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CASE STUDY

UKRAINE

GovTech in the Era of Agentic AI

The Vision · Stay in Control · Manage the Transition · Fund it Through Savings

An ID30 summary analysis of:

Ovcharenko D., Tsvok D., Ilves L., Kilian M., Parazzoli S.M. et al. (2026).
'Building the Agentic State in Ukraine: Roadmap from Vision to Implementation.' — agenticstate.org

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Why This Document Matters

for Governments & Development Partners

The Global Stakes

Every government faces the same question: what does governing well mean when AI can reason, coordinate, and act at scale? Ukraine is the most advanced public case study in existence.

The ID30 Lens

We read this roadmap through the lens of clients in West Africa, the Horn of Africa, and the Western Balkans — countries building digital identity foundations today that will become the base layer for agentic services tomorrow.

Three Filters

1. The Vision — what is the Agentic State and why now?
2. Control & Governance — how do you keep AI from running away?
3. Economics — how do you fund the transition through demonstrated savings?

ID30 READING KEY

12
Architecture layers covering the full stack

3
Deployment phases 2026 → 2030+

23M
Citizens already active on the Diia platform

5th
UN eGov ranking (from 102nd in 2019)

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CONTEXT

From Digital State to Agentic State

UKRAINE — A PROVEN TRACK RECORD

102nd → 5th

UN eGovernment ranking since 2019

23M

Citizens active on the Diia platform

2026

National AI Strategy launched

DIGITAL STATE (reactive)

The citizen identifies their need, finds the right agency, fills the form, and follows up. Government responds — it does not anticipate.

AGENTIC STATE (proactive)

Grounded in legal basis, consent, and accountability: government anticipates needs, coordinates across agencies, and acts within clear boundaries.

The Paradigm Shift

This is not a technology upgrade. It is a new operating model. Digitisation made existing processes faster. The Agentic State redesigns the processes themselves.

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ARCHITECTURE

The 12-Layer Framework

IMPLEMENTATION LAYERS (1–6) — The visible face of the Agentic State

1 — Public Service UX

Diia.AI — conversational citizen & business interface

2 — Internal Workflows

Civil servant agent — drafting, compliance, service building

3 — Policy & Rule-Making

AI-assisted co-creation of regulation

4 — Compliance & Supervision

Real-time continuous monitoring agent

5 — Crisis Response

New services deployed in days

6 — Public Procurement

Automated procurement agents

ENABLEMENT LAYERS (7–12) — Governance · Data · Tech Stack · Cybersecurity · Finance · People

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IMPLEMENTATION

Three Agents of the Agentic State

01

CITIZEN AGENT

Diia.AI — Public-Facing

WHAT

Live since September 2025. Conversational single front door to all government services.

HOW

Natural language → orchestrates specialised back-end agents → unified, auditable response.

MODE

Reactive (current) + Proactive (in dev): life events, financial distress, regulatory exposure.

TECH

LLM + PII anonymisation · Liquio low-code · MCP · Google Vertex AI

02

CIVIL SERVANT AGENT

Internal Workflows

WHAT

Secure AI for civil servants: drafting, regulation Q&A, and on-the-fly service construction.

HOW

Fine-tuned LLM on government corpus. Sourced & citable answers. Pre-wired MCP scaffolding.

MODE

3 tiers: No-code (domain experts), Low-code (analysts), Full-code (developers). Internal marketplace.

TECH

GovKnowledge API · Agent Registry · Architectural guardrails built-in

03

COMPLIANCE AGENT

Regulatory Supervision

WHAT

Continuous real-time regulatory monitoring. Replaces periodic, document-heavy audits.

HOW

'Rules as Code' by gov. Firm-Side Agents generate cryptographic compliance proofs.

MODE

Management by exception: AI flags anomalies. Regulator focuses on real-risk cases only.

TECH

Distributed privacy-preserving · Zero-knowledge proofs · Commercial confidentiality preserved

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ID30 ANALYSIS

Vibe Coding &

On-the-Fly Application Generation

INTERNAL CREATION PLATFORM — 3 TIERS

NO-CODE — Domain Experts

Lawyers, analysts, educators build AI assistants in plain language — zero coding. Example: a legal officer independently builds a Ukraine/EU directive comparison tool.

LOW-CODE — Business Analysts

Visual decomposition of government processes into automated workflows. Conditional logic, registry connections, AI-powered review steps. Full agentification of complex procedures.

FULL-CODE — Developers

Custom agents via MCP, cross-registry orchestration, advanced architectures. Published to the internal government marketplace for cross-ministry reuse.

Guardrails are architectural, not policy. Identity, audit, APIs are pre-wired —

CRITICAL RISKS — ID30 ASSESSMENT

⚡ ENERGY & COST

Intensive LLM use generates massive power consumption. Cloud inference at scale (Vertex AI, Azure) for millions of citizens can explode in cost. ROI must be demonstrated service by service — and it can be.

🏛 SOVEREIGNTY

Dependency on foreign models and clouds (Google, Microsoft, AWS) for state data. Ukraine targets a sovereign LLM with on-premise compute — a real constraint for developing countries.

🔒 SECURITY

Thousands of autonomous agents across ministries create an unprecedented attack surface. Zero Trust is mandatory but complex. Prompt injection, hallucinations, compromised agents — new risks, no precedent.

⚠ AI GOVERNANCE

Who is responsible when an agent makes a wrong decision? Vibe coding acceleration risks multiplying ungoverned agents (shadow automation). Architectural guardrails are necessary but not sufficient.

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TECHNICAL FOUNDATIONS

The Agentic GovStack — Nervous System

GovStack Orchestration

Central layer routing all agent-to-agent and agent-to-legacy communication. API Gateway + Service Mesh. Every interaction logged and auditable.

GovKnowledge API

Single versioned source of truth for all laws, regulations, FAQs. Every agent cites its legal basis. Updated once centrally — all dependants update instantly.

Agent Registry

Machine-readable directory of every authorised government agent. Cryptographic identity, authorisation scope, operational status. The 'Yellow Pages' of the state.

Data Mesh

Federated architecture: each ministry exposes data as standardised 'data products.' No centralisation — permissioned discovery and access. Domain-owned data.

Hybrid Compute Fabric

Sovereign on-premise core (NVIDIA DGX) for sensitive data + multi-cloud (Azure, GCP, AWS) for scale. Kubernetes-unified management layer.

CORE ARCHITECTURAL PRINCIPLE

Applications are thin orchestrators — no siloed logic, no private databases. Each new service strengthens the whole rather than creating a new monolith.

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GOVERNANCE — LAYER 7

Human Oversight & Accountability

HIGH-STAKES DECISIONS

Human-in-the-Loop

— AI drafts, analyses, proposes

— Civil servant reviews and signs

— Guaranteed right to human appeal

— Admin logs serve as legal evidence

ROUTINE SERVICES

Human-on-the-Loop

— Autonomous agents for Q&A, certificates

— Ex-post review by service team

— Citizen feedback (👍/👎) drives improvement

— Service Owner accountable for agent performance

IAI TEAM — Instruction & Alignment Intelligence

Continuous trace review · Prompt correction · Golden Dataset curation · Proactive red-teaming of production agents.

TRUST KPIs

Human Override Rate · Hallucination Frequency · Appeal Resolution Time · Prompt Iteration Cycle · Public Redress Satisfaction

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ROADMAP

Three-Phase Deployment

Phase 01 · 2026–2028

EXPLORE & ESTABLISH

Build shared foundations. Structured experimentation.

- → Agent Registry — universal cryptographic identity
- → Diia.AI service catalogue expansion
- → GovStack API Gateway — mandatory for all new services
- → Hybrid Compute Fabric (sovereign + cloud)
- → Data Mesh pilot — Finance, Justice, Social
- → Internal Civil Servant Agent deployed
- → Government AI CEO / CTO / CDO appointments

Phase 02 · 2028–2030

DEPLOY & SCALE

Production-grade services. Security baselines enforced.

- → Diia.AI: cross-ministry orchestration
- → Civil Servant Agent across all ministries
- → Legacy systems connected to GovStack
- → Agentic Compliance pilot (Rules as Code)
- → Audit logging, RBAC, sandboxed runtimes — mandatory

Phase 03 · 2030+

INTEGRATE & ANTICIPATE

Full Agentic State vision. Proactive services. Frontier.

- → Cross-agency orchestration — no human handoffs
- → Proactive services: automatic life event triggers
- → Advanced privacy: confidential computing
- → Sovereign compute at scale + quantum-ready
- → Rules as Code extended to all regulatory domains
- → Institutionalised AI governance: permanent audits

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ID30 CONCLUSION

ID30 Strategic Analysis

The Vision · Stay in Control · Manage the Transition · Fund it Through Savings

The Vision Is Real — and Transferable

Ukraine proves the Agentic State is not a concept paper. Infrastructure being procured, agents deployed, governance institutionalised. Governments building digital identity foundations today are building the base layer of tomorrow's agentic services.

Stay in Control — Architecture First

The only way to stay in control is to make governance architectural, not political. Thin orchestrators on shared infrastructure. Agent Registry with cryptographic identities. Zero Trust by design. Build guardrails before you open the vibe coding platform.

Manage the Transition — Sequence Matters

Ukraine's lesson: foundations before applications. Identity rails → data mesh → GovStack gateway → THEN proactive services. The Expert-as-Teacher model is key: civil servants improve the system, they don't resist it.

Fund It Through Savings — The Business Case

Agentic services compress years into weeks, reduce fraud through verified identity, eliminate redundant integrations. Each new service is cheaper to build on shared rails. Automated compliance frees investigative capacity. ROI demonstrated incrementally.

Source: Ovcharenko D., Tsvok D., Ilves L., Kilian M., Parazzoli S.M., Velsberg O., Daglio M. (2026). 'Building the Agentic State in Ukraine: Roadmap from Vision to Implementation.' Public Beta — agenticstate.org