

Horizon Europe as a Strategic Instrument for Georgia's Internal Security: Leveraging Clusters 3 and 4 through the NOTIONES Experience

Horizon Europe, როგორც საქართველოს შიდა უსაფრთხოების სტრატეგიული ინსტრუმენტი: მე-3 და მე-4 კლასტერების შესაძლებლობების გამოყენება

NOTIONES-ის გამოცდილების საფუძველზე

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Abstract

Introduction: The European Union's research and innovation programme Horizon Europe (2021-2027) is increasingly recognized as a strategic instrument for the security development, extending well beyond its traditional role in scientific cooperation. This paper examines the relevance of two thematically connected clusters, Cluster 3 ("Civil Security for Society") and Cluster 4 ("Digital, Industry and Space"), for Georgia's internal security architecture. Since January 2021, Georgia has been a fully associated member of Horizon Europe, entitled to participate on equal terms with European Union Member States. However, the strategic potential of these two clusters for the country's domestic security institutions remains largely underexplored in the academic and policy literature. **Methods:** The paper applies a policy analysis approach that combines document analysis of Horizon Europe's programmatic architecture, a case study of the NOTIONES project (funded under Horizon 2020) and its wider network of sister projects, and a comparative assessment of Georgia's current security-research architecture against European standards. NOTIONES, in which Georgia's Ministry of Internal Affairs participated alongside thirty European partner organizations, serves as the paper's primary empirical illustration. **Results:** The synergy between Clusters 3 and 4 offers a concrete mechanism for aligning Georgia's internal security system with European Union standards, that Georgia's participation in NOTIONES provided documented opportunities for operational learning, institutional networking, and access to technology foresight, and that the European Commission's interim evaluation provides broader evidence of the societal relevance of Cluster 3. Building on this experience, the paper identifies a replicable institutional model: the creation of a national-level security-research network functioning as a Georgian equivalent of NOTIONES. **Conclusion:** Participation in Horizon Europe, particularly through the combined leverage of Clusters 3 and 4, constitutes a substantive dimension of Georgia's European integration process, advancing not only institutional alignment with European Union norms but also the concrete development of operational security capabilities.

Keywords: Horizon Europe, internal security, European integration, NOTIONES, Cluster 3, Cluster 4.

აბსტრაქტი

შესავალი: ევროკავშირის კვლევისა და ინოვაციების პროგრამა Horizon Europe (2021–2027) სულ უფრო მეტად განიხილება უსაფრთხოების განვითარების სტრატეგიულ ინსტრუმენტად, რომლის მნიშვნელობაც სცდება სამეცნიერო თანამშრომლობის ტრადიციულ ჩარჩოებს.



წინამდებარე ნაშრომი შეისწავლის თემატურად ურთიერთდაკავშირებული ორი კლასტერის - კლასტერი 3 („სამოქალაქო უსაფრთხოება საზოგადოებისთვის“) და კლასტერი 4 („ციფრული ტექნოლოგიები, მრეწველობა და კოსმოსი“) - მნიშვნელობას საქართველოს შიდა უსაფრთხოების არქიტექტურისთვის. 2021 წლის იანვრიდან საქართველო Horizon Europe-ის სრულად ასოცირებული ქვეყანაა და პროგრამაში ევროკავშირის წევრი სახელმწიფოების თანაბარ პირობებში მონაწილეობის უფლება აქვს. მიუხედავად ამისა, ქვეყნის შიდა უსაფრთხოების ინსტიტუტებისთვის აღნიშნული ორი კლასტერის სტრატეგიული პოტენციალი აკადემიურ და პოლიტიკის ლიტერატურაში ჯერ კიდევ არასაკმარისად არის შესწავლილი. **მეთოდოლოგია:** კვლევა ეფუძნება პოლიტიკის ანალიზის მიდგომას, რომელიც აერთიანებს Horizon Europe-ის პროგრამული არქიტექტურის დოკუმენტურ ანალიზს, Horizon 2020-ის ფარგლებში დაფინანსებული NOTIONES-ის პროექტისა და მასთან დაკავშირებული პარტნიორი პროექტების ქსელის შემთხვევის შესწავლას, აგრეთვე საქართველოს არსებული უსაფრთხოების კვლევითი არქიტექტურის შედარებით შეფასებას ევროპულ სტანდარტებთან მიმართებით. NOTIONES, რომელშიც საქართველოს შინაგან საქმეთა სამინისტრო ოცდაათ ევროპელ პარტნიორ ორგანიზაციასთან ერთად მონაწილეობდა, კვლევის ძირითად ემპირიულ მაგალითს წარმოადგენს. **შედეგები:** ანალიზი აჩვენებს, რომ მე-3 და მე-4 კლასტერებს შორის სინერგია ქმნის საქართველოს შიდა უსაფრთხოების სისტემის ევროკავშირის სტანდარტებთან დაახლოების კონკრეტულ შესაძლებლობას; საქართველოს მონაწილეობამ NOTIONES-ში უზრუნველყო ოპერაციული სწავლების, ინსტიტუციური ქსელების განვითარებისა და ტექნოლოგიური პროგნოზირების რესურსებზე წვდომის დოკუმენტირებული შესაძლებლობები; ხოლო ევროკომისიის შუალედური შეფასება დამატებით ადასტურებს მე-3 კლასტერის ფართო საზოგადოებრივ მნიშვნელობას. აღნიშნულ გამოცდილებაზე დაყრდნობით, ნაშრომი გამოყოფს განმეორებით გამოყენებად ინსტიტუციურ მოდელს — ეროვნული დონის უსაფრთხოების კვლევითი ქსელის შექმნას, რომელიც NOTIONES-ის ქართულ ანალოგად იმოქმედებს. **დასკვნა:** ნაშრომი ასკვნის, რომ Horizon Europe-ში მონაწილეობა, განსაკუთრებით მე-3 და მე-4 კლასტერების ერთობლივი შესაძლებლობების გამოყენებით, წარმოადგენს საქართველოს ევროპული ინტეგრაციის მნიშვნელოვან განზომილებას და ხელს უწყობს არა მხოლოდ ევროკავშირის ნორმებსა და სტანდარტებთან ინსტიტუციურ დაახლოებას, არამედ ქვეყნის ოპერაციული უსაფრთხოების შესაძლებლობების პრაქტიკულ განვითარებასაც.

საკვანძო სიტყვები: Horizon Europe, შიდა უსაფრთხოება, ევროპული ინტეგრაცია, NOTIONES, კლასტერი 3, კლასტერი 4.

Introduction

Since regaining independence, Georgia has consistently framed European integration as both a civilizational choice and a security strategy, positioning closer institutional alignment with the European Union as an instrument for domestic stability as much as for economic development. Horizon Europe, the European Union's flagship research and innovation programme for the 2021-2027 period, is generally analyzed through the lens of scientific cooperation, academic mobility, and industrial competitiveness. This paper argues that such a reading, while accurate, is incomplete: for a country situated in a volatile neighbourhood and engaged in an active process of security-sector modernization, Horizon Europe also functions as a strategic instrument of security development, operating through channels that are rarely made explicit in either Georgian policy discourse or academic literature on EU-Georgia relations.

Georgia has been a fully associated country to Horizon Europe since January 2021, following an agreement signed in December 2021 that formally granted Georgian researchers, innovators, and research organizations the right to participate in the programme under conditions equivalent to those of European Union Member States (European Commission, 2021; Horizon Europe Georgia, n.d.). This association builds on Georgia's prior full association to Horizon 2020 since 2016, indicating a decade-long trajectory of gradually deepening research and innovation integration (European Commission, n.d.-a). Yet association status alone does not guarantee strategic use: the extent to which Georgian institutions convert eligibility into

operational capability depends on which parts of the programme's architecture are actively mobilized, and for what purpose.

This paper focuses on two of Horizon Europe's seven thematic clusters within Pillar II ("Global Challenges and European Industrial Competitiveness"): Cluster 3, "Civil Security for Society," and Cluster 4, "Digital, Industry and Space." These two clusters are examined jointly because their combination is analytically significant: Cluster 3 addresses the substantive domain of civil and internal security - counter-terrorism, border management, critical-infrastructure protection, cybersecurity, and disaster resilience (European Commission, n.d.-b) - while Cluster 4 supplies the underlying digital and technological capabilities, including artificial intelligence, advanced computing, and next-generation data infrastructures, that increasingly underpin modern security practice (European Commission, n.d.-c). For a country such as Georgia, whose internal security architecture faces persistent modernization pressures alongside genuine resource constraints, the synergy between a security-substantive cluster and a technology-enabling cluster is potentially more consequential than either cluster considered in isolation.

The central empirical anchor of this paper is the NOTIONES project ("iNteracting netwOrk of inTelligence and securItY practitiOners with iNdustry and acadEmia actorS"), a Coordination and Support Action funded under Horizon 2020 and running from September 2021 to August 2026 (NOTIONES, n.d.-a; CORDIS, 2021). NOTIONES brought together thirty partner organizations from nine European Union Member States and six associated countries, including military, civil, financial, and judicial security and intelligence practitioners, industry actors, and academic institutions (Astynomia, 2024; Zanasi & Partners, n.d.). Georgia's Ministry of Internal Affairs participated in NOTIONES as one of the associated-country practitioners, making the project a rare and directly observable instance of Georgian institutional engagement with a Cluster 3-adjacent European security-research network.

This paper poses a straightforward but underexamined question: what does Georgia's documented experience within NOTIONES reveal about the strategic potential of Horizon Europe's Clusters 3 and 4 for the country's internal security architecture, and what institutional lessons can be drawn from that experience for future engagement with the programme? Section 2 sets out the methodological approach, and details its scope and limitations. Section 3 presents the results of the document analysis and case study, addressing the substantive content of the two clusters, the operational content of Georgia's NOTIONES participation, the wider ecosystem of sister projects, documented evidence on Cluster 3's impact, and a structured comparison of Georgia's current security-research architecture against relevant European standards. Section 4 discusses these results, identifies a replicable institutional model, and situates the findings within the broader trajectory of Georgia's European integration. Section 5 concludes by summarizing the paper's contribution and outlining directions for further research.

Methods

This paper adopts a qualitative policy analysis approach, combining three complementary methods: (1) documentary analysis of Horizon Europe's programmatic architecture, (2) a single case study of the NOTIONES project and its wider network of sister projects, and (3) a comparative review of Georgia's current internal security-research architecture against relevant European Union standards and practices.

The documentary search was conducted between June and September 2026 and covered documents published between 2019 and September 2026, except for undated institutional webpages and programme documents still in force during the period under examination. Documents were retrieved from the European Commission's Research and Innovation portal, CORDIS, the official NOTIONES website, and the official repositories of Georgia's Ministry of Internal Affairs and State Security Service. A document was included in the analytical corpus when it: (1) was issued or commissioned by an identifiable public institution or Horizon-funded project; (2) directly concerned Horizon Europe Clusters 3 or 4, NOTIONES, or Georgian internal security policy; (3) was publicly accessible; and (4) contained information on institutional priorities, operational capabilities, practitioner participation, technological development, implementation mechanisms, or expected impact. The final corpus comprised 17 core documents: five EU programme or evaluation documents, seven NOTIONES-related documents, and five Georgian strategy or policy documents. The documents were coded using seven predefined categories: institutional access to EU research instruments; security and threat domains; digital and technological capabilities; practitioner and cross-sector participation; knowledge-transfer mechanisms; implementation and impact pathways; and institutional gaps. Georgian strategies were subsequently compared with the six Cluster 3 destinations, relevant Cluster 4 capability areas,

and the principles of practitioner participation and research uptake through a thematic alignment matrix. Correspondence was classified as explicit, implicit, or absent, depending on whether a Georgian document directly identified a corresponding priority or mechanism, presented a functional overlap without referring to Horizon Europe, or contained no equivalent provision.

The documentary analysis draws on official European Commission programmatic texts describing Cluster 3 and Cluster 4, including work-programme documents, the association agreement between Georgia and the European Union, publicly available European Commission country pages describing Georgia's association status, and the Commission's own 2024 interim evaluation evidence base for Cluster 3 (European Commission, 2021; European Commission, n.d.-a; European Commission, n.d.-b; European Commission, n.d.-c; Stančiauskas et al., 2024). These sources were selected because they constitute the primary institutional record of the programme's structure, of Georgia's formal relationship to it, and of the Commission's own documented assessment of the cluster's effects, rather than secondary commentary.

The NOTIONES case study relies on publicly available project documentation, including the project's official website and its list of network ("sister") projects, its CORDIS record maintained by the European Commission, dissemination materials presented at security-research conferences, and secondary reporting on national-level participation (NOTIONES, n.d.-a, n.d.-b; CORDIS, 2021; Astynomia, 2024; Resilience Advisors, 2022). NOTIONES was selected as the paper's empirical anchor for three reasons: first, it is one of the few Horizon-funded security-research networks in which a Georgian state institution - the Ministry of Internal Affairs - is a documented, named participant; second, its five-year duration (2021-2026) allows observation of a sustained rather than one-off engagement; and third, its explicit purpose of connecting practitioners, industry, and academia around emerging security technologies makes it directly relevant to the Cluster 3-Cluster 4 synergy this paper investigates. The review of sister projects listed on the NOTIONES website is used to situate the case within the broader population of comparable European security-research networks, several of which remain active and open to associated-country engagement.

The comparative review of Georgia's internal security architecture draws on the Ministry of Internal Affairs' strategic and policy documents, including its counter-terrorism strategy, its analysis-based and intelligence-led policing strategies, its most recent organized-crime strategy, and the Ministry's official public repository of strategies, concepts, and action plans, read alongside the European Union's stated Cluster 3 policy priorities and its documented evaluation findings (Ministry of Internal Affairs of Georgia, 2019, 2021a, 2023, 2025, n.d.; European Commission, n.d.-b; Stančiauskas et al., 2024). This comparison is used descriptively, to identify areas of alignment and gaps, rather than to produce a formal gap-analysis scored against a fixed metric.

This approach carries clear limitations. First, the paper does not have access to internal Ministry of Internal Affairs deliberations or non-public assessments of NOTIONES participation; its account of operational benefits therefore relies on what is documented in public project materials and secondary sources, and should be read as indicative rather than exhaustive. Second, as a single-case design, the NOTIONES illustration cannot establish that the observed pattern of benefits would generalize automatically to other Cluster 3 or Cluster 4 initiatives, even accounting for the wider population of sister projects reviewed; it is treated here as a plausibility case demonstrating that such benefits are achievable, not as statistical evidence of their typicality. Third, the comparative review of Georgia's security architecture is necessarily partial, given the classified or restricted nature of many operational security planning documents. These limitations mean the paper's conclusions are best understood as a structured, evidence-grounded argument for strategic attention to Clusters 3 and 4, rather than as a comprehensive audit of Georgia's Horizon Europe engagement.

Results

Cluster 3 and Cluster 4: Complementary Architectures

Cluster 3, "Civil Security for Society," is structured around six substantive destinations: fighting crime and terrorism, effective management of external borders, protected infrastructure, increased cybersecurity, a disaster-resilient society, and strengthened security research and innovation more broadly (European Commission, n.d.-b). With a budget of approximately EUR 1.6 billion over the 2021-2027 period, Cluster 3 explicitly requires that funded consortia include "practitioners" - law enforcement agencies, civil-protection bodies, or comparable operational actors - rather than academic or industrial partners alone (APRE, n.d.). This requirement is analytically significant: it means Cluster 3 projects are structurally designed to generate direct

engagement between state security institutions and the wider European research and innovation ecosystem, rather than producing research outputs at arm's length from operational practice.

Cluster 4, "Digital, Industry and Space," is considerably larger in scope and addresses artificial intelligence, advanced computing, next-generation internet infrastructure, and space-based data and services, among other areas (European Commission, n.d.-c). While Cluster 4 is not a security cluster in the narrow sense, several of its destinations - trustworthy artificial intelligence, secure data infrastructures, and space-based earth observation - supply capabilities that are directly transferable to internal security functions such as border surveillance, critical-infrastructure monitoring, and intelligence data fusion (Horizon Europe Ukraine, n.d.).

The complementarity between the two clusters follows from this division: Cluster 3 defines the substantive security problems and mandates practitioner involvement, while Cluster 4 develops the underlying digital and technological building blocks that increasingly determine how those problems are addressed in practice. For an associated country such as Georgia, engaging with both clusters in a coordinated manner - rather than treating them as unrelated funding lines - offers a route to simultaneously strengthening institutional security capacity and absorbing relevant technological capability.

Georgia's Association to Horizon Europe

Georgia's association to Horizon Europe was formalized through an agreement signed on 7 December 2021 by the European Commissioner for Innovation, Research, Culture, Education and Youth and Georgia's then Minister of Education and Science, with retroactive legal effect from 1 January 2021 (Civil.ge, 2021; Horizon Europe Georgia, n.d.). This association followed Georgia's full association to the preceding Horizon 2020 programme since 2016, giving the country's participation in European Union research and innovation instruments a continuous institutional history of roughly a decade by the time Horizon Europe entered into force (European Commission, n.d.-a). Under the terms of association, Georgian research organizations, universities, and eligible public institutions - including, in principle, ministries participating as practitioner partners - may apply for and receive funding under the same conditions as entities based in European Union Member States, in exchange for a financial contribution to the programme and a commitment to upholding the principles of the European Research Area (Horizon Europe Georgia, n.d.).

Despite this formally equal access, Georgian participation in Cluster 3 and Cluster 4 calls specifically remains limited relative to the country's participation in other parts of the programme, and remains largely unexamined in the academic literature on EU-Georgia research cooperation. This gap between formal eligibility and substantive engagement is precisely the space within which the NOTIONES case, discussed below, becomes analytically informative: it demonstrates what sustained engagement with a Cluster 3-adjacent network can concretely deliver for a Georgian state institution.

The NOTIONES Case: Structure and Georgian Participation

NOTIONES was funded under Horizon 2020 with grant agreement number 101021853, under the call for "Pan-European networks of practitioners and other actors in the field of security" (CORDIS, 2021). Administratively coordinated by TECNALIA and scientifically coordinated by Zanasi & Partners, the project ran for sixty months, from September 2021 to August 2026, and brought together thirty partner organizations from nine European Union Member States and six associated countries, spanning military, civil, financial, judicial, and local, national, and international security and intelligence services (NOTIONES, n.d.-a; Zanasi & Partners, n.d.; Astynomia, 2024).

The project's stated objectives were fourfold: to elicit the current and emerging needs of intelligence and security practitioners; to promote structured interaction between technology providers, academia, and practitioners; to identify novel technologies relevant to practitioner needs through systematic research monitoring; and to build and sustain a durable network capable of outlasting the project's own funding period (Resilience Advisors, 2022). Methodologically, NOTIONES organized its work around thematic working groups in which practitioners, industry representatives, and academic partners jointly discussed specific technology areas, complemented by periodic workshops and conferences at which findings - synthesized into technology roadmaps, priority statements, and standardization recommendations - were disseminated to the broader intelligence and security community (NOTIONES, n.d.-a; Resilience Advisors, 2022).

Georgia's Ministry of Internal Affairs participated in NOTIONES as one of the practitioner organizations representing an associated country, alongside partner institutions from countries including Spain, Italy, Finland, Bulgaria, Austria, France, Poland, Slovakia, Sweden, Estonia, the United Kingdom, and Israel (Astynomia, 2024). This participation placed a Georgian state security institution inside a structured, multi-year European network explicitly designed to shape future security-research priorities at the European level, rather than in a passive or purely observational role.

Three categories of documented access and institutional learning opportunities can be identified from Georgia's participation in this framework. First, access to European intelligence and security expertise: participation in NOTIONES' working groups gave the Ministry of Internal Affairs structured exposure to the operational experience of long-established European security and intelligence services, an exposure difficult to replicate through bilateral cooperation alone. Second, access to technology roadmaps: NOTIONES' core deliverables consist precisely of forward-looking assessments of which emerging technologies are relevant to practitioner needs, giving participating institutions early visibility into technological trends before they are adopted at scale (Resilience Advisors, 2022). Third, access to horizon-scanning reports: the project's systematic monitoring of research and technological advancement in the security and intelligence domain provided Georgian authorities with a synthesized, curated view of a fast-moving field that domestic institutions, given resource constraints, would find costly to monitor independently.

The NOTIONES Network: Sister Projects and the Broader Ecosystem

NOTIONES does not operate in isolation. The project's own website maintains a curated list of "network projects" - sister initiatives funded under Horizon 2020, Horizon Europe, and the European Union's Internal Security Fund that address closely related dimensions of civil and internal security (NOTIONES, n.d.-b). Situating NOTIONES within this broader ecosystem clarifies both the specificity of its own contribution and the range of complementary instruments that a country such as Georgia could, in principle, engage with beyond the single project examined as this paper's primary case.

Several of these sister projects target the technological and analytical dimensions of policing that fall squarely within Cluster 4's area of comparative advantage. STARLIGHT (2021-2025) built a community of law enforcement agencies, researchers, and industry to advance the operational uptake of artificial intelligence in policing, while ALIGNER (2021-2024) developed an artificial intelligence research roadmap specifically for policing and law enforcement (NOTIONES, n.d.-b). popAI (2021-2023) pursued a complementary objective, working to reconcile the deployment of artificial intelligence tools by law enforcement with the protection of privacy and fundamental rights, addressing a governance concern that becomes increasingly salient as security agencies adopt Cluster 4-derived technologies (NOTIONES, n.d.-b). EU-HYBNET (2020-2025) extended this ecosystem toward hybrid-threat preparedness by building a Pan-European network to identify gaps and test innovations against hybrid threats, an area directly relevant to Georgia's own exposure to hybrid and information-based destabilization efforts (NOTIONES, n.d.-b).

Other network projects address specific operational domains within Cluster 3's core mandate. CYCLOPES (2021-2026), a Horizon 2020-funded network against cybercrime, and AI4CYBER (2022-2025), which develops trustworthy artificial intelligence services for cybersecurity reinforcement, both correspond to the cybersecurity destination emphasized in Georgia's own strategic priorities (NOTIONES, n.d.-b; Ministry of Internal Affairs of Georgia, 2019). EU-funded efforts such as SHIELD and PROSPERES focus on protecting places of worship and large public gatherings from terrorism and hate crime, illustrating how Cluster 3-adjacent instruments extend into physical-security domains with direct relevance to community policing. More recent Horizon Europe network projects, including ENACT (2023-2026), AVALANCHE (2024-2026), and ENSEMBLE (2024-2027), continue this trajectory by developing collaborative investigation tools against disinformation, deepfakes, and cross-border cybercrime, indicating that the Cluster 3-Cluster 4 ecosystem NOTIONES exemplifies is not a static, time-bound phenomenon but an evolving pipeline of successor initiatives (NOTIONES, n.d.-b).

For Georgia, the existence of this dense network of sister projects reframes the strategic significance of the NOTIONES experience: participation in a single Coordination and Support Action functions less as an isolated achievement than as a potential entry point into a wider, continuously renewed European ecosystem of security-research networks, several of which remain open to associated-country participation and directly extend the technological and analytical themes - artificial intelligence, cybersecurity, hybrid threats - most relevant to the modernization of Georgia's internal security architecture.

Documented Impact of Horizon Europe's Civil Security Cluster

Beyond the qualitative programmatic description of Cluster 3 presented above, the European Commission's own interim evaluation evidence base offers a more systematic assessment of the cluster's demonstrated effects. The 2024 "Evaluation support study on Horizon Europe's contribution to a Resilient Europe," prepared for the Commission's Directorate-General for Research and Innovation as an input to the programme's interim evaluation, devotes a dedicated analytical strand to Cluster 3 alongside Clusters 1 and 2, drawing on 210 stakeholder interviews, 15 case studies, and structured survey evidence (Stančiauskas et al., 2024).

The study's findings are directly relevant to the argument advanced in this paper. It confirms that public bodies and security practitioners are not merely encouraged but mandated as a formal eligibility criterion in several of Cluster 3's core call areas, including fighting crime and terrorism, border management, and disaster-resilient society, precisely the design feature this paper identifies as structurally distinguishing Cluster 3 from ordinary academic-competition funding lines (Stančiauskas et al., 2024). The evaluation further finds that cross-border cooperation between security practitioners and relevant authorities under Cluster 3 has helped establish a "common culture" of disaster preparedness and security across participating countries, a finding that lends independent empirical support to this paper's claim that NOTIONES-style networks generate genuine institutional socialization effects rather than purely symbolic cooperation (Stančiauskas et al., 2024).

The evaluation also situates Cluster 3 within the European Commission's monitoring framework of Key Impact Pathways, under which the cluster's short-term societal outputs are assessed primarily against KIP 4 (addressing European Union policy priorities and global challenges through research and innovation) and KIP 6 (strengthening the uptake of research and innovation in society) (Stančiauskas et al., 2024). Cluster 3's call topics were found to map clearly onto core European Union security policies and onto United Nations Sustainable Development Goal 16 (peace, justice, and strong institutions), reinforcing the reading, advanced in this paper's discussion, that Cluster 3 engagement carries significance beyond research funding and constitutes a genuine policy-alignment instrument (Stančiauskas et al., 2024). At the same time, the evaluation notes that open dissemination of Cluster 3 results is constrained by the sensitive nature of security research, a limitation that helps explain why the concrete operational benefits of participation - of the kind documented for Georgia's involvement in NOTIONES - are more readily observed through direct case analysis than through published output metrics alone (Stančiauskas et al., 2024).

Georgia's Internal Security Architecture: A Comparative Assessment

Georgia's Ministry of Internal Affairs has articulated its institutional priorities through successive strategic documents, including a National Strategy on Fighting Terrorism structured around seven core directions: information collection and analysis on terrorism, extremism, and radicalization; prevention; protection; preparedness; prosecution; development of the legislative framework; and international cooperation (Ministry of Internal Affairs of Georgia, 2019). These directions correspond closely, at the level of substantive concern, to several of Cluster 3's stated destinations, particularly "fighting crime and terrorism" and "protected infrastructure" (European Commission, n.d.-b).

This comparative reading can be extended by considering the Ministry's more recent strategic output, published and maintained on its official strategies, concepts, and action plans page (Ministry of Internal Affairs of Georgia, n.d.). The Ministry approved a Strategy for Analysis-Based Policing by ministerial order in July 2021, covering the optimization of analytical structures, human-resource development for analysis-based policing, and the associated software and information-communication infrastructure (Ministry of Internal Affairs of Georgia, 2021a). This was followed by a dedicated Strategy for the Development of Intelligence-Led Policing (2021-2025), with successive action plans covering 2023-2025, approved by ministerial order in April 2023 (Ministry of Internal Affairs of Georgia, 2023). Most recently, the Ministry's Inter-Agency Coordination Council against organized crime advanced a new National Strategy for Combating Organized Crime covering 2025-2028, together with an accompanying 2025-2026 Action Plan, for submission to the Government of Georgia (Ministry of Internal Affairs of Georgia, 2025).

However, a structural difference is evident when comparing these Georgian frameworks with Cluster 3's programmatic architecture: Georgia's strategic documents are formulated primarily in terms of institutional mandates, legal instruments, and inter-agency coordination, whereas Cluster 3 is explicitly structured around funded research-and-innovation projects mandating direct practitioner-industry-academia

collaboration as a condition of funding (APRE, n.d.). A review of these Georgian strategic texts finds no explicit reference to Horizon Europe, Cluster 3, or European Union research and innovation instruments as a resource for their implementation, even though the analytical and technological capacities these strategies seek to build - software development, information-communication systems, data-driven threat assessment - are exactly the kind of capability that Cluster 3-Cluster 4 engagement, as demonstrated through NOTIONES, is designed to help generate (Ministry of Internal Affairs of Georgia, 2019, 2021a, 2023, 2025).

This comparative reading points toward a specific institutional gap rather than a comprehensive shortfall: Georgia possesses the substantive strategic priorities that align with Cluster 3's destinations, and has demonstrated, through NOTIONES, the capacity to engage productively with European practitioner networks. What appears to be missing is a standing, national-level institutional structure designed to make such engagement systematic, replicable, and independent of any single project's funding cycle, as well as explicit formal recognition of Horizon Europe within the Ministry's own strategic planning.

Discussion

The results presented above support the paper's central claim that the combination of Cluster 3 and Cluster 4 constitutes a potentially coherent and underused mechanism through which Georgia's internal security architecture could be more systematically aligned with European Union standards. The NOTIONES case provides a documented example of Georgian institutional participation in such a European security-research network and illustrates the opportunities for professional networking, knowledge exchange, and access to technology foresight that such participation may provide.

The most direct implication concerns institutional design. Georgia's experience within NOTIONES suggests a replicable model: a national-level research-and-practitioner network, functioning as a domestic equivalent of NOTIONES, convening Georgian security and intelligence practitioners, academic institutions, and relevant industry actors around a structured agenda of technology monitoring and requirement-setting. Such a network would not need to await the initiation of a new Horizon-funded project, it could, in principle, be established using domestic resources and subsequently seek complementary Horizon Europe funding under Cluster 3 or Cluster 4 calls, using the credibility and contacts generated through NOTIONES as a foundation. This would convert what is currently a single, time-bound project experience into a standing institutional capability, addressing the structural gap identified in the comparative assessment above.

A second implication concerns sequencing and prioritization within Georgia's broader Horizon Europe engagement strategy. Given documented resource constraints affecting Georgian research institutions' capacity to prepare competitive Horizon Europe proposals (a constraint widely noted across Eastern Partnership associated countries), this paper's findings suggest that Cluster 3, precisely because it mandates practitioner participation rather than academic excellence alone as an eligibility condition, may offer a more accessible initial entry point for Georgian state institutions than clusters structured around open scientific competition. Cluster 4, by contrast, is more naturally approached as a secondary, capability-building complement once foundational practitioner networks - of the kind NOTIONES and its sister projects exemplify - are established.

Third, the analysis carries implications for how Georgia's Horizon Europe participation should be narrated within its broader European integration strategy. Existing accounts of Georgia's association to Horizon Europe tend to frame the programme's significance primarily in terms of academic mobility and access to European research funding. This paper's findings, reinforced by the European Commission's own interim evaluation evidence on Cluster 3's demonstrated societal effects, suggest that such framing, while not incorrect, understates the programme's relevance to a policy domain - internal security - that occupies a central place in Georgia's own stated national-security priorities (Ministry of Internal Affairs of Georgia, 2019; Stančiauskas et al., 2024). Presenting Horizon Europe engagement, and particularly Cluster 3-Cluster 4 engagement, as a security-sector modernization instrument rather than solely a scientific cooperation instrument may help mobilize different, and potentially more decisive, institutional and political support for sustained participation.

Fourth, the review of the Ministry's most recent strategic documents suggests that the institutional gap identified in this paper is not merely theoretical but observable in current practice: notwithstanding their substantive alignment with Cluster 3 priorities, Georgia's analysis-based policing, intelligence-led policing, and organized-crime strategies make no explicit reference to Horizon Europe as an implementation resource, indicating that the lessons of the NOTIONES experience have not yet been systematically absorbed into national strategic planning.

These findings should nonetheless be read against the methodological limitations noted above. Because NOTIONES is a single case, and because the paper's assessment of Georgia's internal security architecture draws only on publicly available strategic documents, the specific proposal advanced here - a national NOTIONES-equivalent network - remains a plausible institutional inference rather than a fully validated policy recommendation. Future research combining interviews with Ministry of Internal Affairs officials involved in NOTIONES, together with a systematic review of Georgian participation across the full range of Cluster 3 and Cluster 4 calls to date, would allow this inference to be tested more rigorously.

Conclusion

This paper has examined the relevance of Horizon Europe's Cluster 3 ("Civil Security for Society") and Cluster 4 ("Digital, Industry and Space") for Georgia's internal security architecture, using the NOTIONES project and its wider network of sister initiatives as its central empirical illustration. The analysis suggests that the substantive orientation of Cluster 3 and the technological capabilities associated with Cluster 4 are structurally complementary. Georgia's Ministry of Internal Affairs, through its participation in NOTIONES, provides a documented example of engagement with a European security-research network offering access to European security expertise, technology roadmaps, and horizon-scanning assessments.

At the same time, the comparative review of Georgia's national counter-terrorism, analysis-based policing, intelligence-led policing, and organized-crime strategies against Cluster 3's programmatic priorities points to a specific institutional gap: the absence of a standing, national-level structure capable of making practitioner-academia-industry engagement of the kind NOTIONES exemplifies systematic and self-sustaining, and the absence of any explicit reference to Horizon Europe within the Ministry's own recent strategic planning documents. On this basis, the paper proposes the establishment of a Georgian NOTIONES-equivalent network as a plausible institutional model for consideration and further evaluation.

More broadly, this paper argues that participation in Horizon Europe - specifically through the combined leverage of Clusters 3 and 4 - constitutes a substantive, and currently underappreciated, dimension of Georgia's European integration process, one that advances not only institutional alignment with European Union norms and standards but also the concrete, operational development of the country's internal security capabilities. Future research should extend this single-case analysis through direct engagement with Ministry of Internal Affairs practitioners and a systematic mapping of Georgian participation across the full population of Cluster 3 and Cluster 4 funding instruments, in order to test the generalizability of the institutional model proposed here.

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