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DIGITAL TRANSFORMATION AND PROACTIVE PROSECUTORIAL OVERSIGHT: STRENGTHENING RULE OF LAW AND ANTI-CORRUPTION EFFORTS IN UZBEKISTAN'S PUBLIC ADMINISTRATION

Gulrukh Burkhanova

Deputy Prosecutor of Bektemir District, Tashkent City

g.burhonova1989@mail.ru

Abstract. Uzbekistan has rebuilt the legal architecture of its anti-corruption system over the past decade: a corruption-specific criminal law (2017), an Anti-Corruption Agency answerable to the President and Parliament (2020), a revised Constitution (2023), and a decree approving the "Digital Prosecutor's Office - 2030" strategy (2025), alongside a national e-government push under the Digital Uzbekistan - 2030 strategy. Yet the country's Corruption Perceptions Index score, having risen from 22 in 2017 to a peak of 33 in 2023, has fallen for two consecutive years, to 32 in 2024 and 31 in 2025. This article argues the plateau reflects a structural gap, not a lack of political will: prosecutorial oversight remains largely reactive because tax, customs, procurement, and land databases stay unlinked at the point of prosecutorial analysis. Drawing on the World Bank's Governance Risk Assessment System, the EU's ARACHNE tool, and Estonia's X-Road interoperability model, the article proposes a sequenced pathway for embedding predictive risk-analytics into the Digital Prosecutor's Office - 2030 strategy, converting oversight from an after-the-fact function into a continuous safeguard of the rule of law.

Keywords: prosecutorial oversight, digital transformation, anti-corruption, rule of law, e-government, risk analytics, interoperability, Uzbekistan

1. Introduction

Corruption in public administration is rarely one discrete act; it is usually the visible edge of an administrative process, a procurement award, a licensing decision, a land allocation, never designed to be checked in real time. Prosecutorial bodies across the former Soviet space, Uzbekistan included, have traditionally supervised legality after the fact: responding to complaints or opening a case once a loss has already occurred. Uzbekistan's post-2016 reform program has modernized the legal scaffolding of anti-corruption enforcement, yet its own corruption-perception trajectory suggests scaffolding alone is not enough. This article asks a narrow question: what digital capability is still missing from Uzbekistan's prosecutorial toolkit, and what would it take to add it. Section 2 outlines the legal framework for prosecutorial anti-corruption oversight; Section 3 reviews Uzbekistan's e-government progress and the resulting oversight gap; Section 4 reviews international models of digital risk-based oversight; Section 5 proposes a sequenced solution within the "Digital Prosecutor's Office - 2030" strategy.

2. Legal and Institutional Framework for Prosecutorial Anti-Corruption Oversight

2.1 Constitutional and Statutory Foundations

The Prosecutor's Office derives its supervisory mandate from Law No. 746-XII, "On the Prosecutor's Office" (Republic of Uzbekistan, 1992), most recently amended by Law No. ZRU-1008 of November 29, 2024 (Koliboyev, 2026). The constitutional referendum of April 30, 2023, approved by 90.2 percent of voters, recast the state's institutional balance, including a requirement that the Senate consult on the President's nominee for Prosecutor General (Library of Congress, 2023). Building on this, Decree No. UP-204 of November 3, 2025, approved the "Digital Prosecutor's Office - 2030" strategy, committing

the system to automated supervision and artificial-intelligence-supported risk forecasting aimed at shifting prosecutorial work "from reactive investigation to proactive legal prevention" (Koliboyev, 2026), alongside the 2025 to 2026 transfer of corruption-investigation authority from separate agencies to the prosecutor's office (Koliboyev, 2026).

2.2 The Anti-Corruption Institutional Architecture

Substantive anti-corruption law rests on Law No. ZRU-419, "On Combating Corruption," adopted January 3, 2017, the first Uzbek statute to define corruption, corruption offenses, and conflict of interest, since supplemented by more than thirty related acts (Republic of Uzbekistan, 2017; Transparency International Knowledge Hub, n.d.). The decisive step came on June 29, 2020, with the Anti-Corruption Agency, accountable directly to the President and, through an annual report, to Parliament (Anti-Corruption Agency of the Republic of Uzbekistan, n.d.), followed by the eantikor.uz reporting platform built with the European Union and UNDP (UNDP Uzbekistan, n.d.-b) and a monitoring platform modeled on a Korean tool (UNDP Seoul Policy Centre, n.d.). The OECD's 2024 baseline report under the Istanbul Anti-Corruption Action Plan confirmed this progress while flagging gaps in the independence and investigative reach of oversight bodies (OECD, 2024).

3. Digital Transformation of Public Administration: Progress and the Oversight Gap

3.1 Digital Uzbekistan - 2030 and E-Government

Approved by Decree No. UP-6079 of October 5, 2020, the Digital Uzbekistan - 2030 strategy targets a place among the thirty highest-ranked countries in the UN E-Government Development Index (OECD.AI Policy Observatory, n.d.). Progress has been measurable: the index score rose from 0.7265 in 2022 (69th place) to 0.7999 in 2024 (63rd), moving Uzbekistan into

the "very high" category ahead of schedule. More than 760 services are now delivered through the Unified Interactive Public Services Portal, and Ijro.gov.uz, operating since May 1, 2021, centralizes execution-discipline tracking across state bodies (UNDP Uzbekistan, n.d.-a; Republic of Uzbekistan e-Government Portal, n.d.).

3.2 The Persistent Problem: Fragmented Data and Reactive Supervision

None of this has produced what prosecutorial oversight most needs: a single, cross-agency risk picture available at the moment a decision or contract is made, rather than after a complaint is filed. Ijro.gov.uz tracks whether an instruction was executed on time; it does not flag, for example, a procurement award to a supplier whose beneficial owner also sits in the awarding body. Uzbekistan's Corruption Perceptions Index trajectory fits this diagnosis: the score rose from 22 in 2017 (157th of 180 states) to 31 in 2022 (126th) and a historic high of 33 in 2023 (Tashkent Times, 2017; Gazeta.uz, 2024), then fell to 32 in 2024 (121st of 180) and 31 in 2025 (124th of 182), a second consecutive decline (Kun.uz, 2025; Gazeta.uz, 2026). As Transparency International's 2025 country note observes, "formal reforms have delivered some progress, but journalists and bloggers exposing corruption still face harassment or prosecution, limiting the impact of anti-corruption efforts" (Gazeta.uz, 2026), a pattern consistent with institution-building having outpaced the analytical infrastructure needed to detect risk before, not after, harm occurs.

4. International Models of Digital Risk-Based Oversight

4.1 The World Bank's GRAS and the EU's ARACHNE

The World Bank's Governance Risk Assessment System applies sixty indicators across the procurement cycle to detect fraud and collusion; piloted in four Brazilian subnational governments, it identified over 850 suppliers

showing signs of collusion, about 450 likely strawman registrations, some 500 conflict-of-interest cases, and roughly 4,500 firms with political-campaign ties (World Bank, 2023). The EU's ARACHNE tool, in use since 2009, screens over one hundred risk indicators across seven categories for Cohesion Policy funds (European Commission, n.d.). Both are designed to support, not replace, human judgment, generating leads rather than automated findings of wrongdoing.

4.2 Estonia's X-Road: Interoperability as Infrastructure

Risk-scoring depends on a precondition Uzbekistan has not yet met: one agency's database being securely queryable by another in real time. Estonia's X-Road, built on the principle that "data resides where it is created," lets each agency keep ownership of its own database while exposing defined fields to other authorized bodies through a shared exchange layer (e-Estonia, n.d.), now used in over twenty countries and credited as the backbone of Estonia's rise from sixteenth to second place in the UN E-Government Development Index between 2018 and 2024 (e-Estonia, n.d.). A GRAS- or ARACHNE-style capability cannot be built on Ijro.gov.uz alone; it needs an interoperability layer of this kind linking the tax, customs, cadastre, procurement, and court systems.

5. A Policy Proposal for the Digital Prosecutor's Office - 2030 Strategy

The Digital Prosecutor's Office - 2030 strategy already commits Uzbekistan to artificial-intelligence-supported risk forecasting (Koliboyev, 2026); what remains is implementation, in three sequenced steps. First, build an X-Road-style interoperability layer connecting prosecutorial oversight to the tax, customs, cadastre, and procurement systems, preserving each agency's ownership of its own data rather than centralizing it. Second, pilot a risk-scoring methodology adapted from GRAS and ARACHNE, covering beneficial-ownership overlap and statistical deviation in land or licensing decisions, in a small number of regional prosecutor's offices before national

rollout, mirroring GRAS's own subnational pilots in Brazil (World Bank, 2023). Third, treat resulting scores strictly as investigative leads triggering human review, never as automated findings, so due-process protections keep pace with analytical capacity. A nationwide system launched before the interoperability layer exists would risk repeating the pattern already visible in Uzbekistan's corruption-perception trajectory: announcing capability before building the infrastructure that makes it real.

6. Conclusion

Uzbekistan has, in under a decade, built most of the legal and institutional apparatus anti-corruption reform is conventionally understood to require. The plateau and recent decline in its corruption-perception score suggest this apparatus has reached the limit of what reactive, complaint-driven oversight can achieve. Closing the gap needs less new legislation than new infrastructure: a secure interoperability layer connecting databases that already exist, paired with a risk-scoring methodology tested internationally through GRAS and ARACHNE. The Digital Prosecutor's Office - 2030 strategy supplies the legal mandate; what it now needs is a phased, tested, human-review-anchored implementation plan of the kind outlined here.

REFERENCES

Anti-Corruption Agency of the Republic of Uzbekistan. (n.d.). About agency. Anticorruption.uz. https://anticorruption.uz/en/about

e-Estonia. (n.d.). X-Road. https://e-estonia.com/solutions/interoperability-services/x-road/

European Commission. (n.d.). What is ARACHNE? Anti-Fraud Knowledge Centre. https://employment-social-affairs.ec.europa.eu/policies-and-activities/funding/european-social-fund-plus-esf/what-arachne_en

Gazeta.uz. (2024, January 30). Uzbekistan rises in Transparency International's Corruption Perceptions Index. https://www.gazeta.uz/en/2024/01/30/transparency-international-cpi/

Gazeta.uz. (2026, February 13). Uzbekistan falls in Corruption Perceptions Index for second year in row. https://www.gazeta.uz/en/2026/02/13/corruption-perceptions-index/

Koliboyev, D. R. (2026). Legal status and modern changes in the powers of prosecutorial bodies of the Republic of Uzbekistan. Research and Publications. https://doi.org/10.5281/zenodo.19542753

Kun.uz. (2025, February 12). Uzbekistan ranks 121st in the 2024 Corruption Perception Index. https://kun.uz/en/news/2025/02/12/uzbekistan-ranks-121st-in-the-2024-corruption-perception-index

Library of Congress, Global Legal Monitor. (2023, May 30). Uzbekistan: New constitution takes effect. https://www.loc.gov/item/global-legal-monitor/2023-05-30/uzbekistan-new-constitution-takes-effect/

Organisation for Economic Co-operation and Development. (2024). Baseline report of the fifth round of monitoring of anti-corruption reforms in Uzbekistan: Istanbul Anti-Corruption Action Plan. OECD Publishing. https://www.oecd.org/en/publications/2024/11/baseline-report-of-the-fifth-round-of-monitoring-of-anti-corruption-reforms-in-uzbekistan_a7d9ab4c.html

OECD.AI Policy Observatory. (n.d.). Digital Uzbekistan - 2030. https://oecd.ai/en/dashboards/policy-initiatives/digital-uzbekistan-2030-3968

Republic of Uzbekistan. (1992). Law No. 746-XII, On the Prosecutor's Office.

Republic of Uzbekistan. (2017). Law No. ZRU-419, On Combating Corruption. United Nations Office on Drugs and Crime. https://track.unodc.org/uploads/documents/BRI-legal-resources/Uzbekistan/1_-_Law_on_Combatting_Corruption_EN.pdf

Republic of Uzbekistan e-Government Portal. (n.d.). Ijro.gov.uz: Unified electronic system for ensuring execution discipline. Us.uz. https://us.uz/en/products/post-152

Tashkent Times. (2017, February 22). Uzbekistan ranks 157th in Corruption Perceptions Index 2017. http://tashkenttimes.uz/national/2104-uzbekistan-ranks-157th-in-corruption-perceptions-index-2017

Transparency International Knowledge Hub. (n.d.). Corruption and anti-corruption efforts in Uzbekistan. https://knowledgehub.transparency.org/helpdesk/corruption-and-anti-corruption-efforts-in-uzbekistan

UNDP Seoul Policy Centre. (n.d.). Uzbekistan launches electronic platform for monitoring and evaluation of anti-corruption measures inspired by Korean tool.

https://www.undp.org/policy-centre/seoul/news/uzbekistan-launches-electronic-platform-monitoring-and-evaluation-anti-corruption-measures-inspired-korean-tool

UNDP Uzbekistan. (n.d.-a). Uzbekistan's path in overcoming corruption. https://www.undp.org/uzbekistan/stories/uzbekistans-path-overcoming-corruption

UNDP Uzbekistan. (n.d.-b). Preventing corruption through effective, accountable and transparent governance institutions in Uzbekistan [Project page]. https://www.undp.org/uzbekistan/projects/preventing-corruption

World Bank. (2023). Governance Risk Assessment System (GRAS): Advanced data analytics for detecting fraud, corruption, and collusion in public expenditures. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099110723040010259