Let's talk Matrix between Governments and Citizens
Governments provide a lot of services...

Total of 575 service categories with >13,000 individual services

Source: servicesuche.bund.de
How to apply for these services?

Option 1: You don’t have to!
“proactive government“

Option 2: Apply offline
at your local city hall

Option 3: Apply online
via app or via website
request government support  
(via web form or app)

That’s easy because:
- Government websites are public
- Contact details of government agencies are public (including public keys)
That’s harder, because:
- Contact details of individuals are not publicly available
- We don’t want to force people to install specific apps

government responds

(but person may have left the website / uninstalled the app)
How does industry solve this issue?

→ plain-text messages on central server
How did other governments solve this issue?

In May 2020, the data of 26 million driver’s licenses appeared in the public domain on the Internet. The Ukrainian government said the Dilia app was not linked to a data breach, but it is impossible to say for certain. Any storage of official documents in electronic format is associated with the risk of their leakage.

A new data leak hits Aadhaar, India’s national ID card system, exposing personal information on all Aadhaar holders, exposing the data leak on a system run by a state-owned utility company.

A hacker has breached the Argentinian government ID database for card details for the country’s entire population, data that is...
How did the German government solve this issue?
Digital Health Apps

https://zerforschung.org/posts/datenabfluss-auf-rezept/
Data leak

“My Justice Mailbox” grants third parties access to data

Individuals should be able to communicate digitally with the judiciary via the new justice mailbox. But the price for this is high, because their private data ends up in the address directory of electronic legal transactions, which thousands of people from the judiciary can access.

Vision

Communication between governments and citizens needs to be easy, reliable and encrypted.
Matrix to the rescue 😊

- End-to-end encrypted messages
- Multi-device access (app + web)
- Access via third-party apps and services (cooperate IT systems, e-gov apps, etc.)
Matrix-based secure communication channel
Matrix + BundID

Matrix messages
Great User Experience

- Push notifications & status updates
- Polls / multiple-choice questions
- Image / document upload

Already built-in 😊
Great **User** Developer Experience

- Push notifications & status updates
- Polls / multiple-choice questions
- Image / document upload
- SDKs

Already built-in 😊
What Matrix offers us

- Great usability (esp. compared to e-mail based systems)
- Tried and tested security
- Interoperable & easy to integrate
- Ready-to-use interoperability layer, many features are already there
Strategic Thoughts

End-to-end encrypted communication is a key enabler for...

- seamless e-gov services
- “trivial” and privacy-preserving realization of the once-only principle
- “wallet”-like use-cases (attestation and presentation of attributes)
Broader vision

“mailbox app”

Provide most common e-gov services via app

Provide framework for any e-gov service

National, privacy-first e-governance app

Not within official project scope (yet ;)}
Let’s talk about infrastructure :)

Status quo: Different tech stacks
Matrix as an interoperability layer
Thanks for listening!

Let's discuss!
#matrix4gov:matrix.org

Project infos (in German):
https://gitlab.opencode.de/fitko/rueckkanal-ueber-messengerdienste

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CC BY 4.0 @marco@darmstadt.social
More info about Germany’s government IT

awesome-egov-de

A curated list of resources on e-government in Germany.

Pull requests and feedback via issues welcome! Get in touch via the matrix chat at #awesome-egov-de:technics.de

Communities

Places to ask questions and find other community resources.

- eGov AfterWork meetup: monthly meetup of the egovernment Podcast community
  - Matrix chat
  - Twitter
- N3GZ Nachwuchsnetzwerk Digitale Verwaltung: junior network for people working in public administration, industry and science
  - eGov-Wiki
  - mailing list
  - Twitter
- Code for Germany: civic tech open government network
  - Twitter
- bund.de: civic tech community that documents government APIs