

Practical insights of using Matrix in Germany



MATRIX IN GERMANY

INTEROPETABLE, DECENTRALIZED REAL-TIME COMMUNICATION.



PUBLIC
ADMINISTRATION



HEALTHCARE



EXTERNAL
SECURITY





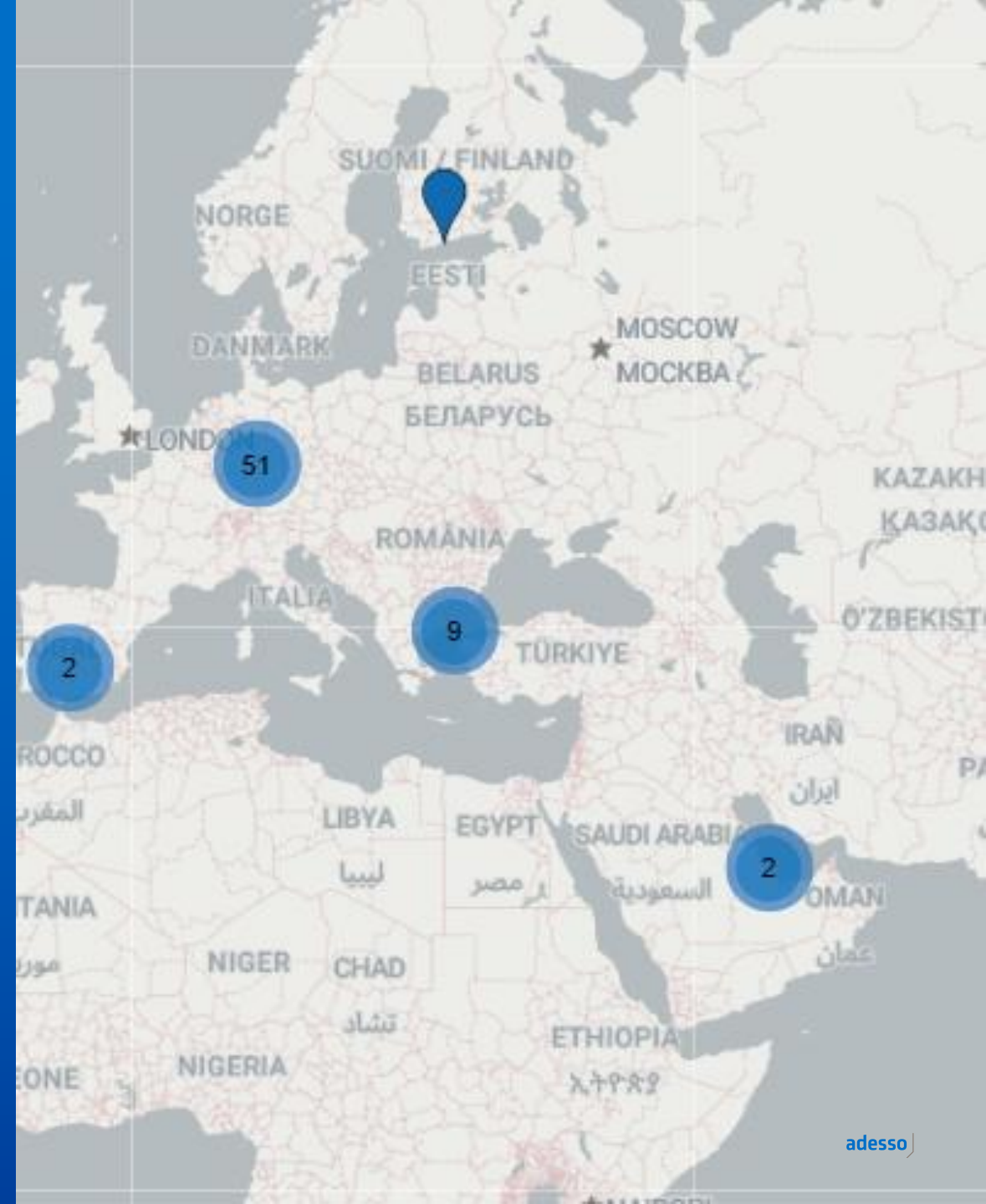
What we do?

- Software development and engineering
- IT Strategy and process consulting
- System integration and IT operations
- Modernizing existing systems, all the way to cloud, data, and AI solutions, business applications, and managed services

Different branches:

- Public administration
- Banks
- Insurance
- Healthcare
- Energy supply, and industry

65 locations worldwide/ present in 18 countries
> 11.000 employees



Agenda

1. Public Sector

2. Healthcare Sector

3. External Security

Public sector – Some challenges

Federalism and complexity

Responsibilities are fragmented among the federal government, the states, and municipalities.

Heterogeneous IT landscapes

Many IT systems have evolved over decades and are difficult to integrate.

Legal and bureaucratic hurdles

Lengthy decision-making processes, strict data protection and compliance requirements slow down transformation processes.

Shortage of skilled workers

Lack of IT specialists and trained personnel; demographic change is severely exacerbating the situation.

○ Messenger communication channel for Government-to-Citizen communication

→ referred to “Project Neo”

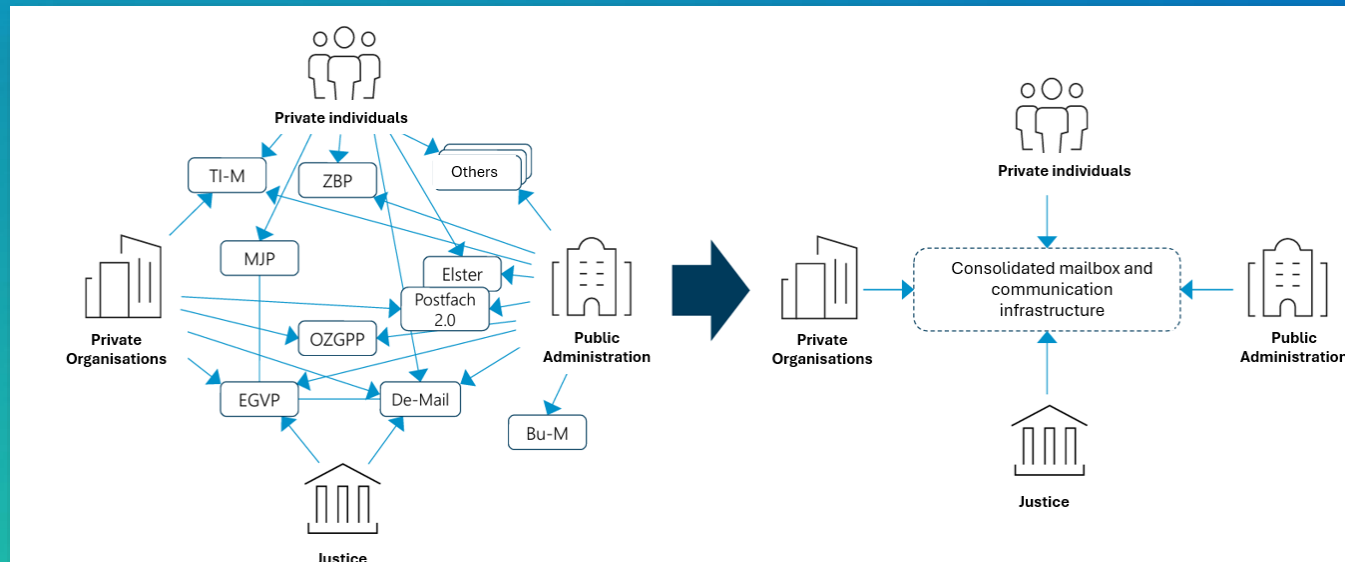
- **Federal IT-Cooperation (FITKO)** has been commissioned to implement the project
- FITKO was created to coordinate the digitalization of public administration and to support further development effectively and together with the federal government, states, and municipalities

The goal is to create innovative digital solutions
for a modern, efficient, and resilient administration in Germany



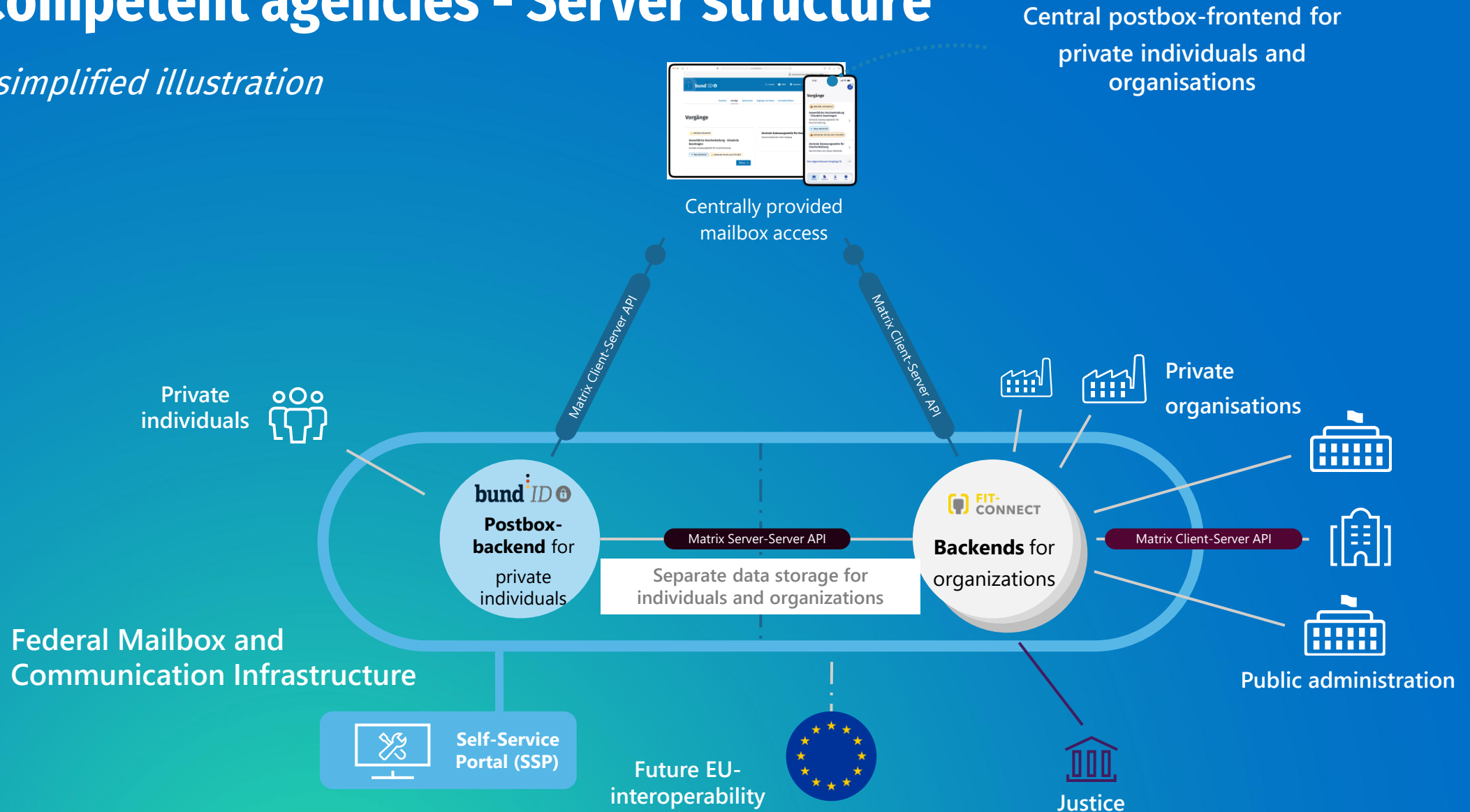
Messenger communication channel for Government-to-Citizen communication

- “Neo” started in June 2025 | 17 team members
- The project provided the technical proof and validation for bi-directional and secure government-to-citizen communication in the German public sector
- Part of ZaPuK project which aims to consolidate Germany’s complex mailbox and communication infrastructure

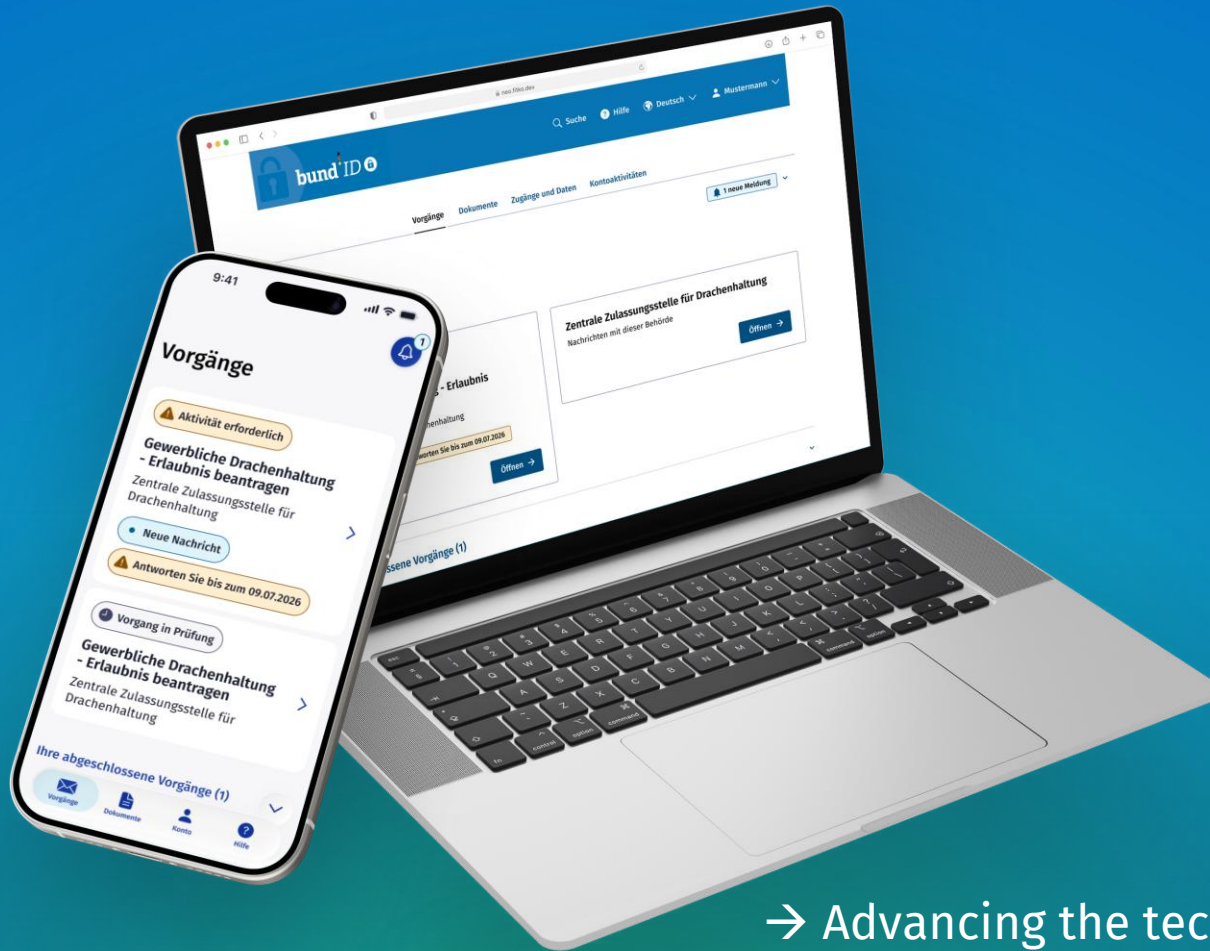


Competent agencies - Server structure

**simplified illustration*



Webclient and Mobile App

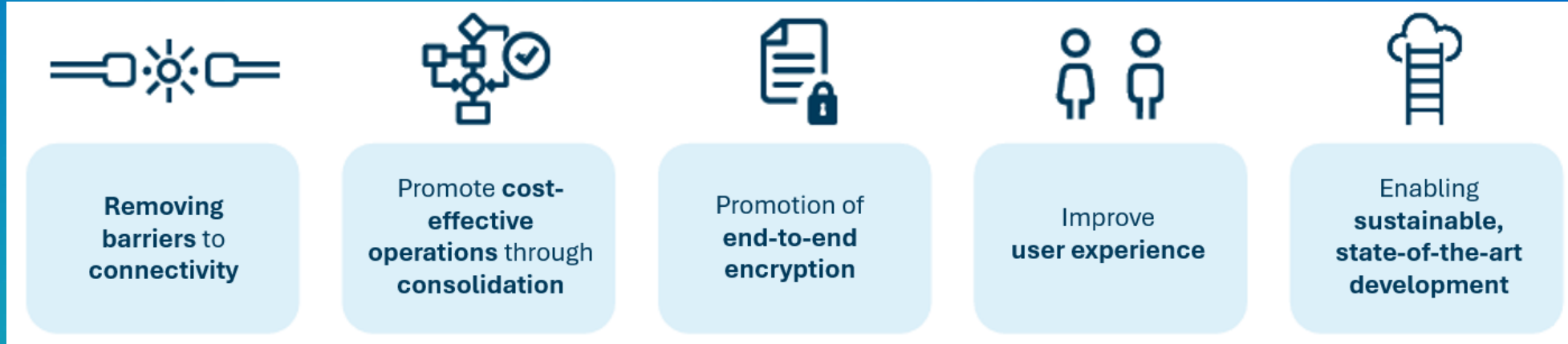


- ✓ Positive feedback from users
- ✓ Successfully piloted with competent agencies:
 - Public Health Department in city of Frankfurt
 - Workflow management system in BaWü
- ✓ Integration guide was created containing technical and procedural details

→ Advancing the technical proof of concept toward production readiness
 → In the future, Neo will be integrated into other government portals

Project Objectives

→ The project specifically supports the strategic priorities of Germany's Federal Digital Strategy





“With Neo, we enable digital administration AND we also ensure that communication is secure, simple and direct!”

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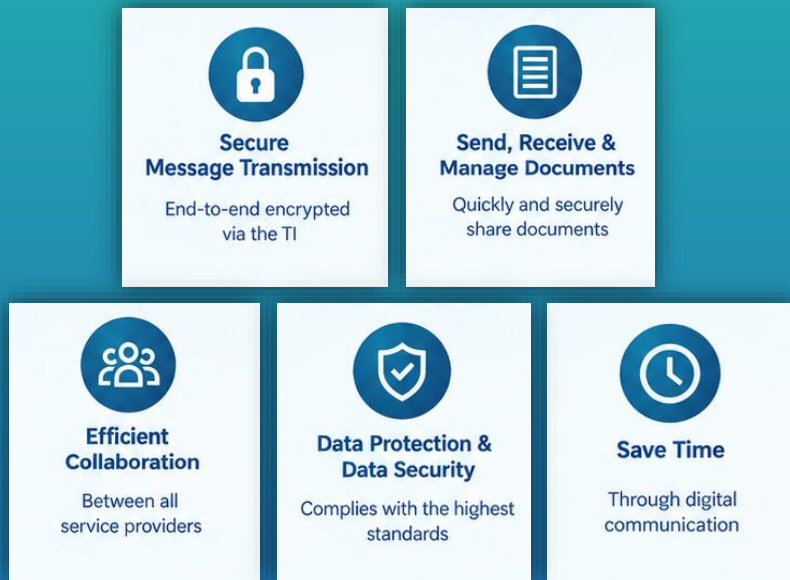
2. Healthcare Sector

3. External Security

Matrix in the healthcare sector

adesso

- adesso helps to implement different mandatory components for IT health care providers
- E.g. TI-Messenger interconnects diverse organizations and IT systems
- 2025 launched for insured individuals



Matrix in the healthcare sector



- adesso works with major healthcare IT service provider covering over 35 million insured individuals
- adesso provides support through a variety of activities & roles:

- ✓ Software development
- ✓ Development of the Crypto and Matrix libraries
- ✓ Architecture coordination
- ✓ Project management
- ✓ Requirements Engineering
- ✓ Solution design
- ✓ Provides expert advice on regulatory approval and certification process through gematik (= National Agency for Digital Medicine in Germany) and helps with deployment of the PRO client (clerk frontend)
- ✓ User experience and user interface experts

*Gematik is responsible for the development, operation, and further advancement of the telematics infrastructure (TI) in healthcare)

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Bw-Messenger



My Bundeswehr experience, 2014: everyday coordination had moved from phone calls/SMS to WhatsApp.

Then: WhatsApp

Phone-number accounts

Vendor-controlled hosting

Proprietary product code

Informal group coordination



Today: BwMessenger

Institution-managed accounts

Bundeswehr/BWI data centres

Open-source Matrix / Element basis

Governed, encrypted teamwork

Same everyday need. A fundamental change in who controls the communication.

Bundes-Messenger



Modern, secure teamwork for public administration — from municipalities to federal authorities.



In use today

Everyday coordination

Team chats, files, quick feedback.
Example: Kirchheim unter Teck.



Evolving now

A modern workplace

BundesMessengerX: a modern app.
Self-hosted or managed in Germany.



Simpler collaboration

Less friction, more control

Fewer email loops. Shared team spaces.
Cross-authority links by choice.

Adesso's contribution

Product	adesso engineering focus	Practical value
BwMessenger	Android mobile-client development	Messaging on mobile devices
Bundes-Messenger	Web administration portal	Institutional service management
Bundes-Messenger	Kubernetes / container-cloud DevOps	Repeatable builds and deployments

BWI leads the products; adesso contributes specialist engineering.

○ **Thank you very much for your attention !**



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APPENDIX

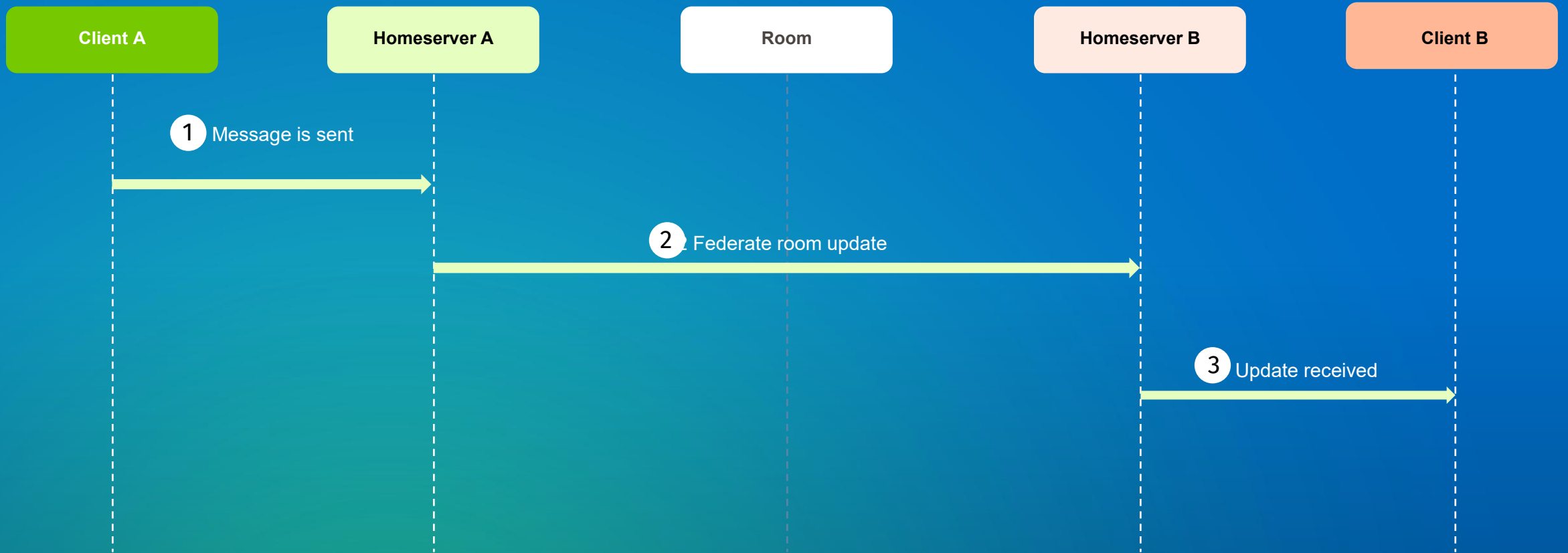
[matrix]

A new basis for open interoperable, decentralized real-time communication.

Matrix Manifest

- Individuals should have full control of their own communication
- Individuals should NOT be locked in centralized communication silos, they should be able to decide freely where their communication is stored, without restrictions to their communication partners
- Opportunity for secure and private communication → Human Rights Act
- The communication should be free and open, non-biased, standardised and globally used

Each organization operates its own home server



Hospital information systems, image archives, and medical devices can also act as bots and exchange data..

○ Secure information flows across sectoral boundaries



Connect

Organizations and systems collaborate within shared communication spaces.



Protect

The protocol is designed for the exchange of sensitive information.



Scaling

New instances can be integrated into an existing network.



Collaboration

Real-time communication connects people, services, and bots.



Reliability

Individual server failures have only local effects.



Flexible

Each instance can operate independently and connect with others.

→ *An open standard translates diversity into interoperability*