through innovative procurement), fiscal levers (through R&D loans) and liability regimes that fix the limits of acceptable risk. It is this integrative optics of literature that determines the formulation of the task and the choice of methods in the following sections.

3. Problem Statement

The object of the study is the state policy of stimulating the production and use of autonomous systems, in which economic and legal instruments should be co-configured with risk-oriented regimes of safety, compliance and accountability [1]. The subject is economic and legal incentives and their combinations – tax, financial, regulatory, procurement and infrastructure – can accelerate the innovation cycle without undermining standards of responsibility and transparency [12].

The aim of the study is to create an integrated framework for the selection and combination of incentives for different classes of autonomous systems, taking into account the context of application, risk profile and institutional capacity of customers and regulators [7]. Accordingly, the main research question is formulated: what combinations of incentives provide the best ratio of innovation output and legal affiliation in Ukrainian conditions, taking into account the European trajectory of regulation and data exchange [2]?

The analytical hypothesis of the study proposed below is that contingent incentives tied to conformity assessment and supervision procedures outperform "flat" benefits when combined with innovative procurement tools and regulatory sandboxes that reduce the transaction costs of the experiment [8]. An additional hypothesis concerns measurability: the effectiveness of incentives is determined not only by the number of resources involved, but primarily by the quality of the legal result, which is recorded through the metrics of compliance, security and appealability of procedures [17].

To test hypotheses, it is proposed to solve several interrelated tasks: firstly, to conceptualize the concept of economic and legal stimulation of autonomous systems and to distinguish it from general instruments of innovation policy [12]. Secondly, to develop a taxonomy of incentives indicating the conditions for their lawful application and marginal risks, including anti-corruption and competition restrictions in the field of public procurement [9]. Thirdly, to construct a risk-based algorithm for selecting combinations of incentives depending on the level of autonomy, scope of use and evidence of safety, taking into account the modes of access to and use of data for training and testing [2]. Fourthly, to propose performance indicators that are sensitive to the phases of the technology life cycle and to the quality of procedures – from algorithm audits to complaint mechanisms [16].

The empirical field will be cases of innovative procurement and sandboxes in related jurisdictions, which allow comparing the institutional ability of the state to manage uncertainty and risk distribution between the producer, integrator and operator [15]. The Ukrainian section focuses on the possibilities of combining procurement, special digital economy regimes, and R&D support programs to generate demand for autonomous solutions, while maintaining appealability and competitive neutrality [11].

The expected scientific contribution is to build a verifiable, transparent methodology for political design of incentives, which simultaneously works as a map of legal constraints and as a tool for the strategic selection of tools for specific technological scenarios [7]. The practical result is a set of procedural "seams" between incentives, conformity assessment and public procurement, which can be directly implemented in standard conditions of support programs and customer documentation [9].

4. Methods and Materials

Methodologically, the article relies on an integrated framework that combines a dogmatic analysis of the norms of economic and related branches of law with a comparative legal approach, elements of policy design and assessment of the impact of regulation. This combination makes it possible not only to describe the available incentive tools, but also to design them in conjunction with the security, compliance and accountability procedures inherent in autonomous systems [1; 7]. Particular attention is paid to cross-validation of conclusions: legal arguments are tested on empirical and managerial suitability, while managerial hypotheses are "grounded" in legal constraints and procedures.

The empirical material consists of three types of sources: first, the corpus of judgments and conclusions of the modern doctrine of "sandboxes", public procurement of innovations, models of responsibility and the effects of fiscal stimulus; secondly, open data on procurement, grants and R&D

activity; thirdly, descriptive and analytical cases of the implementation of autonomous solutions in the fields of transport, healthcare and industrial automation. To compare managerial practices in the field of innovative procurement, instructive sources were used to assess the capabilities of public customers and mechanisms for the formation of "demand for innovations" [21]. The paper also uses an analysis of the modes of access to and use of data in the training and test circuits of autonomous systems in order to operationalize the requirements for transparency and reproducibility of results [2].

The selection of cases was carried out according to the logic of the contrast of jurisdictions and sectors: examples where experimental modes are integrated into compliance procedures (through "sandboxes") and procurement cycles, with cases where these relationships are absent or fragmentary, are compared. This design allows you to "see" the difference between speed without support and speed with procedural handrails, which is critical for high-risk applications [12; 16]. The same observation blocks are formed for each case: incentive tools, control configuration, responsibility distribution, performance metrics, and user feedback.

The operationalization of variables is carried out through three groups of indicators: innovative results (prototypes, pilots, market entry), legal affiliation of processes (audits, time/quality of conformity assessment, share of contested procedures) and security results (incidents, recalls, compliance with standards). The choice of such indicators is based on reviews of the effectiveness of procurement as an instrument of innovation policy and on empirical studies of the impact of R&D loans on the behavior of companies [17; 18]. To minimize biases, a "double binding" is used: each metric is interpreted simultaneously from the point of view of legal requirements and from the point of view of the manageability of the management process.

Analysis methods include qualitative comparison of cases, content analysis of documents and scientific publications, as well as logical and normative synthesis to build an algorithm for selecting combinations of incentives for different levels of autonomy. A separate step is risk mapping: for each application scenario, the "nodes" of potential harm are defined, to which the requirements of transparency, traceability, and feedback are attached, which arise as conditions for providing support [12]. The reliability of the conclusions is ensured by the replication of procedures: all steps of source selection, case coding and calculation of indicators are described so that they can be repeated in another sample or jurisdiction.

The limitations of the study are due to both the dynamics of regulatory changes and the heterogeneity of data by sectors and countries. To reduce the risk of the "snapshot effect", the analysis combines cross-section with short retrospective trajectory tracking in key cases, and also applies the sensitivity of the findings to variations in indicators. This allows you to maintain a balance between the rule-making horizon and the practical verification of management decisions in the field of autonomous systems.

5. Results and Discussion

Let's start with a framework in which "incentive" is understood not as an isolated benefit, but as a condition for admission to a controlled experiment, sewn with standards of security, transparency, and responsiveness. Such a reading translates the language of support from the plane of fiscal incentives to the plane of contractual and procedural obligations of the developer and the customer [12]. In this logic, the very fact of receiving support entails requirements for data traceability, model auditing, and readiness to quickly withdraw decisions in case of identified flaws, which reduces the risk of "washing out" responsibility in favor of external effects [13].

The taxonomy of tools in the proposed model consists of five interrelated branches: tax incentives for R&D and validation, grant and voucher mechanisms, regulatory sandboxes with conditional access, public procurement of innovations, and infrastructure agreements for polygons and shared datasets. Each branch is evaluated not only by the financial effect, but also by the ability of the tool to be embedded in conformity assessment and supervision procedures, which is critical for autonomous systems [1; 7]. Actually, this is where the "seam" between the economic and the legal arises: a support tool is considered mature only when it contains built-in mechanisms for stopping, restarting and transparent appeal.

Regulatory sandboxes streamline the experiment if their status does not turn into carte blanche, but work as a vertical of mutual obligations and procedural safeguards. The European doctrine convincingly shows that it is the linking of the "sandbox" to the conformity assessment cycle, to testing protocols and to feedback channels with the regulator that removes the main objections of skeptics [12;

15]. Additional legitimation is provided by the publicity of access rules and exit mechanisms, which is especially important in sectors with increased humanitarian risk.

Public procurement of innovations in this system is not just a way of acquisition, but a policy of generating demand for technologies for which there are no mature markets yet. When the state can formulate "mission" tasks, work with uncertainty, and measure intermediate results, procurement becomes a multiplier that entails private investment and standardizes security and transparency requirements [16]. Generalized reviews confirm that without such capabilities, even generous preferences do not turn into a verifiable innovation [17].

Fiscal tools perform better where they "read" the life cycle of technology and business, rather than acting uniformly across the entire field. Empirical studies demonstrate that the same benefit gives different effects depending on access to venture capital, team competencies, and local testing infrastructure [18]. The specifics of software development additionally require tax design to recognize the iterativeness and immateriality of the result, otherwise the incentive becomes declarative [20].

Liability regimes must be designed in parallel with incentives; otherwise, the immediate benefit of innovation turns into a long-term legal debt. Transport examples clearly show how the distribution of risks between the manufacturer, integrator and operator depends on subtle differences in national doctrines of tort law [19]. In the healthcare sector, safety evidence and decision tracing procedures act as an additional stabilizer, without which any stimulus quickly loses its social license [14].

A generalized algorithm for selecting instrument combinations suggests moving from a risk profile to a support design. First, the level of autonomy and the context of application are determined, after which a "bundle" of sandboxes, procurement contracts with built-in control points, and fiscal levers tied to verified stages of progress is selected [7]. The final tactic is the connection of infrastructure components such as polygons and shared data sets with clear rules for access and protection of user rights [2].

The Ukrainian section adds important contours of legitimation and implementation. A. Hachkevych's arguments about the "double crosslinking" of technical norms and human rights requirements in high-risk applications suggest how to avoid constitutionally significant conflicts at the stage of incentive design [23]. The conceptualization of "sandboxes" by V. Ustymenko and his colleagues helps to avoid the substitution of law for "experiment" by maintaining transparent access criteria, time limits, and exit mechanisms [22].

V. Chubenko's work on innovative procurement in Ukrainian realities shows how the demand tool works only under conditions of competitive neutrality, standardization of technical requirements and an effective appeal procedure [24]. In parallel, V. Ignatusha emphasizes the need for a stricter procedural framework where humanitarian risks are especially high, which directly affects the admissibility of any economic and legal incentives [25]. This is echoed by the conclusions of M. Popovych et al. about the need to protect privacy as a prerequisite for the acceptability of experimental regimes in civilian sectors [26].

To turn a framework into a management tool, indicators are needed that are sensitive to both the innovation result and the legal affiliation of the process. The first group includes prototypes, pilots, and validated market entry; the second is the time and quality of conformity assessment, the share of contested procedures and the results of algorithm audits [21]. The third group captures security consequences: incidents, recalls, compliance with industry standards and the effectiveness of complaint mechanisms, which closes the feedback loop.

As a result of the application of this matrix, we get several practical conclusions for political design. The "bundles" of instruments work best, in which each element not only stimulates, but also ensures the risks of other elements, while maintaining the possibility of stopping and correcting the course without destroying the entire program [16]. Where these "seams" are absent or declarative, incentives generate asymmetries and a zone of legal uncertainty, which ultimately affects trust and the pace of implementation [13].

6. Conclusions

In this article, it has been proposed to read incentives not as a set of scattered benefits, but as a holistic construction of mutual obligations, where each instrument must simultaneously accelerate innovation and ensure the risks that the neighboring one generates. Such a shift in perspective turns the incentive into a condition for responsible access to a controlled experiment, sewn into procedures of

transparency, verifiability, and readiness to quickly withdraw decisions. It is in this connection that economic and legal cease to compete and begin to work as one mechanism.

The key result was a matrix of instrument combinations that moves from the risk profile to the support design: from the regulatory sandbox and innovative procurement contracts with control points to fiscal levers tied to verified stages of progress, and the final link in the form of data infrastructures and test sites. This sequence allows you to accelerate the launch of autonomous systems from laboratories to production without losing trust, and therefore without increasing hidden external costs.

It has been established that the true effectiveness of the policy is manifested not only in the growth in the number of prototypes and pilots, but primarily in the quality of procedures: in the timing and transparency of conformity assessment, in the ability of the customer to work with uncertainty without substituting the right for "experiment", in the effectiveness of appeal mechanisms, and in the ability to promptly stop or restart projects. Where these "seams" are missing, incentives inevitably produce asymmetries that ultimately destroy the social license to implement.

The practical value of the proposed approach lies in the ability to directly integrate it into the documentation of customers and support programs: determine the thresholds for entering the experiment, formulate transparent rules for access to shared data, lay control points in contracts and preliminarily agree on "painless stop" algorithms. In this way, the state receives not only acceleration tools, but also a steering wheel for maneuvering in case of unforeseen consequences.

For Ukraine, this means the opportunity to stitch three previously disconnected trajectories – innovative procurement, fiscal incentives and experimental regimes – into one policy that works according to the logic of "security and accountability first, then scale". The recommendation is simple but demanding: the stimulus should be issued together with the procedure, and the procedure should be issued together with the measurable responsibility. Only in this format do autonomous systems turn from a source of regulatory anxiety into a lever of growth, which at the same time does not undermine institutional guarantees and does not deplete public trust.

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