The Internet is such a great idea . . .

...we should have multiple instances

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Walled gardens

- used to be POTS
- then came social media
- after that: APPS
- but we can drive that further …
New gardens, new walls?

- Deutschland-Netz
- Schengen-Netz
- (De-Mail)
- \textit{E-Mail made in Germany}
A great plan

- We don’t peer
- We mourn for the packets crossing the border
- We declare that a security risk
- We blame it on everybody else
- We suggest a new connection regime
- We give it a shiny name
- …and rename
- We take a bath in EUR
- We don’t need to encrypt
No questions asked

- How much is really crossing borders?
- …and at what layers?
- Why is it safe(er) in country?
- Legal control, really?
- Wasn’t this the Internet?
- How would it work, really?
- What is so wrong about crypto?
- What was *end-to-end* again?
Another one?
De-Mail

- Observation: PGP, S/MIME do not work well, really
- Proxy solutions tend to work, sometimes
- eGovernment
  - *best effort* Internet
  - *best effort* email
  - Desire: reliable, secure, provable email delivery
- Overlay network, based on RFC 5321/5322
  - Vetted entry points (no spam!)
  - Hop-by-Hop encryption (anti-malware!)
  - Authenticity, *(Non-*)Delivery Notices
  - *special* domains
Combine the wall and the garden

- E-Mail made in Germany
- Again: encryption for email
- Again: hop-by-hop, though (STARTTLS)
- with vetted participants (providers)
- and a transitive trust policy (that’s a club)
- a nice lock and tickmark in the user interface
No questions asked

- Why is it safe(er) in country?
- Legal control, really?
- Wasn’t this the Internet?
- What was end-to-end again?
- Much ado about STARTTLS?
- Ever heard of DANE?
- What’s wrong about the picture?
So, the end is nay?

- Remember: smart edge, dumb core
- Transitive trust is hard
- Crypto does matter
- Deploy standard technologies
- Time to think about decentralization?
- Steering and architecture vs. product management