



eDawlad

From Fragmented Systems to Integrated Digital Government

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SomNOG9

Fragmented Systems

Government Enterprise Architecture

Data Exchange Layer

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Fragmented Systems

Government is building essential digital capabilities.

- National identity
- Public Health
- Education domain
- Business registration
- Taxation & Revenue

A Citizen's Current Journey



The Citizen Becomes the Integration Layer

Different institutions → Different systems.

Every institution asks the citizen to carry information.

- Identity documents
- Demographic information
- Certificates and forms
- Proof of earlier transactions

we have digital government! but the citizen performs the integration.

The Cost of Fragmentation

Citizens

- Repeated forms
- Physical visits
- Service delays

Government

- Duplicate systems
- Manual processes
- Complex integrations

Leadership

- Delayed reporting
- Limited cross-sector insight
- uninformed decision making

How do we turn fragmented systems into one integrated government service experience?

Government Enterprise Architecture

Government as an Enterprise

Many institutions; One government; Shared outcomes

Government Enterprise Architecture (GEA) establishes a common blueprint across:

- Ministries, agencies, and public institutions
- Authorities and regulators
- Federal Member States and local governments

It aligns government services, responsibilities, processes, data, applications, technology, standards, and investment.

GEA defines how government is organized and how its systems cooperate.

The Four Domains of GEA

A common blueprint for integrated government.

Business Architecture

- Services and outcomes
- Institutional responsibilities
- End-to-end processes
- Process ownership and approvals

Application Architecture

- Service applications
- Shared platforms
- System responsibilities
- Integration boundaries

Data Architecture

- Authoritative data sources
- Shared definitions and identifiers
- Data quality and stewardship
- Privacy, access, and lifecycle

Technology Architecture

- Networks and hosting
- Identity, security, and certificates
- Data exchange and API management
- Resilience, monitoring, and recovery

Interoperability → Beyond Technical Connectivity

Connecting systems is not the same as connecting institutions.

Legal Authority to exchange information, data-sharing policies, privacy, and accountability.

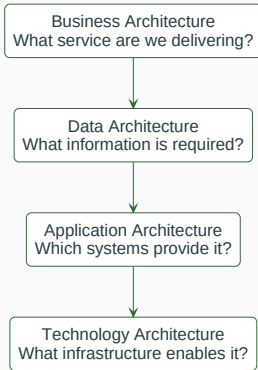
Organizational Aligned processes, institutional roles, service ownership, and responsibilities.

Semantic Shared definitions, identifiers, data dictionaries, schemas, metadata, and code lists.

Technical APIs, open standards, protocols, connectivity, authentication, encryption, and monitoring.

APIs alone cannot resolve differences in authority, responsibility, or meaning.

From Architecture to Institutional Cooperation



- **Business:** Aligns processes, institutional roles, and service ownership.
- **Data:** Establishes shared meaning, authoritative sources, and governance.
- **Applications and Technology:** Define systems, integration boundaries, and secure exchange infrastructure.

GEA establishes the conditions for institutions to work together; How?

Data Exchange Layer

From Point-to-Point to a Shared Exchange

GEA defines interoperability; the exchange layer puts it into operation.

Point-to-Point

- Custom bilateral integrations
- Growing complexity and maintenance
- $n(n - 1)/2$ connections

Shared Exchange Layer

- Reusable system connections
- Common exchange infrastructure
- n connections to the exchange

❌ FRAGMENTED CONNECTIONS 🔗



🔗 INTEGRATED EXCHANGE 🔄



Shared Exchange, Institutional Control

Connect institutions without centralizing their systems or data ownership.

Shared Capabilities

- Reusable interfaces
- Authentication and authorization
- Secure routing and exchange
- Logging, monitoring, and audit

Institutional Autonomy

- Retain existing systems
- Preserve institutional mandates
- Control access to authoritative data

Connected, not centralized: information is shared securely without transferring data ownership.

Reliable and Secure Government Cloud

Shared services require continuous operational and security oversight.

Network Operations Center (NOC)

- Monitor service availability
- Manage performance and capacity
- Detect and resolve outages
- Coordinate recovery and continuity

Keeps govCloud running.

Security Operations Center (SOC)

- Monitor cybersecurity threats
- Detect suspicious activities
- Protect critical services
- Coordinate security incident response

Keeps govCloud secure.

Reliability and security are continuous operational responsibilities, not one-time deployments.

eDawlad

Digital, efficient, & accessible public services

One government experience; Accessible anytime, anywhere.

eDawlad brings government services together through a unified, mobile-first platform.

- **One access point:** Discover and access services across government institutions.
- **One identity:** Secure authentication across participating government services.
- **One experience:** Apply for services, track requests, and receive notifications.
- **Mobile-first:** Government services accessible through citizens' phones.

The citizen's front door to government.



One Citizen Journey, Multiple Institutions

Services should follow citizens' needs; not institutional boundaries.

Example: Starting a Business Through eDawlad

1. **Authenticate:** The citizen securely signs in.
2. **Apply:** Submit one business registration application.
3. **Coordinate:** Relevant institutions securely exchange authorized information and process their respective requirements.
4. **Complete:** Track progress, receive notifications, and obtain the required approvals.

One seamless journey instead of multiple disconnected procedures.

Simple for Citizens, Connected Across Government

One experience on the outside; Interoperable institutions on the inside.

Citizen Experience

- Unified access to services
- Reduced paperwork and visits
- Faster service delivery
- Transparent application tracking

Government Operations

- Connected institutions
- Secure information exchange
- Institutional data ownership
- Coordinated service delivery

Institutions retain their mandates while citizens experience one connected government.

Measuring eDawlad's Success

Measure public value; not just technology deployment.

Readiness

- GEA adoption
- Data-sharing policies
- Common standards

Operations

- Connected institutions
- Successful exchanges
- Service reliability

Outcomes

- Faster processing
- Fewer repeat submissions
- Less manual verification

Success means better services, stronger cooperation, and measurable benefits for citizens.

From Fragment Services to eDawlad



The journey culminates in a national service experience:

from fragmented systems, through GEA and trusted data exchange, to eDawlad.

70% Policy | 30% Technology

