

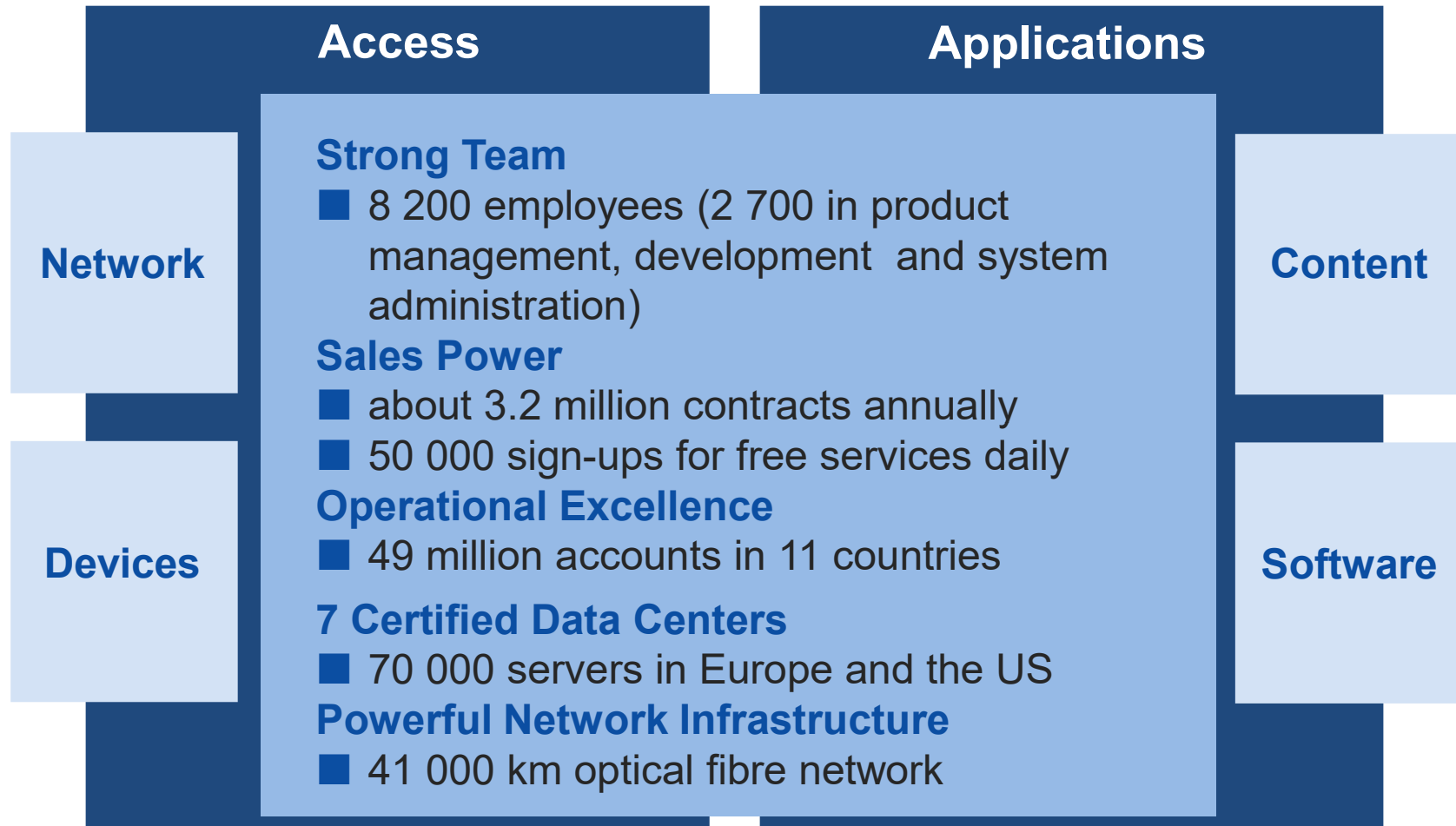
1&1 EU-MAIL MESSAGEBOX MADE IN GERMANY



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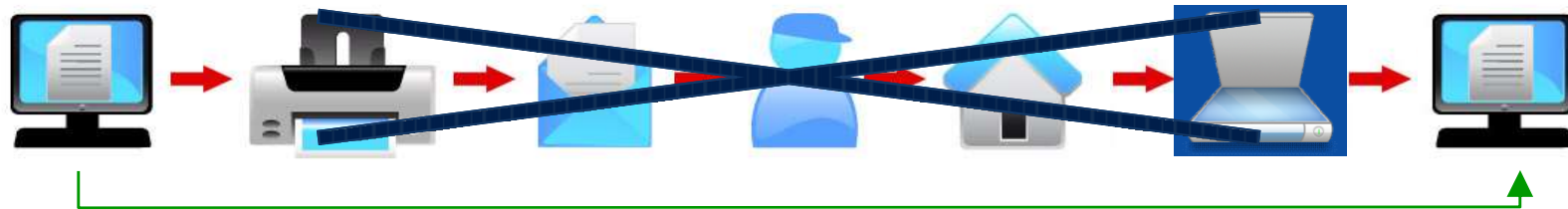


The Vision - EU-Mail

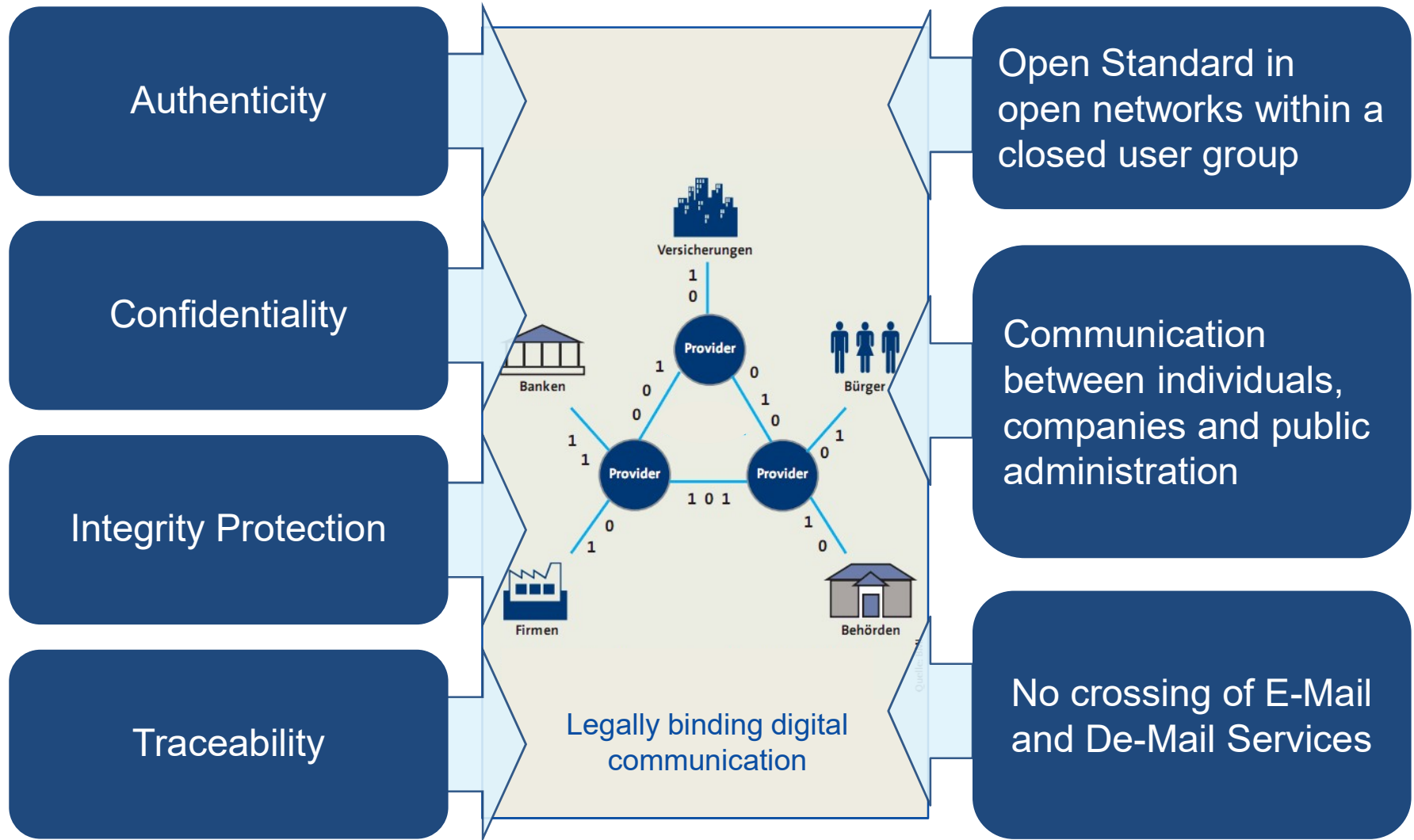
- EU-Mail should not make *e-mail secure* but instead adequately replace letters
- It's not enough to just *transfer the letter to the internet*

EU-Mail should especially include all values of the current paper-based communication in combination with the advantages of the established digital communication

- It should be reliable, legally binding, and traceable, as well as
- simple, fast, flexible, transparent and convenient



The Vision - Solution



The Vision - Functions & Attributes

▪ **Explicit Addressing**

- FName.LName [.Num]@provider.de-mail.de
- Business@Company-Sample.de-mail.de
- John_John-Doe@provider.de-mail.de

- **Mailbox and Delivery Service**
- **Reliable, legally binding, and traceable delivery**

▪ **Secure Document Store**

Encrypted storage and archive for digital documents

▪ **Identification Service**

Third Party Authentication of name, age, billing address and/or delivery address

▪ **Authenticity**

Safe initial registration and authentication with two different authentication levels:

- Regular - Username/ Password
- High - Two-factor authentication

▪ **Secured Transmission**

- Standard - E2E encrypted transmission
- Optional - Included qualified digital signatures

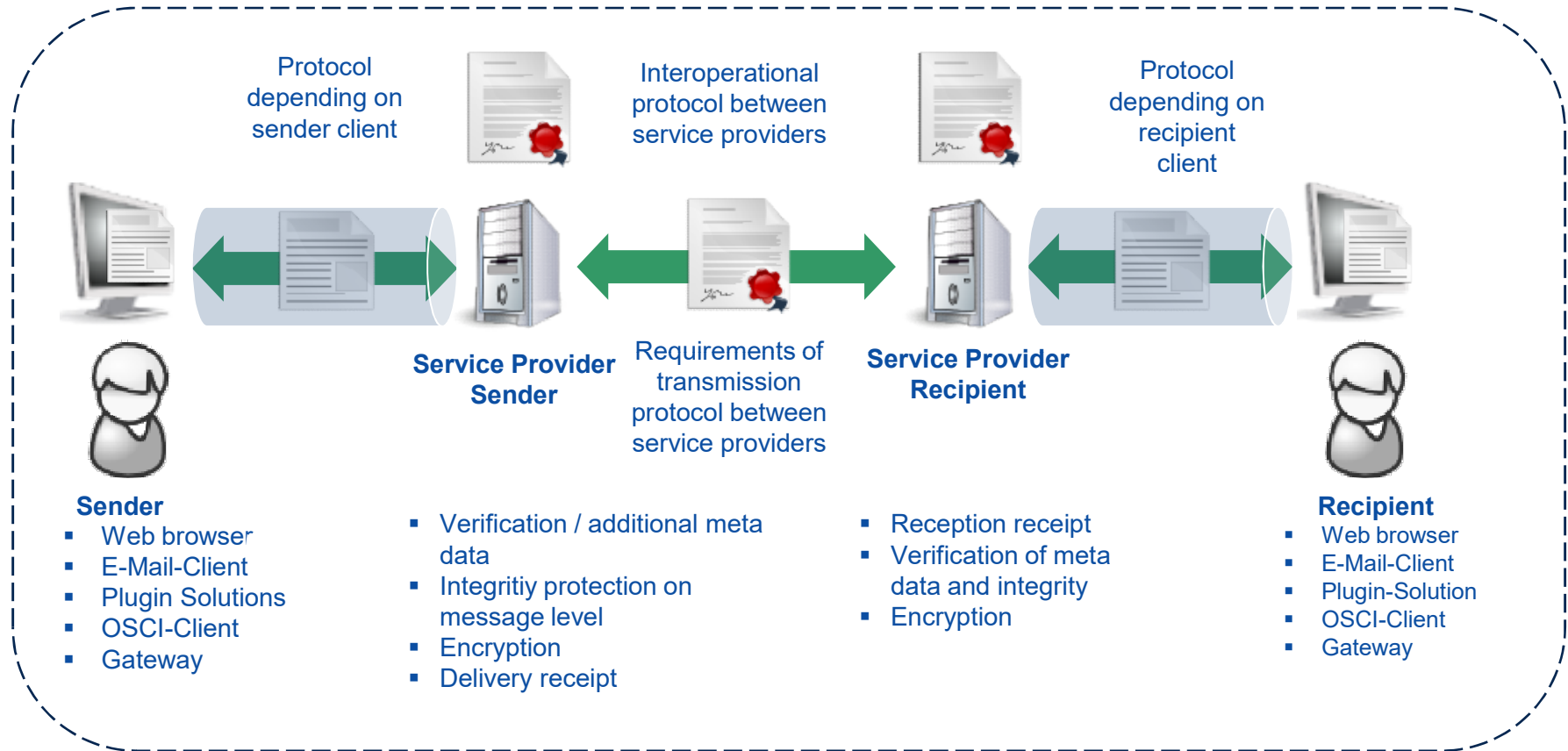
▪ **Integrity Protection**

- Integrity protection as standard
- Optional - Use of digital signatures

▪ **Traceability**

Qualified signed delivery and reception receipts from the sender's/recipient's provider

The Vision - Overview of Functions



EU-Mail Infrastructure

- 1&1 IT infrastructure is certified according to the De-Mail standard and to the eIDAS regulation as a qualified eIDAS trust service since July 1, 2016
- The infrastructure is based on widely used and recognized international standards in the E-Mail environment and it is globally adaptable
- Technical specifications of the De-Mail standard have already been introduced in international standardisation bodies

Possible next steps to implement eIDAS compliant qualified trustservices

Interoperability

- The **SPOCS project**, sponsored by the EU commission, has drawn up procedures for the interoperability of systems operating according to the De-Mail standard with systems of other member states
- De-Mail based systems are an integrated part of the **eSense project** in regards to the cross-border legally binding communication with France, Austria, Slovenia and Greece

Scope Expansion / Scalability

- The 1&1 infrastructure can thus be implemented as **already certified** cost-saving **white label solution**
- Operating for EU memberstates as nationwide or distributed system
- Highly scalable (from 1-10 million users upwards)

EU Infrastructure - Supportive activities

- **Promote rapid dissemination across all target groups**
 - Visible offer by public sector
 - Commitment of economy
 - Mandatory usecases (if needed, free of cost)
 - Visibility to end user (addresses on electronic ID card, registry of residents)
 - Involvement of entities that will disseminate information

- **Improve usage possibilities and create more incentives**
 - Reduce entry barriers (e.g. possibilities of identification)
 - Subsidise usage

Thank you for your attention!

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