

Digital Transformation in the Public Sector

– Challenges and Opportunities –

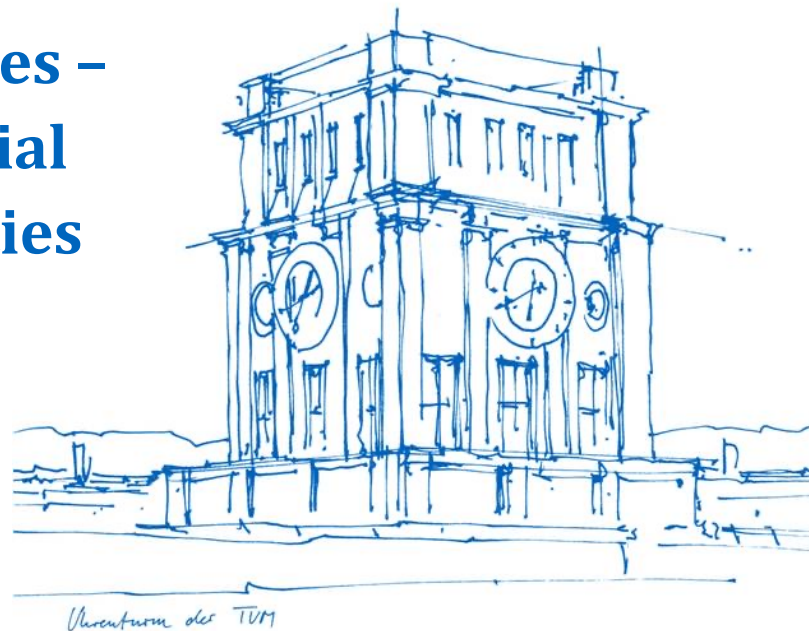
Legal Framework for Artificial Intelligence & Digital Identities

Dr. jur. Sarah Rachut

Managing Director / Senior Researcher

TUM Center for Digital Public Services

School of Social Sciences & Technology



We believe that law is not an obstacle, but an important factor in shaping our digital future!

"Wir begreifen das Recht nicht als Hürde, sondern als wichtigen Gestaltungsfaktor von Digitalisierungsprojekten in der öffentlichen Verwaltung."

ÜBER UNS

PROJEKTE

Bild: Andreas Heddergott / TUM



Gefördert durch

Bayerisches Staatsministerium
für Digitales



Professors of CDPS



Dirk Heckmann,
Direktor



Alena Buyx

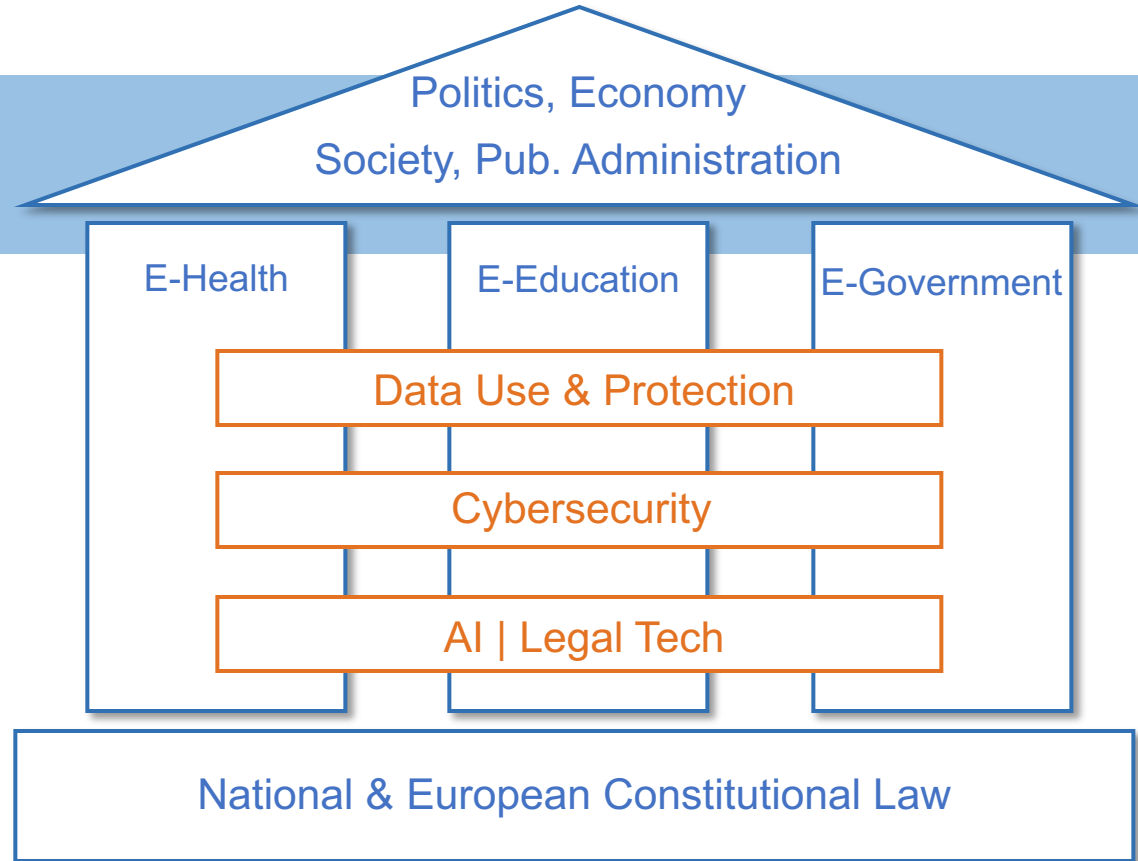


Urs Gasser



Matthias Grabmair

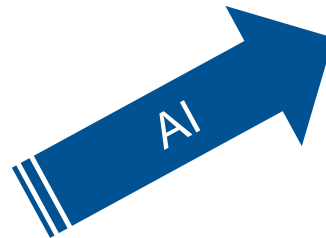
Our Focus



Digital Transformation

Potentials for the Public Administration

- » electronic government = use of technological communications devices to provide public services
- » direct & more convenient access to public services
- » inclusion of previously excluded groups
- » better public administration through:
 - » improvement in effectiveness
 - » data-based decision making
 - » automation



Digital Transformation

Requirements: Data, Infrastructure & Skills

DATA

- » high-quality data
- » personal & non-personal
- » machine-processable



INFRASTRUCTURE

- » data infrastructure
- » IT infrastructure
- » digital identities

SKILLS

- » data expertise
- » IT competences
- » user/clients + administration staff



Digital Transformation

Requirements: Data, Infrastructure & Skills

DATA



INFRASTRUCTURE

+

SKILLS



FUNCTION

USAGE



Digital Transformation

Legal Framework – EU

- » EU Charter of Fundamental Rights (CFR)
- » data law
 - » General Data Protection Regulation (GDPR)
 - » Data Act (DA)
 - » Data Governance Act (DGA)
- » intellectual property law
- » product liability law
 - » Cyber Resilience Act (CRA)
 - » AI Liability Directive Drafts
- » technology regulation
 - » Artificial Intelligence Act (AI Act)
- »

Digital Transformation

Legal Framework – EU



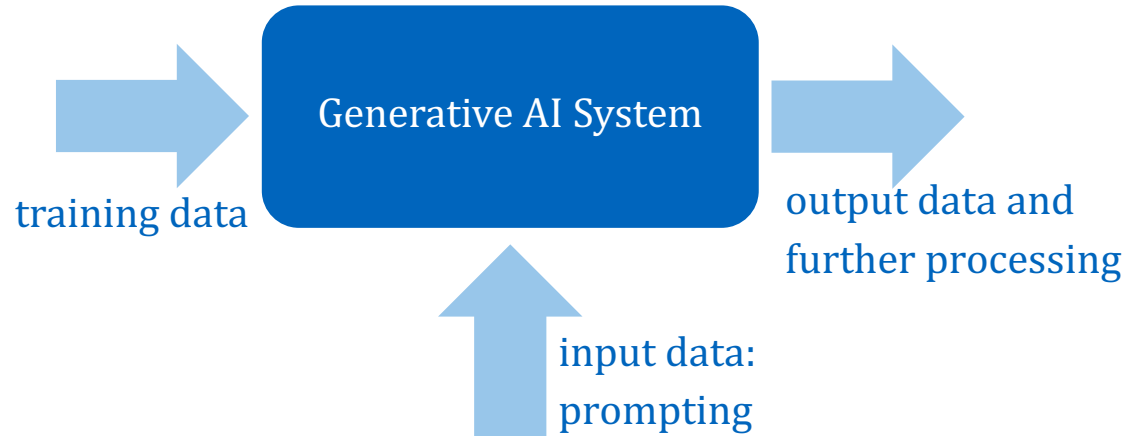
- » EU Charter of **Fundamental Rights** (CFR)
- » **data** law
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 - » Data Act (DA)
 - » Data Governance Act (DGA)
- » **intellectual property** Law
- » **product liability** Law
 - » Cyber Resilience Act (CRA)
 - » AI Liability Directive Drafts
- » technology regulation
 - » **Artificial Intelligence** Act (AI Act)



- » fundamental rights & principles challenged through AI include:
 - » humane dignity, Art. 1 CFR
 - » right for private and family life, Art. 7 CFR
 - » protection of personal data, Art. 8 CFR
 - » freedom of expression and information, Art. 11 CFR
 - » non-discrimination, Art. 21 CFR
 - » rule of law
 - » democracy



- » data law & intellectual property law & product liability law
- » Which data can be used?
- » Where is personal data processed?
- » Is there copyright protection for the output?
- » Who is liable for a malfunction / wrong output?



Digital Transformation

AI in Public Administration – Legal Framework – AI Act

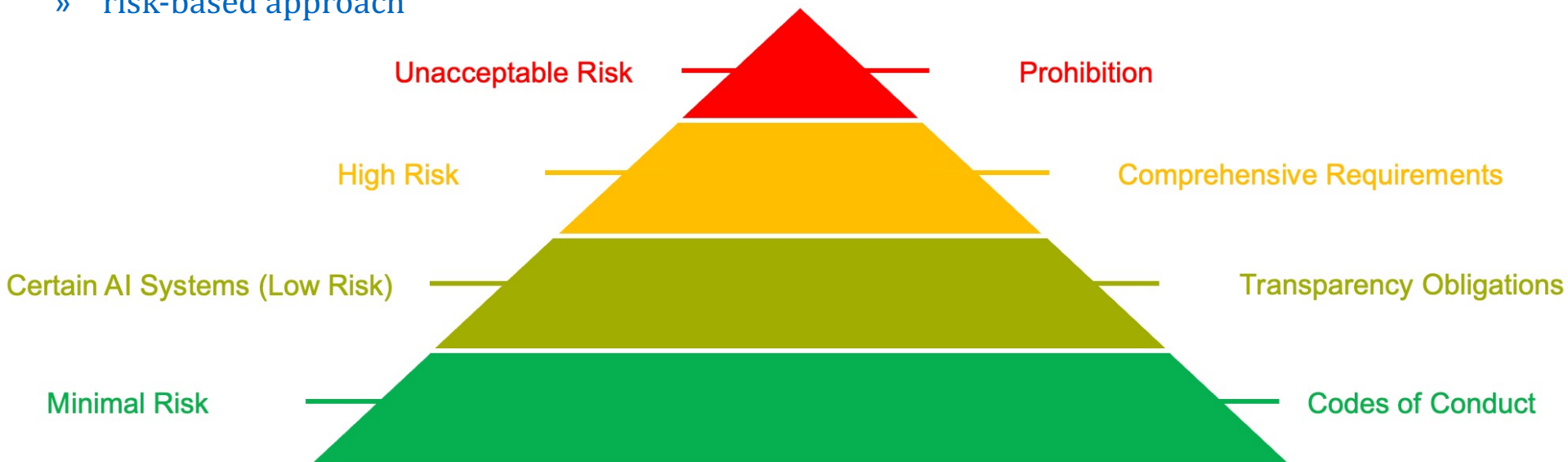
- » human-centered & risk-based approach
- » general principals
 - » human agency & oversight
 - » technical robustness & safety
 - » privacy & data governance
 - » transparency
 - » diversity, non-discrimination & fairness
 - » societal & environmental wellbeing



Digital Transformation

AI in Public Administration – Legal Framework – AI Act

» risk-based approach



Digital Transformation

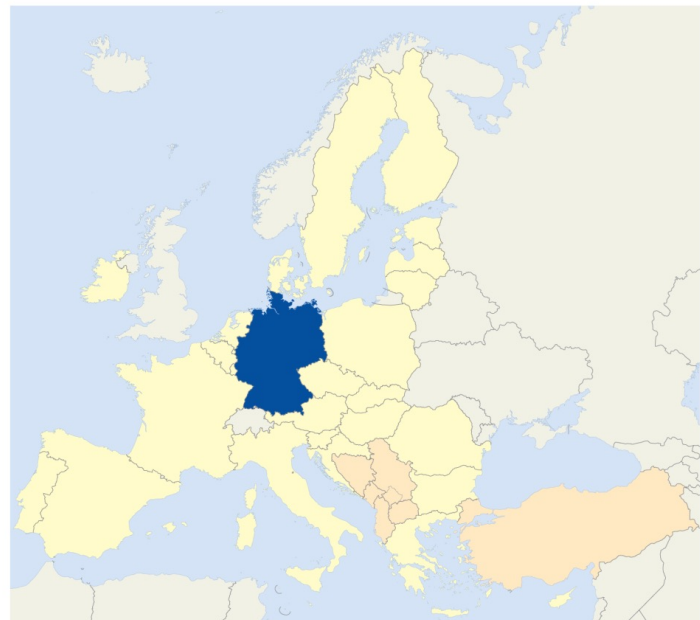
AI in Public Administration – Legal Framework – AI Act

- » prohibited, e.g.
 - » social scoring
 - » untargeted scraping of facial images from the internet or CCTV footage to create or expand facial recognition databases
 - » certain types of predictive policing and emotion recognition
 - » use of biometric data for certain causes
 - » 'real-time' remote biometric identification systems in publicly accessible spaces
- » high-risk use-cases in public administration
 - » biometrics (as far as allowed)
 - » critical infrastructure
 - » education
 - » access to essential public services and benefits
 - » law enforcement
 - » migration, asylum and border control management
 - » administration of justice and democratic processes

Digital Transformation

Legal Framework – Germany

- » constitutional principles & fundamental rights
- » federal-level & state-level regulation for public administration
 - » eGovernment regulation
 - » administrative procedural law
- » data law, IP law, product liability law
 - » progressively harmonised through EU law
- » no general regulation on AI in GER



Digital Transformation

Legal Framework – Germany

- » constitutional principles & fundamental rights
- » federal-level & state-level regulation for public administration
 - » eGovernment regulation
 - » administrative procedural law



established over decades

- » data law, IP law, product liability law
 - » progressively harmonised through EU law
- » no general regulation on AI in GER



new challenges through new technologies

Digital Transformation

AI in Public Administration – Legal Framework – Germany

- » no general regulation on AI in Germany (federal- or state-level)
- » constitutional guidelines for administrative actions
 - » transparency
 - » predictability
 - » comprehensibility
 - » equality of treatment

→ higher potential impact = higher requirements



„Grundgesetz“ (basic law) =
Germany's constitution

Digital Transformation

AI in Public Administration – Legal Framework – Germany

relevant regulations for using AI in the public administration in Germany

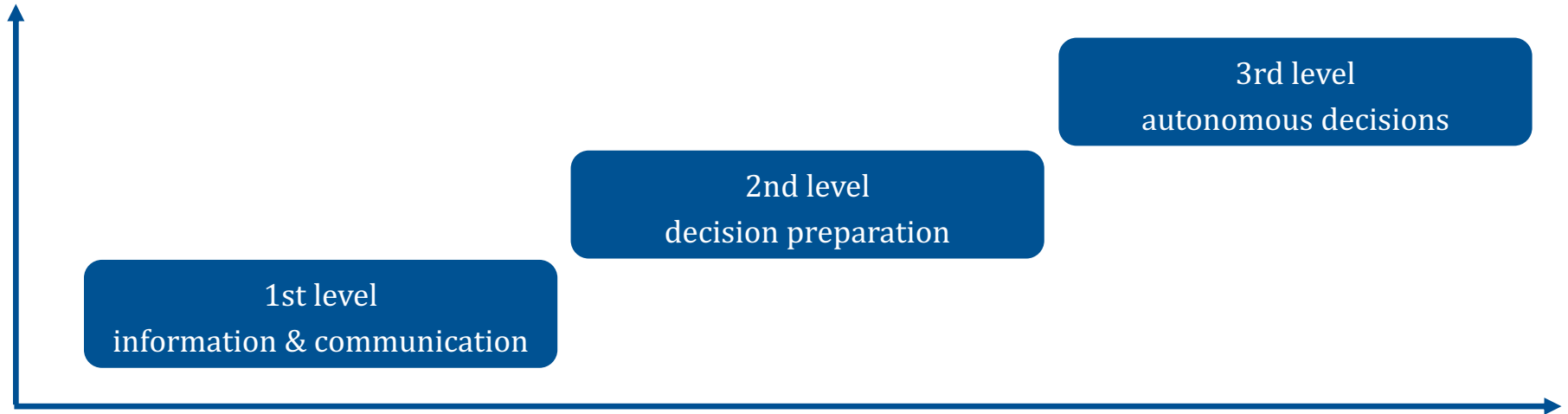
- » Administrative Procedure Acts (federal & state)
 - » § 35a Administrative Procedure Act (*Verwaltungsverfahrensgesetz – VwVfG*)
 - » “fully automated issuing of an administrative act”
 - » not necessarily using AI

„An administrative act can be issued entirely by automated means **if this is permitted by law** and there is **no margin of judgement.**“

Digital Transformation

AI in Public Administration – Use Cases

» distinction between context/purpose and impact/risks



Digital Transformation

AI in Public Administration – Use Cases

1st level
information & communication

- » Chatbots
- » AI-based information systems
- » (legal) research tools & platforms

„Bavaria App“



LEXCADA

juris

legal information tools

Digital Transformation

AI in Public Administration – Use Cases

2nd level
decision preparation

F13 – Die Verwaltungs-KI aus THE LÄND

Das Projekt

- » predictive policing
- » processing of standardised mass procedures (e.g. passenger rights)
- » text assistants & knowledge management



Bild © picture-alliance/dpa (Archiv)

Digital Transformation

AI in Public Administration – Use Cases

F13 – Die Verwaltungs-KI aus THE LÄND

Das Projekt

KI-ASSISTENT LÄND BW
PROTOTYP

RECHERCHEASSISTENZ

Extraktion und
ZUSAMMENFASSUNG

FLIESSTEXTGENERIERUNG

FAQ

⚠ ACHTUNG! Prototyp: Aus Datenschutz-Gründen keine personenbezogenen Daten oder Verschlusssachen eingeben oder hochladen!

functions

1. summary
2. cabinet's note template
3. research assistant
4. text assistant

STANDARD ⓘ

KV-VERMERK ⓘ

Laden Sie ein Dokument (.doc/.docx/.pdf, max. 20 MB) hoch, oder geben Sie einen Text ein, zu dem Sie eine Zusammenfassung erstellen möchten.

Upload ⓘ

Keine Datei ausgewählt

DATEI AUSWÄHLEN

oder Datei hier ablegen
(.doc/.docx/.pdf, max. 20 MB)

-oder-

Texteingabe ⓘ

Text zum Zusammenfassen einfügen

EINSTELLUNGEN

Länge ⓘ

kurz

mittel

lang

Art ⓘ

von oben nach unten

nach Themen sortiert

ZUSAMMENFASSEN

Digital Transformation

AI in Public Administration – Use Cases

3rd level
autonomous decisions

- » automated (!) decision-making, e.g. tax
- » tests for autonomous decision-making with human oversight
- » more experience necessary → explicit legal basis balancing purpose and potential risks





EUR / USD

2.5386

3.7762

2.3574

SLIP: 59.25 USD

BUY

3.8100

Order

18.72

SELL

3.8100

Volume

18.72

200
80%

Digital Transformation

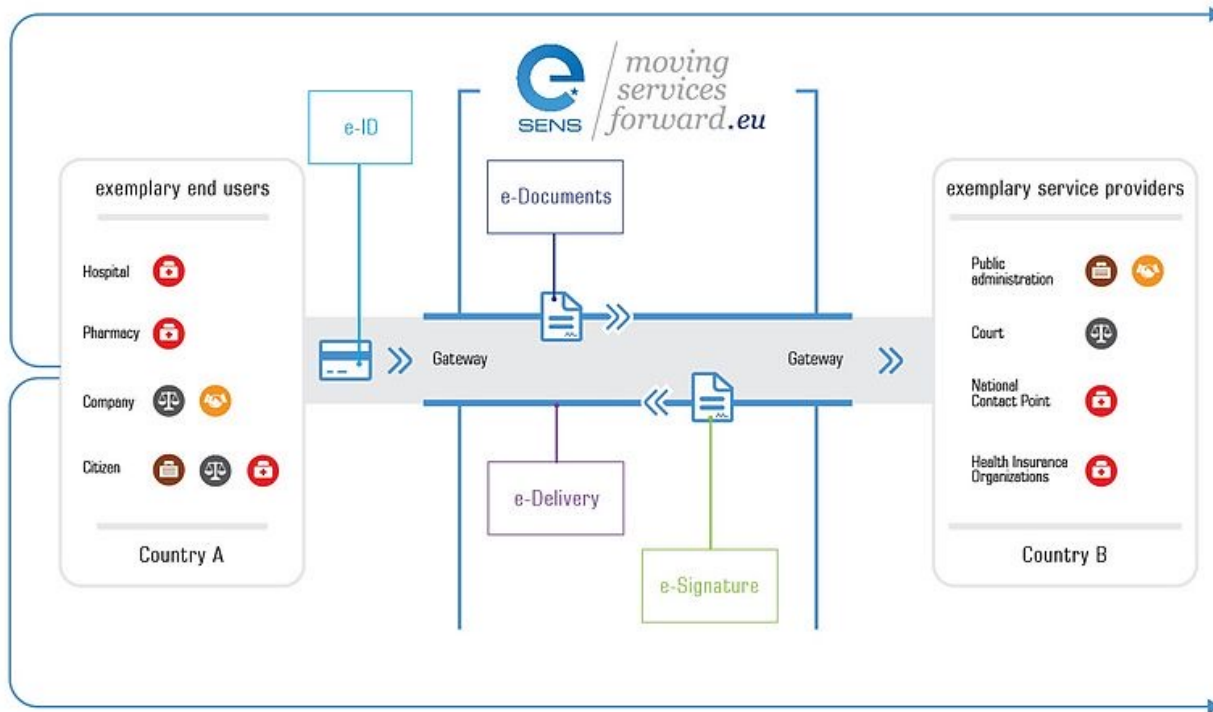
Digital Identities – eIDAS

- » Foundation for digital, seamless public administration
- » EU-Regulation on “electronic IDentification, Authentication and trust Services” (eIDAS)
- » Intention:
 - » Drive innovation & trade through higher level of security, interoperability & transparency
- » Focus:
 - » European Digital Identity Wallet (EDIW/EUDI-Wallet)
 - » Standards for (qualified) electronic signatures, seals & certifications



Digital Transformation Digital Identities

facilitation across borders



e-Health
use case



e-Justice
use case



e-Procurement
use case



e-Business Life
Cycle
use case

Digital Transformation

Digital Identities – BundID (Germany)

- » central user account for all digital administrative services
- » identification, authentication → applications
- » central mailbox for communication with public authorities
- » Forthcoming:
 - » development of a free “German state EIDW”
 - » standards for wallets from other, non-governmental (private) providers→ IDs, certificates, payment methods,...



Happy to Discuss !

Dr. jur. Sarah Rachut
– TUM Center for Digital Public Service –

School of Social Sciences and Technology
Technisch Universität München



sarah.rachut@tum.de



Sarah-Rachut