



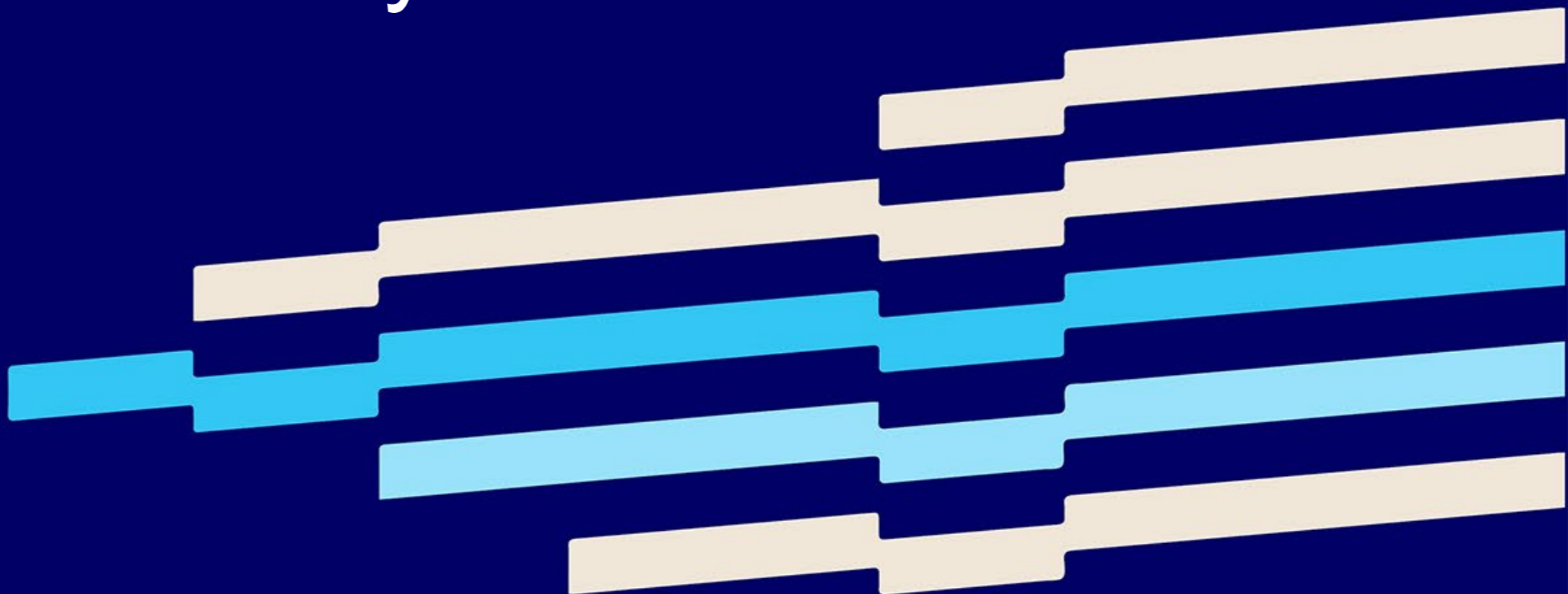
**Difi**

Agency for Public Management  
and eGovernment

# E-government in Norway

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# Agenda

Time	Subject	By
09:00 – 09:05	Welcome	Knut K. Bjørgaas Head of Department for Digital Strategy and Coordination
09:05 – 09:25	Presentation of the Digital Strategy of Thailand.	Representative from the Thailand delegation
09:25 – 09:55	Introduction to Difi and Difis cross-sectorial strategy for digitisation of the public sector	Senior adviser Lars Erik Myhre
09:55 – 10:30	Overview of common digital solutions in the public sector in Norway. Presentation of eID solution and Norge.no (a portal for guiding the citizens to public services).	Senior adviser Stig Hornes
10:30 – 10:50	Presentation of Altinn.no – Altinn is a portal for the digital dialogue between businesses, citizens and the public sector.	Rolf Olai Jacobsen Brønnøysund Register Centre
10:50 – 11:00	Discussion and end of session	All

A scenic view of a Norwegian fjord. In the foreground, there's a wooden pier with a white lamp post. The water is a deep blue. In the middle ground, a small town with colorful buildings is nestled at the base of a steep, snow-dusted mountain. The background features more snow-capped mountains under a clear blue sky.

# E-government made in Norway

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trust, openness and a user-centric approach

A nationwide infrastructure, equal access everywhere.

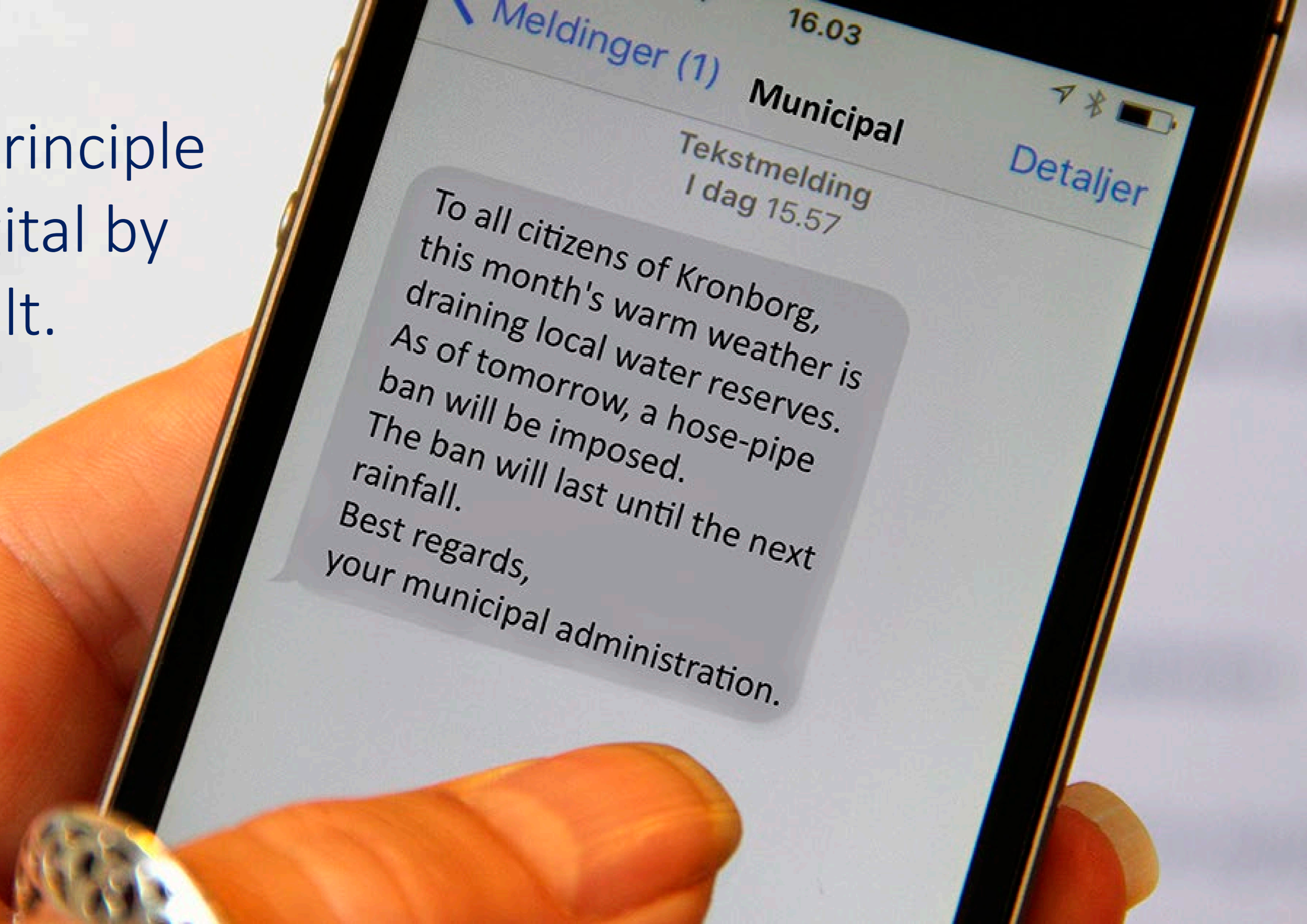
4G 



90 %  
of Norwegians aged  
16-79 years use the  
internet daily

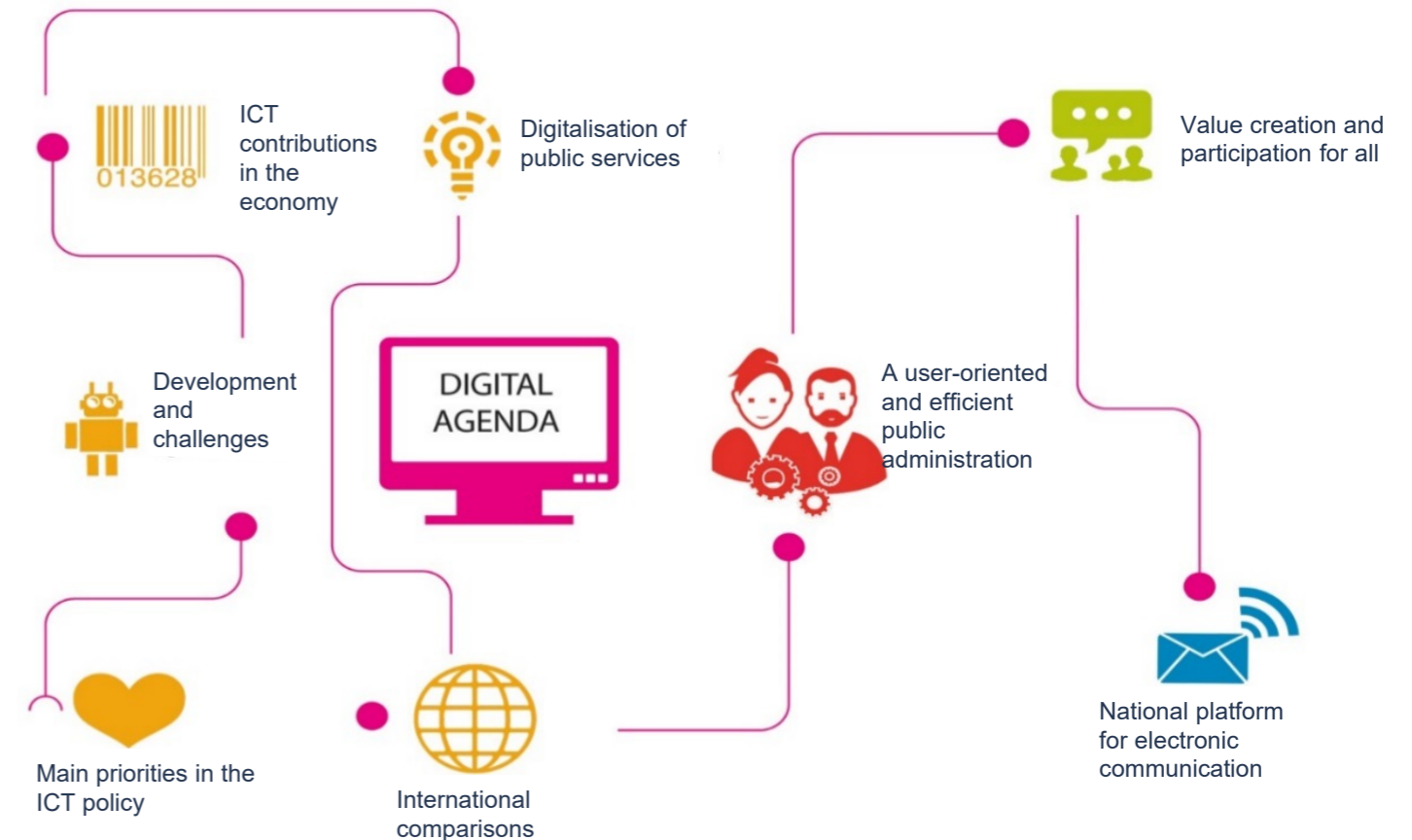


The principle  
of digital by  
default.



# Collaboration across the public sector is necessary to succeed with digital transformation

- In the Digital Agenda, the government has high ambitions to renew, simplify and improve the public sector using ICT
- Citizens and businesses have expectations for a simpler working day
- The government's ICT policy has two main objectives:
  1. A user-oriented and efficient public administration
  2. Value creation and participation for all



*Digitalisation is cross-sectoral and in order to achieve the political ambitions there is a need for a coordinated approach.*

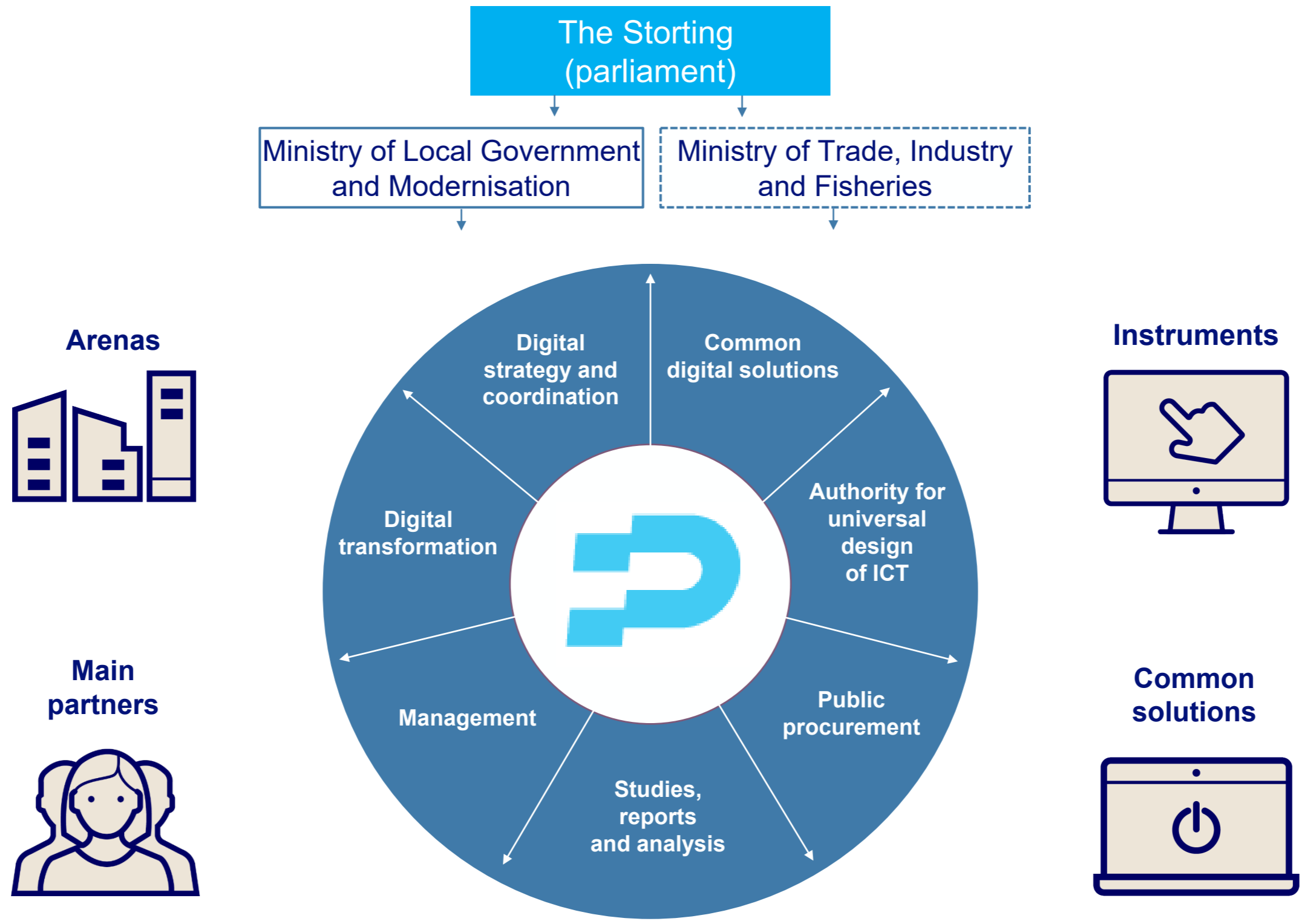
# ICT strategy and development

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Responsibility for national building blocks is delegated to a few central government agencies.







**We make change happen in the public sector**



# Digital agenda of Norway

## Vision

*Public administration is open to change, shares and reuses information efficiently and has easier dialogue with users*

## Principles

**USER EXPERIENCE**

**VALUE CREATION**

**EFFICIENCY**

**ONCE-ONLY**

**COORDINATION**

## Strategic focus areas

**GOVERNANCE, COORDINATION  
AND FINANCING**

**COMMON FOUNDATION**

**INNOVATION AND TESTING**

**EXPERTISE AND CULTURE**

## Measures

- A stronger national priority and funding of cross-sectoral digitalisation initiatives
- Future digital municipality

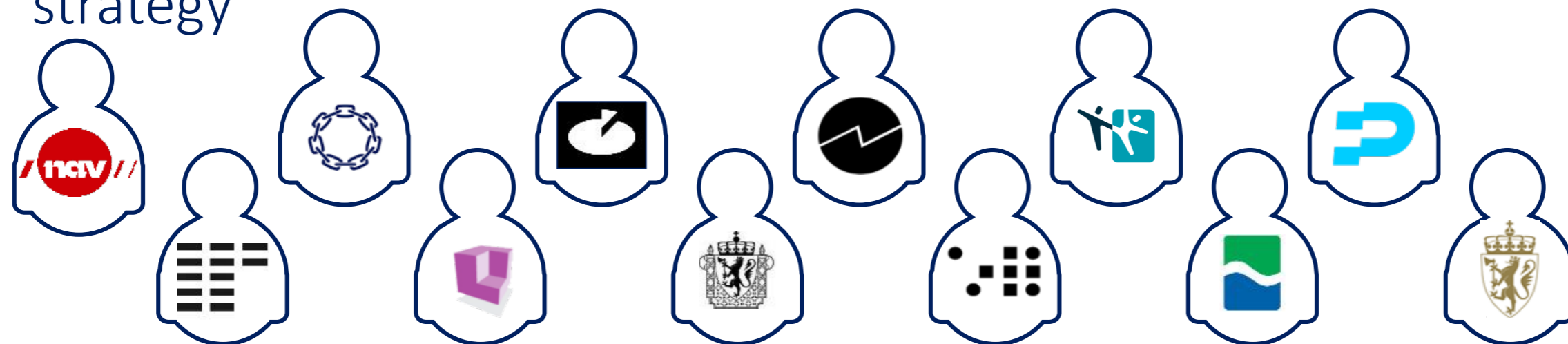
- Concepts for easier data sharing
  - Regulations for a data-driven public sector\*
- Interoperability architecture for public sector
- Framework for national information governance
- API catalogue
- Digital contact information and authorisation register for businesses
- Solution for representation of citizens (authorisation)
- System for identifying and securing documentation
- More efficient data storage

- Strengthen the work on innovative procurement in the field of digitalisation
- Establish a public-private test and learning arena (lab)

- Increase the strategic ICT skills of public sector managers
- Speed up benefit realisation

# SKATE - a strategic council

- Comprises of CEOs and senior representatives from central government agencies
- SKATE was set up as a strategic council for the owners of the national common components
- It is a strategic cooperation council that contributes to the coordination of the digitisation of the public sector, which will benefit citizens, businesses and public administrations
- Strategic issues and follow-up of Difi's cross-sectorial digitisation strategy



# IT Council - Composition and objectives

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- Achieve successful IT projects
- Increase top leader engagement
- Learn from successful- and less successful IT projects.

# Training top managers to become digital leaders



Strengthen the competence of top leaders in digitization



Clarify roles and responsibilities between the ministries and their subordinate agencies



Contribute to reflection and sharing of experiences between leaders

# Co-financing economically profitable ICT-projects

**Co-financing small and medium sized projects at the state level. More than 40 projects have received funds since 2016**

## **Why?**

- Realize more good digitization projects – faster
- Carry out economically profitable projects
- Realize gains

# Difis role in training

- Difi delivers common training activities:
  - Courses and conferences
  - Leadership development and training
  - E-learning and blended learning
  - Programmes and tools

<https://laeringsplattformen.difi.no/>

# Crossborder Commitments - Nordic and Baltic region

- 1. Create a common area for **cross-border digital services in the public sector.**
- 2. Strengthen the competitiveness of our **enterprises.**
- 3. Enhance the **digital single market** in the Nordic-Baltic region.





# CEF Digital infrastruktur



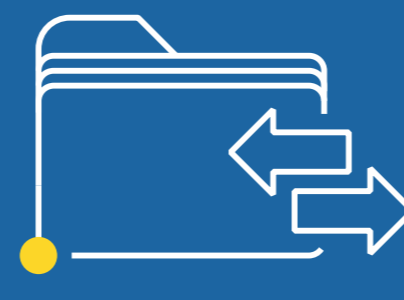
e-ID



e-Signature



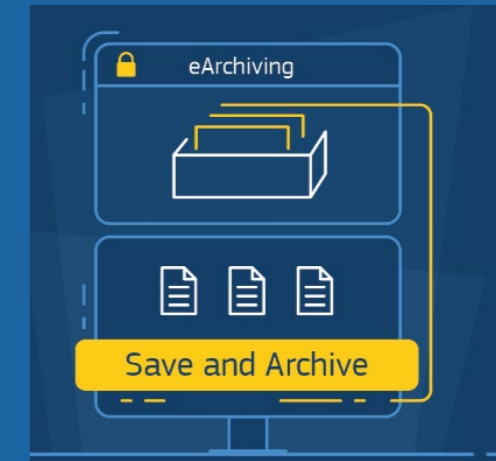
e-Invoicing



e-Delivery



e-Translation



e-Archiving

- 
- BRIS: Business Registers Interconnection System -
  - e-Procurement
  - Online Dispute Resolution
  - EESSI: Electronic Exchange of Social Security Information
  - eHealth
  - Cyber Security
  - Safer Internet
  - Europeana
  - eJustice Portal
  - Student eCard
  - Public Open Data
    - Context Broker
    - Big Data Test Infrastructure
  - WiFi4EU
  - European Platform on Disinformation
  - European Platform for Digital Skills and Jobs
  - Blockchain

«A prerequisite for increased use of ICT is that online services are accessible for everyone.»

© Berit Roald / NTB scanpix



# The anti-discrimination and accessibility act

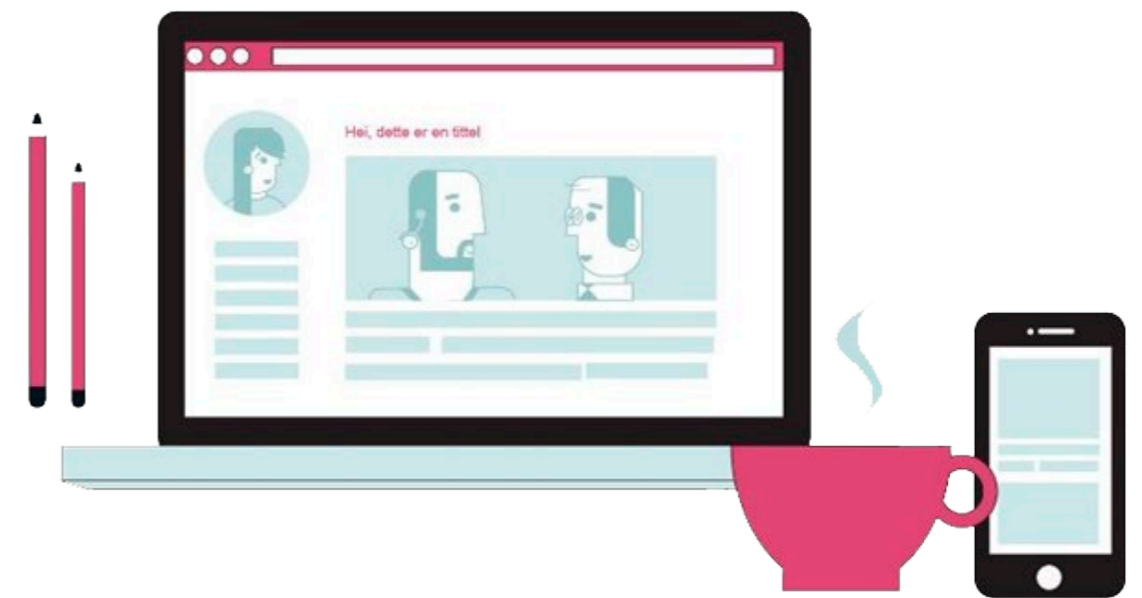
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«The Act shall help to dismantle disabling barriers created by society and to prevent new ones from being created.»

The purpose of this act is to promote equality irrespective of disability.

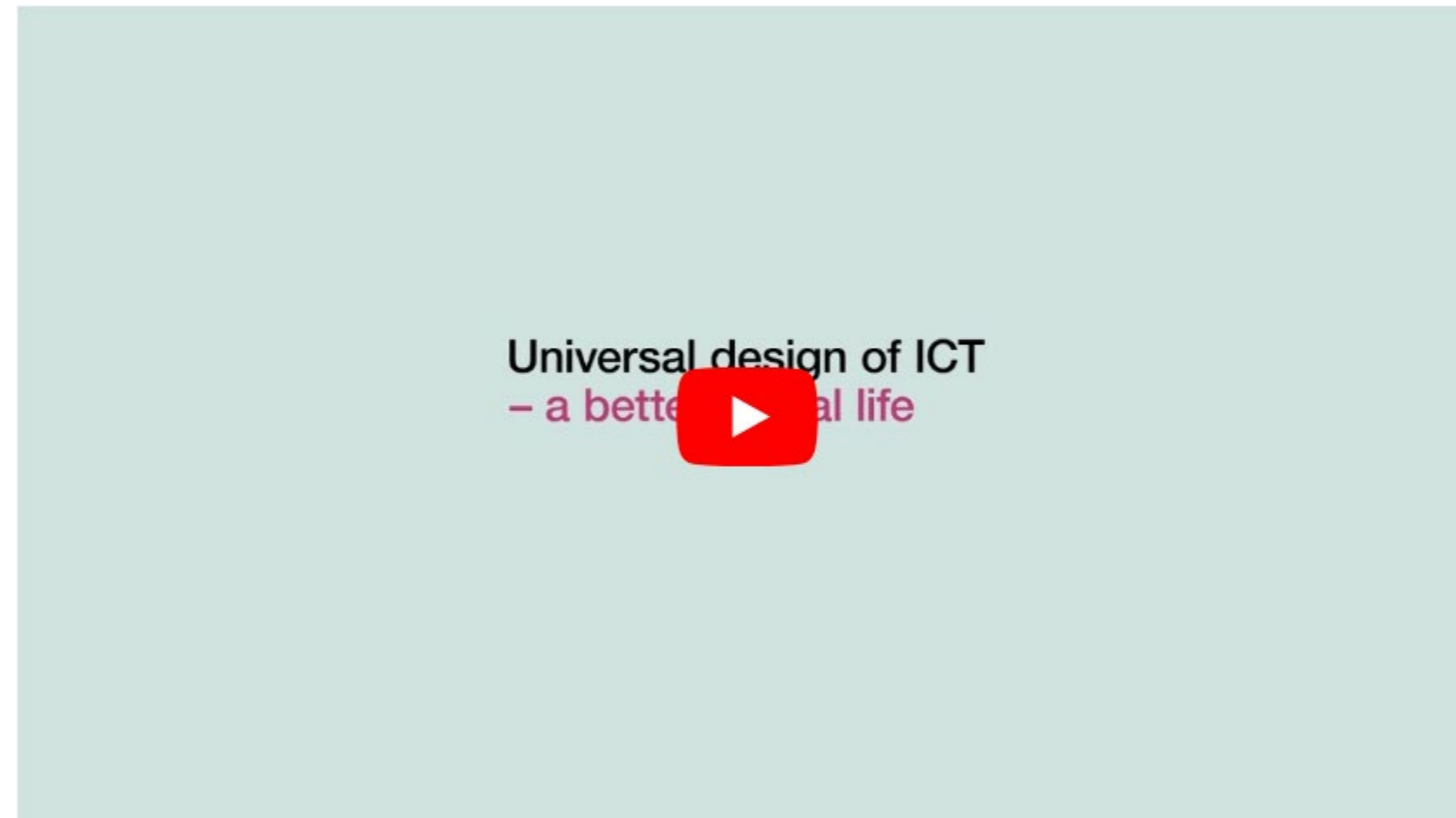
Equality shall mean:

- equal status
- equal opportunities and rights
- accessibility
- accommodation



# eAccessibility – Universal design of ICT-solutions

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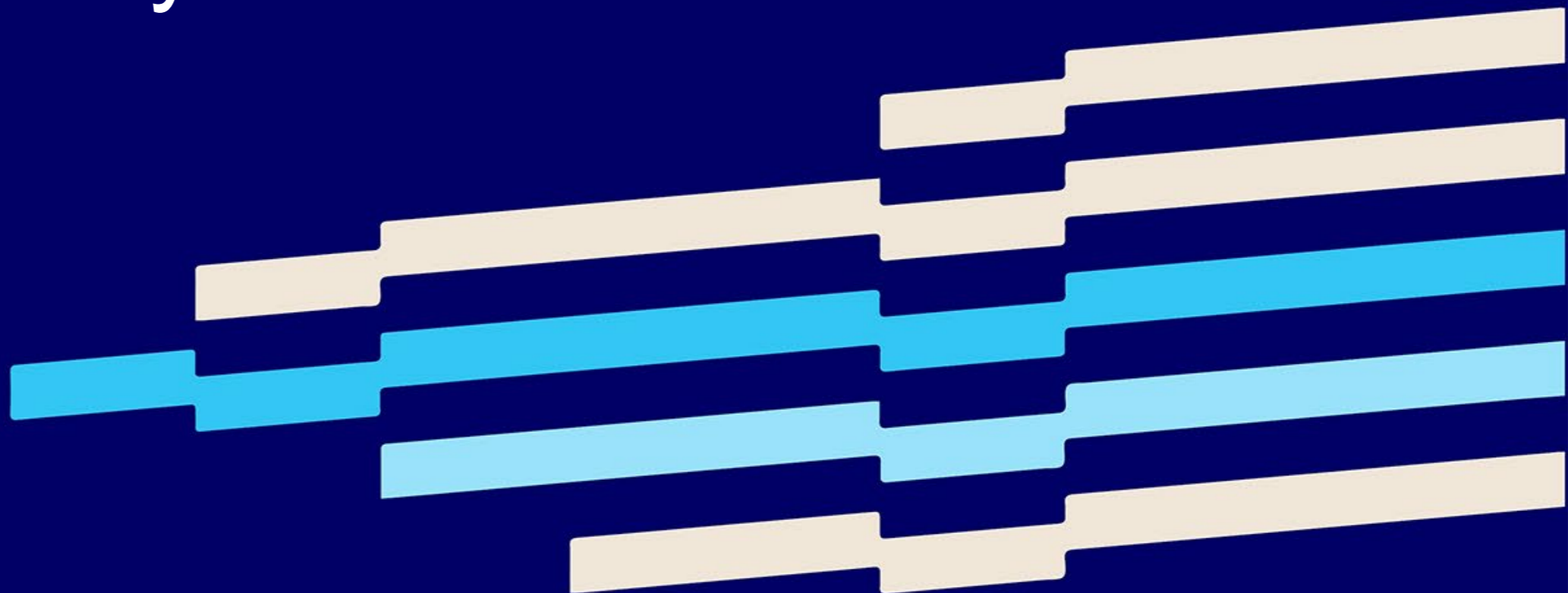
# Digital common components and solutions in Norway

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Stig Hornnes

Senior adviser– Digital common solutions

Oslo - 21.05.2019



# Strategic principle for national IT-components

- Simplifies public services and makes them more efficient
- Shall be applicable for every public organisation
- The public sector is obligated to use them and any deviation must be documented
- Are compatible with each other
- Helps public sector sharing information
- Interacts with European IT-infrastructure



# National common solutions



National Population Register



Kartverket  
Land registry



Brønnøysundregistrene  
The Central Coordinating Register for Legal Entities



altinn  
enklere dialog med det offentlige  
Service portal



National ID-solution



National contact and reservation register



National Digital mailbox



ELMA



eDelivery



Electronic Public Records



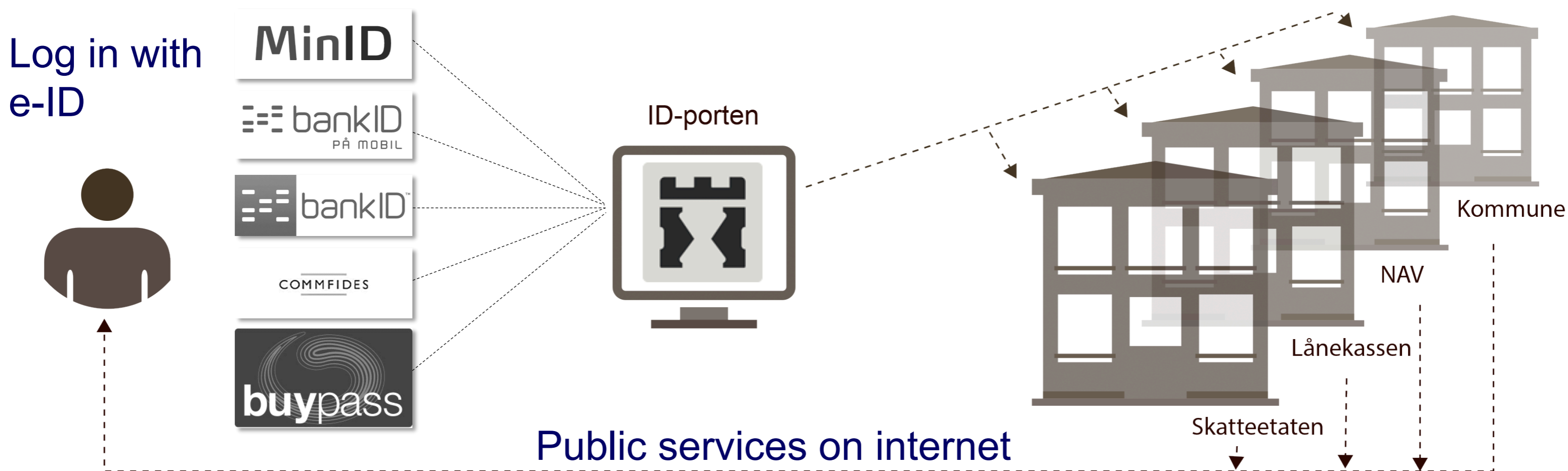
eSignature





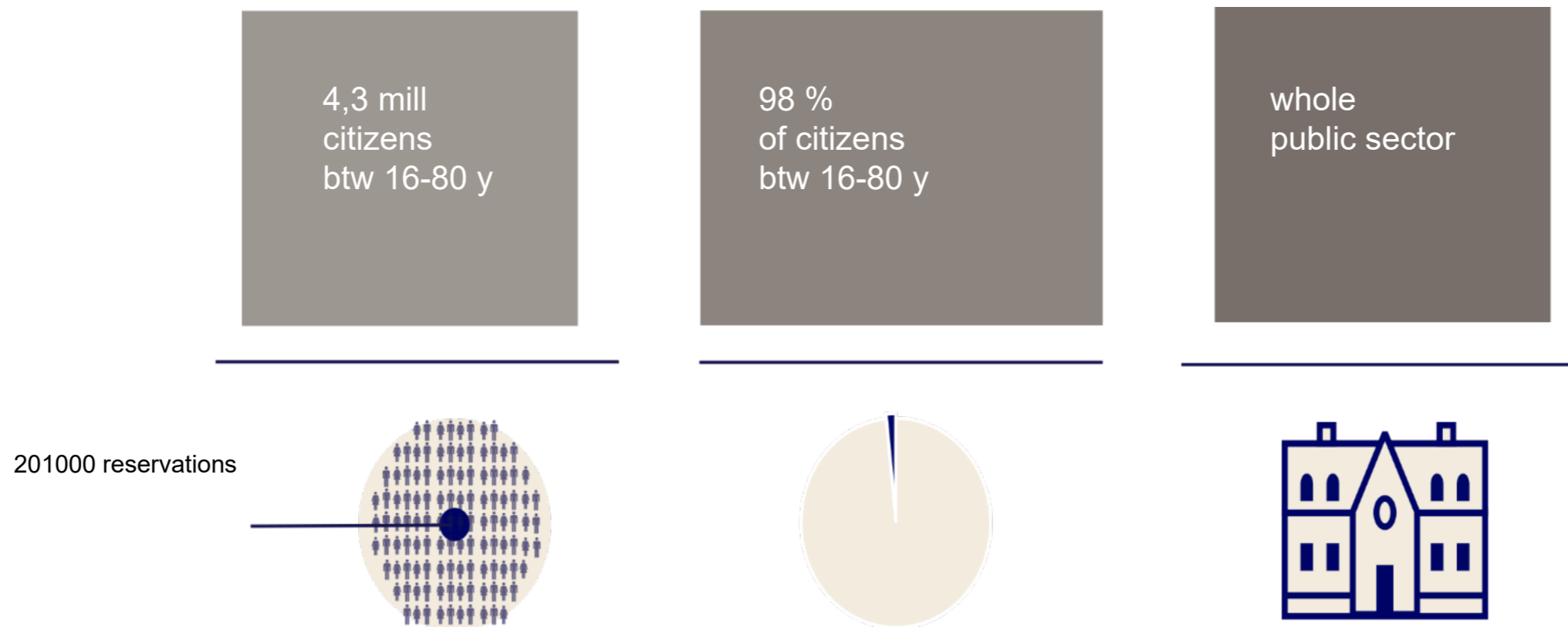
# ID-porten is the gateway to digital public services

Success factor - a micro service which only performs authentication



# Digital contact and reservation register

The register covers the administrations need for access to the citizens digital contact information. The citizen register and updates its own contact information.




**NORGE .NO** Gateway to digital public services

About Norge.no | Bokmål | Nynorsk | English | A A


Search  SEARCH

Find services ▼ Life situations ▼ Digital citizen ▼


Digital citizen



Choose a digital mailbox  
You can choose DigiPost or e-Boks



Update your contact information  
Mobile phone number, e-mail address and language preference



Electronic ID  
Log into digital services from public authorities

Frequently used services

Choose a digital mailbox >	Update your contact information >	Changing your regular GP doctor >
See Property >	Order the European Health Insurance Card >	Mine resepter >

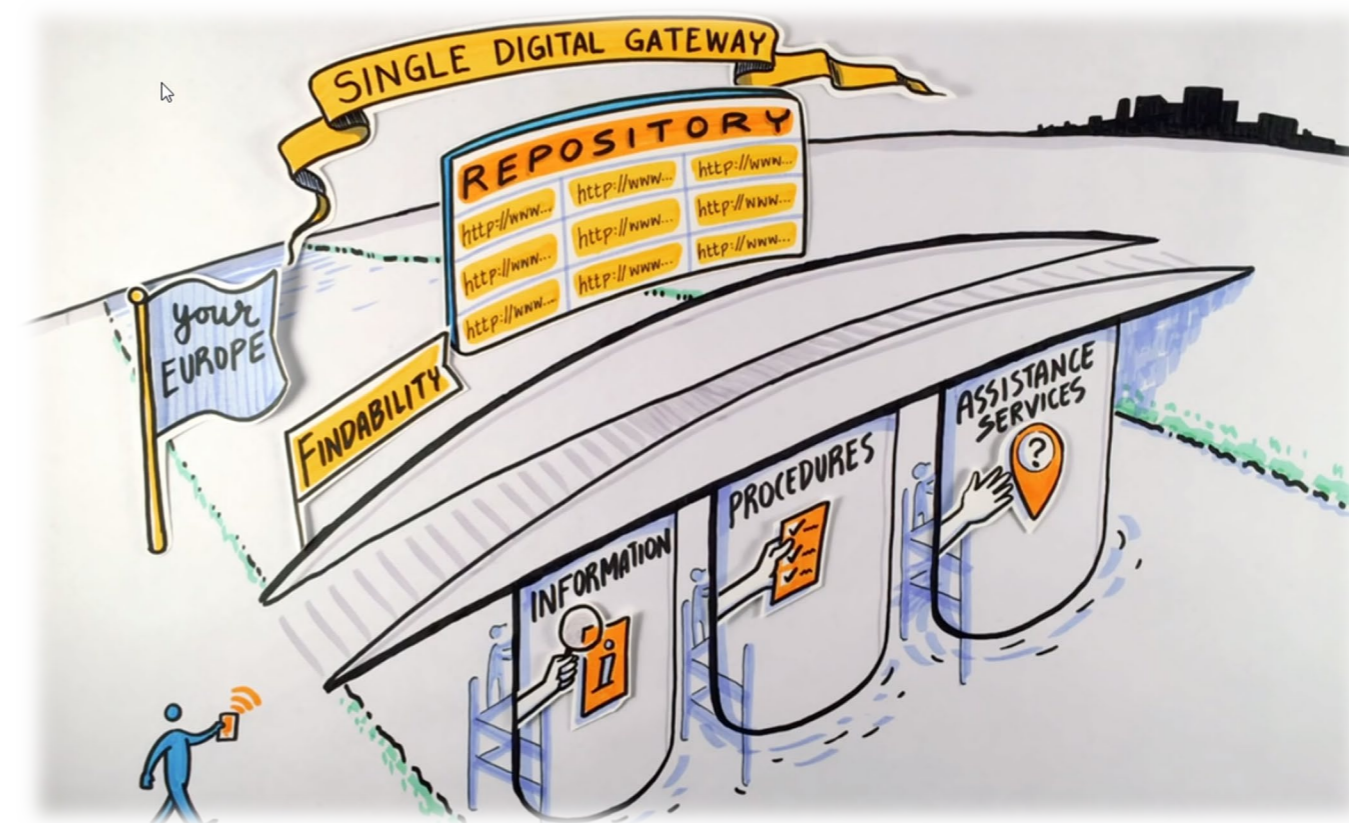
- Originally launched in January 2000, citizens can find digital services through:
  - Menu
  - Search
  - Life situations
- Norway.no also provide information about:
  - how to get an electronic ID
  - how to register in the Digital Contact Information Register
  - how to create a digital mailbox
  - access to information in the Digital Contact Information Register

# Norge.no - One stop shop?

- The vision was one common portal for contact with the public sector.
  - My page – each citizen could log-in and see both information from public records and get access to individualized services
  - Information about all public services on-line
- The idea of a one stop shop was (more or less) abandoned in 2012
  - My page may have been introduced to soon – not enough services available
  - In recent years public sector agencies want communication through their own channels
- We are currently considering how to use norge.no in the future

# Single Digital Gateway – EU initiative

- A regulation was passed by the EU in October 2018
- A single digital gateway with
  - Information
  - procedures
  - Assistance services
- Applicable for all EU member states, including the EEA



## Goal:

- Making it easier for citizens and businesses to move within the EU / EEA and to trade, establish themselves and expand businesses across national borders

Difi is the national coordinator.

# More information in english

- E-Invoicing
  - <https://www.anskaffelser.no/e-procurement>
- ID-gateway
  - <https://www.norge.no/en/electronic-id>
- Digital mailbox
  - <https://www.norge.no/en/about-digital-mailbox>
- Digital contact information register
  - <https://www.norge.no/en/update-your-contact-information>
- Electronic public records
  - <https://einnsyn.no/informasjon/om-oss>
- Norge.no
  - <https://www.norge.no/en>
- Land registry
  - <https://kartverket.no/en/Land-Registry-and-Cadestre/>
- National population registry
  - <http://www.skatteetaten.no/en/person/National-Registry/>
- Altinn
  - <https://www.altinn.no/en/Toppmeny/About-Altinn/>
- Single digital gateway
  - <https://www.youtube.com/watch?v=Znkoz0-P3sc&feature=youtu.be>

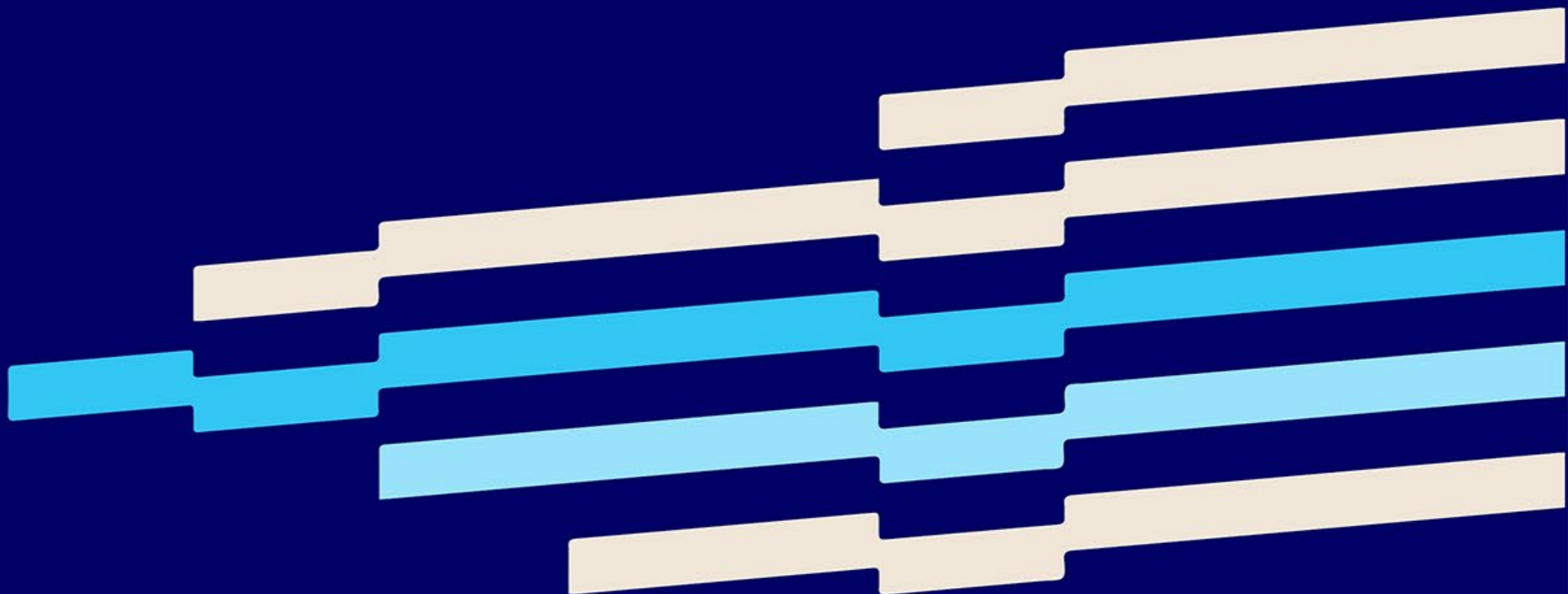


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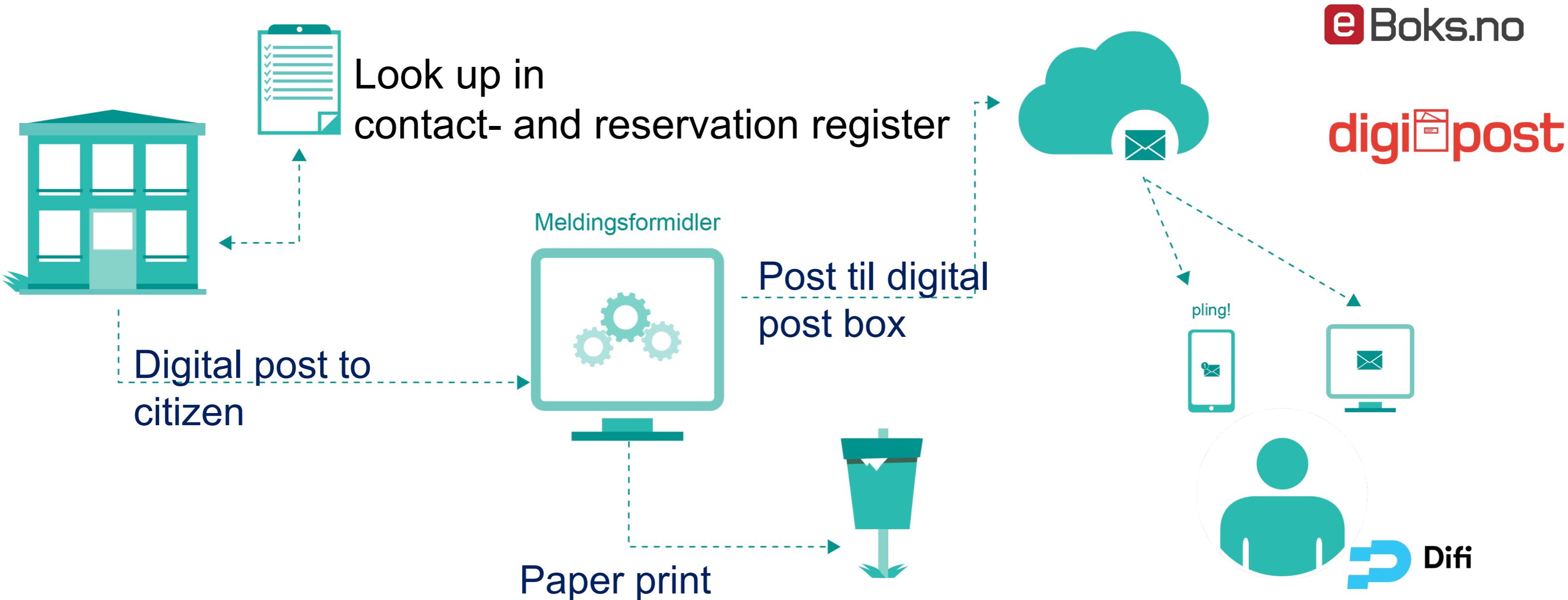
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Extra

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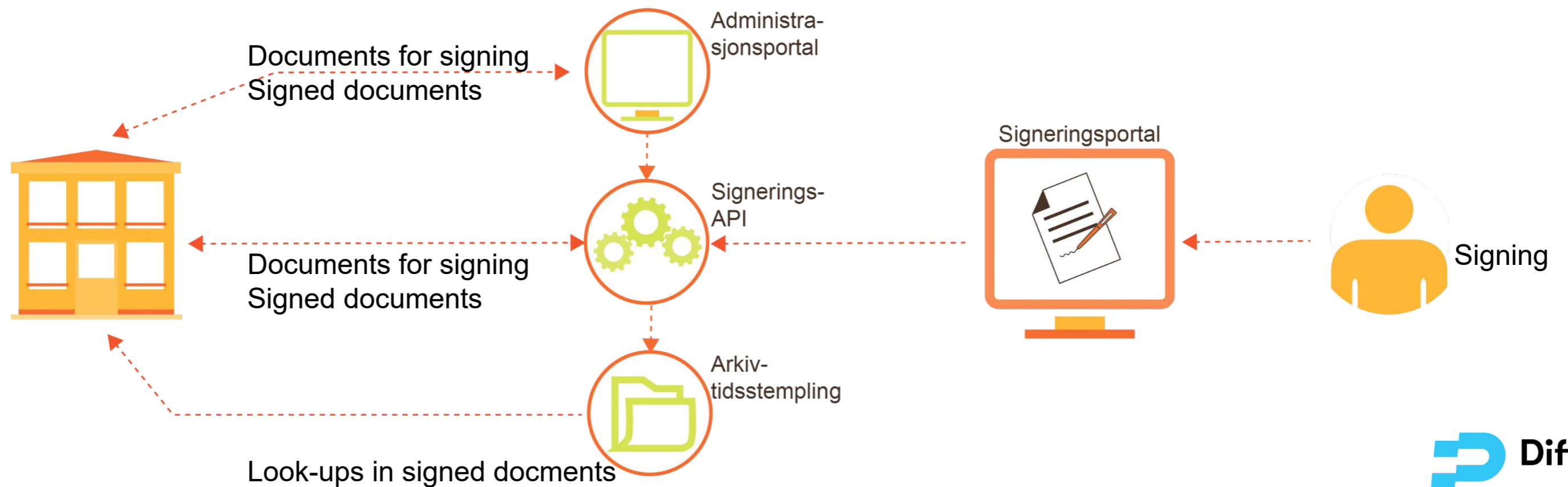
# Digital mailbox





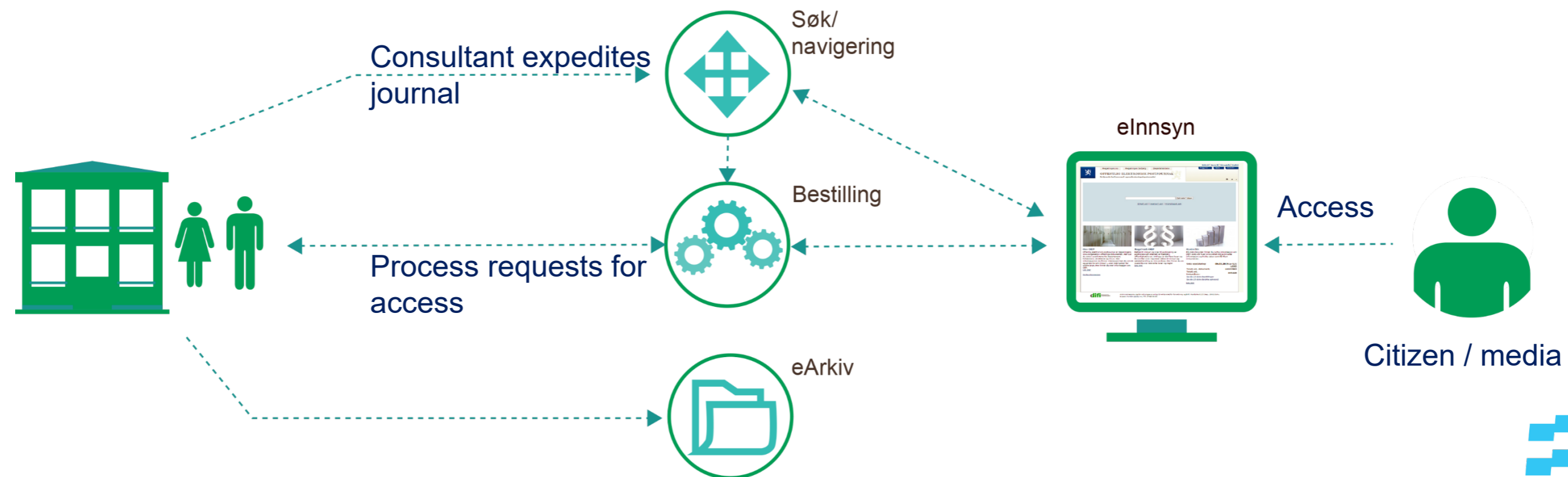
# Build-up of signing solution

Allows citizens to sign documents from the public sector digitally, by applying an advanced electronic personal signature. The solution helps public administration to digitize manual processes involving personal signature.



# Build-up of the access service

Streamlines the administrations work making documents and letters transparent and open. The government commissioned Difi to develop a new and better solution. The solution, **eInnsyn**, will be ready for use at the turn of 2017/18.



# All information - in one common portal

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- Citizens can explore, search, subscribe and go on an adventure in millions of documents.
- Citizens and media can receive the latest news on issues on their mobile.



# Kartverket

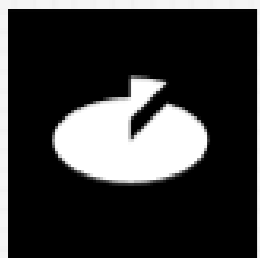


## The land register – register of ownership and encumbrances

- Norwegian properties are registered in the land register, which is the official register of legal rights and obligations associated with fixed property and housing cooperatives. The land register lists ownership and encumbrances such as mortgages, leasing rights, pre-emptive purchasing rights, and so on.

## Cadastral unit

- All properties in Norway have a set of numbers that identifies the property unit in the land register and cadastre.
- 0301 (Oslo) 208 (cadastral) 287 (property unit) 49 (section)



The Norwegian  
Tax Administration

# National Registry (for persons)



- The national registry contain information of everyone that resides or have resided in Norway.
- The Norwegian Tax Administration is responsible for keeping the national registry updated
- Birthnumber:                   15 10 72 3 1 5 2 7
- D-number:                     45 10 72 xxxxx
- National registry is now under modernization

# The procurement process to be digitalised

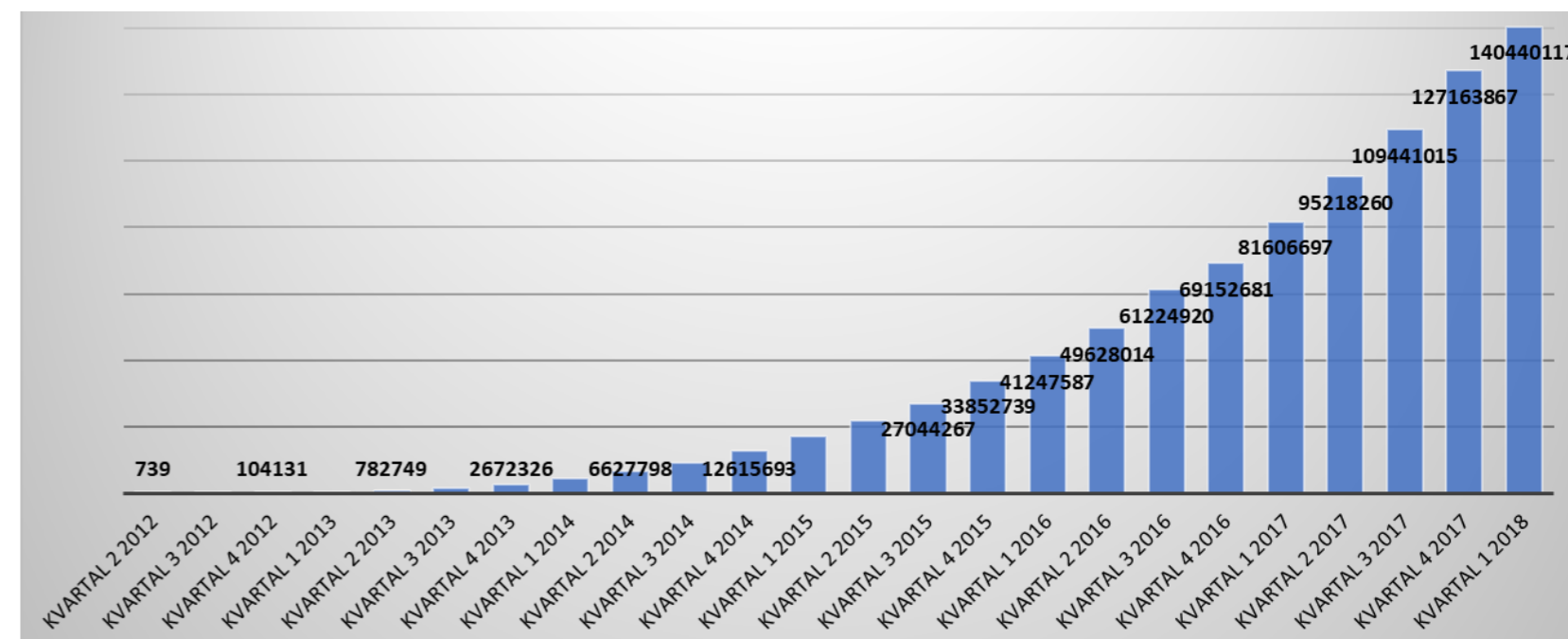
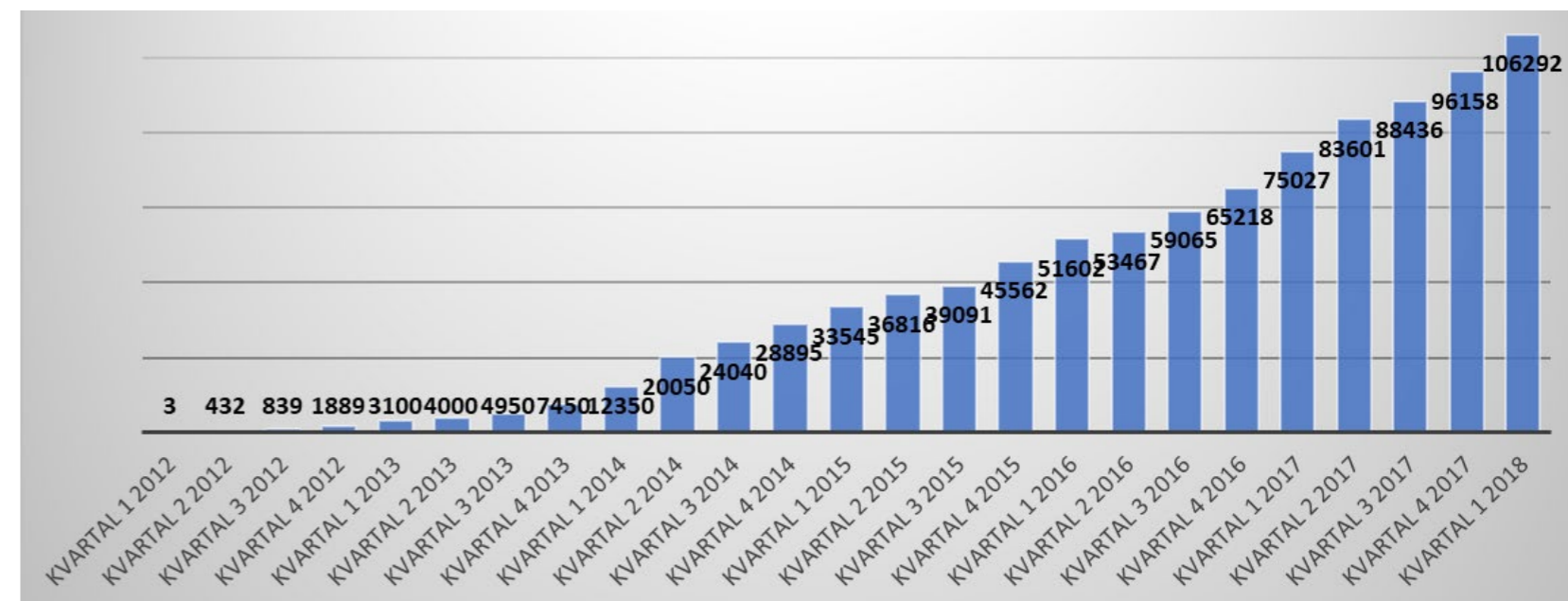


Digitalisation means the use of ICT to conduct, improve and further develop public procurement processes

<https://www.anskaffelser.no/public-procurement-information-english>

# eInvoicing in Norway

- Mandatory for all central government entities to receive and process EHF invoices from 1.7.2011
- Mandatory for all central government entities to require EHF invoices from their suppliers from 1.7.2012
- Mandatory for all public sector entities to use EHF from 1.1.2015
- Mandatory for all contracting authorities (public sector and utilities) to receive and process EN 16931 enabled EHF/PEPPOL BIS by 1.4.2019 (to be confirmed) (Implementation of directive 2014/55/EU on eInvoicing in public procurement)



# Altinn + Information management

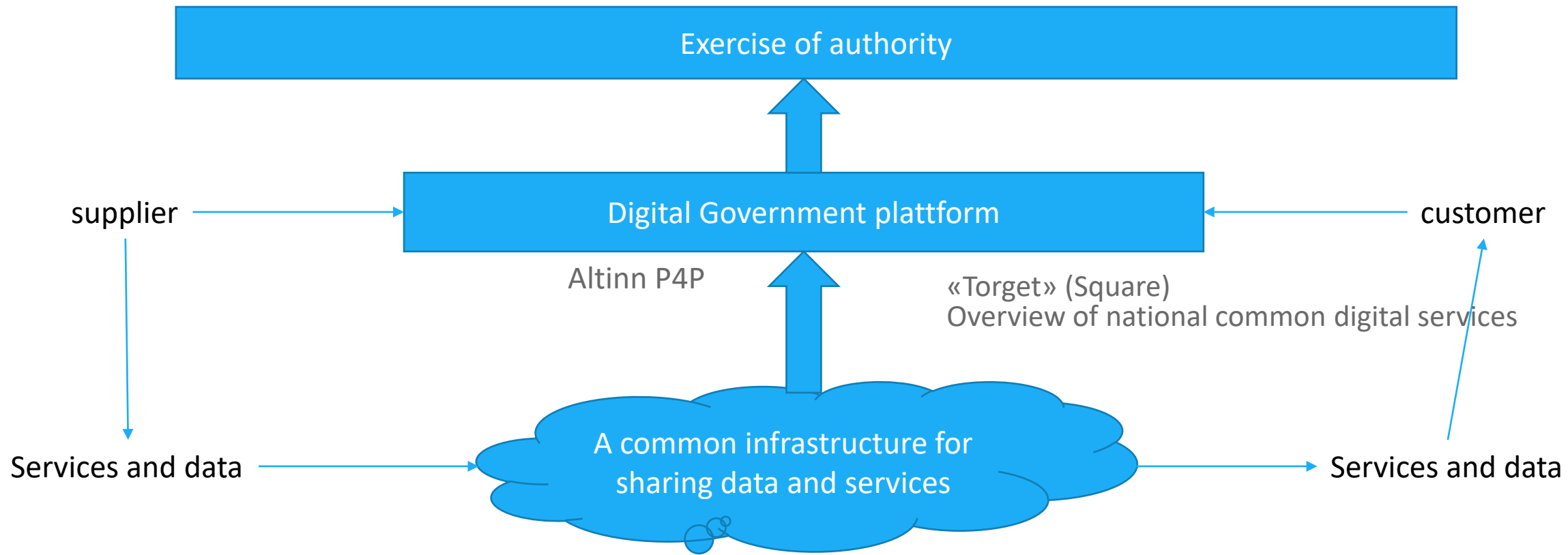
Rolf Jacobsen,  
Technical director  
Brønnøysundregistrene



## MOTIVATION

*Altinn and Information management is digital solutions to support exercise of authority that facilitates*

- *(1 and 2) that businesses and citizens make their duties and can benefit from their rights*
- *(3) a sustainable business*
- *(4) a good citizenship.*



Altinn

# Who Is Leading With Digital Government Technology Platforms



The Altinn Platform

Citizens/  
Businesses



DTA Whole of  
Government Platform

Ecosystems



Antwerp City Platform  
as a Service

Intelligence



Smart Nation Sensor  
Platform for IoT

Things



Adur and Worthing's  
Government as a Platform

IT Systems

## Altinn product platforms and channels

<b>Altinn portal</b> is the entrance to information and Altinn services	<b>Altinn API</b> enables Altinn functionality to be used from external systems	<b>Altinn app</b> represents a simplification of login and efficiency of the user dialog
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**Altinn Service Platform** - is the central part of Altinn that holds the whole of Altinn together. It consists of both development tools for creating services and runtime environment for running the services. The development environment is used to model, design, develop, version, configure, translate, test and manufacture the services.

**Altinn Authorization Platform** - provides the opportunity to control who do what with which data and for which purpose. All based on a security, intelligence, transparent and traceability platform

**Altinn Integration Platform** - offers a common hub for sharing and processing the data that is defined, structured and organized in a future common cross-sectoral information management solution.

**Altinn Infrastructure** - is the foundation of Altinn and consists of, among other things, service development environment, end user environment, development environment, test environment and various support functions.

Desired "cloud characteristics" such as scalable capacity, dynamic resource sharing, self-service, channel independence, measured allocation / consumption and good security solutions will characterize the development of Altinn infrastructure over the next few years.

## Altinn Integration Platform

Offers a common hub for sharing and processing the data that is defined, structured and organized in a future common cross-sectoral information management solution. It can be an alternative to today's more point-based information exchange, which simplifies the future management of the growing information sharing in society.

Altinn Integration Platform shall meet a common need for cross-sectoral sharing ("once only" principle), processing of data and management of processes. In this picture, integration must be seen in interaction with authentication, authorization and information management:

<b>Autentisering</b>	<ul style="list-style-type: none"><li>• Authentication identifies the person and lays the foundation for logging / tracking on an individual level</li></ul>
<b>Autorisasjon</b>	<ul style="list-style-type: none"><li>• Authorization ensures that the right person gets access to the right data at the right time and purpose</li></ul>
<b>Integrasjon</b>	<ul style="list-style-type: none"><li>• The integration platform makes available services and data</li><li>• The integration platform can offer different process functionality</li></ul>
<b>Informasjonsforvaltning</b>	<ul style="list-style-type: none"><li>• Information management defines, structures, and organizes the data</li></ul>

# Information Management



Information management means taking a holistic responsibility for reaching the potential that lies in exploiting data, while safeguarding quality and security





# FELLES DATAKATALOG

DATASETT BEGREPER API INFORMASJONSMODELLER

– closer to the goal “once only”

-if the public sector knew what the public sector knows

## Information Management product platforms and channels

### Common Data Catalog

is a solution that provides an overview of datasets, API, concepts and information models (and connections between them) in the public sector.

### Common Data Set Catalog

is a solution that provides an overview of data sets in the public sector, whether they are public open data or limited public. The catalog addresses the need to detect data sets, evaluate whether the data sets can be used in the context and access data sets through APIs.

### Common API Catalog

is an extension of Common Data Catalog to create an overview of access to data.

### Common concept catalog

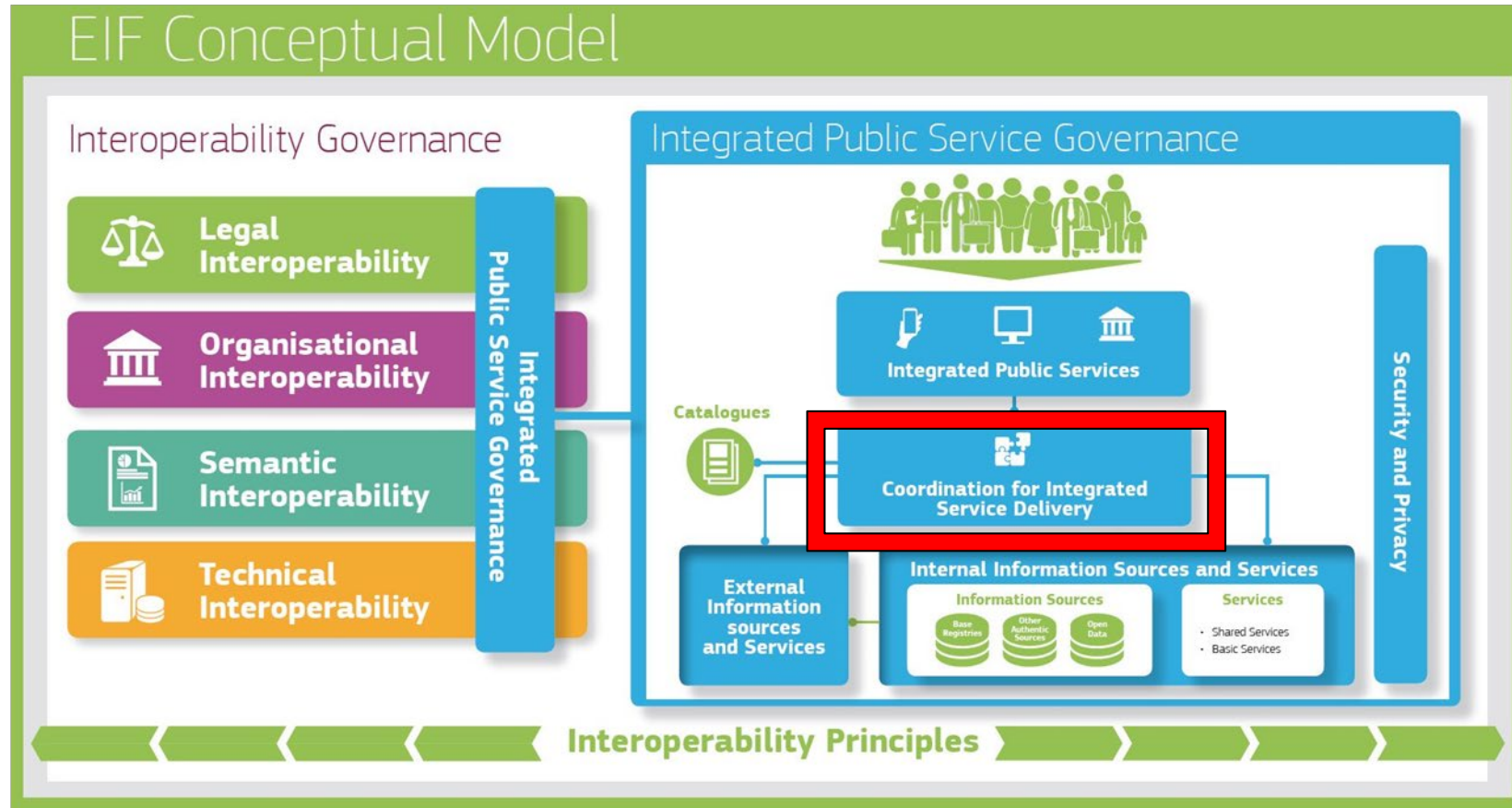
is an extension of the Common Data Catalog to create an overview of the meaning of the data. It is not a condition that the terms in the Common Concept Catalog are linked to a dataset, but this link should be made where appropriate.

### A common information model directory

is an extension of the Common Data Catalog to create an overview of information models and connections between them. In the catalog you will also find which APIs the information models belong to.

In conclusion

# European Interoperability Framework (EIF)



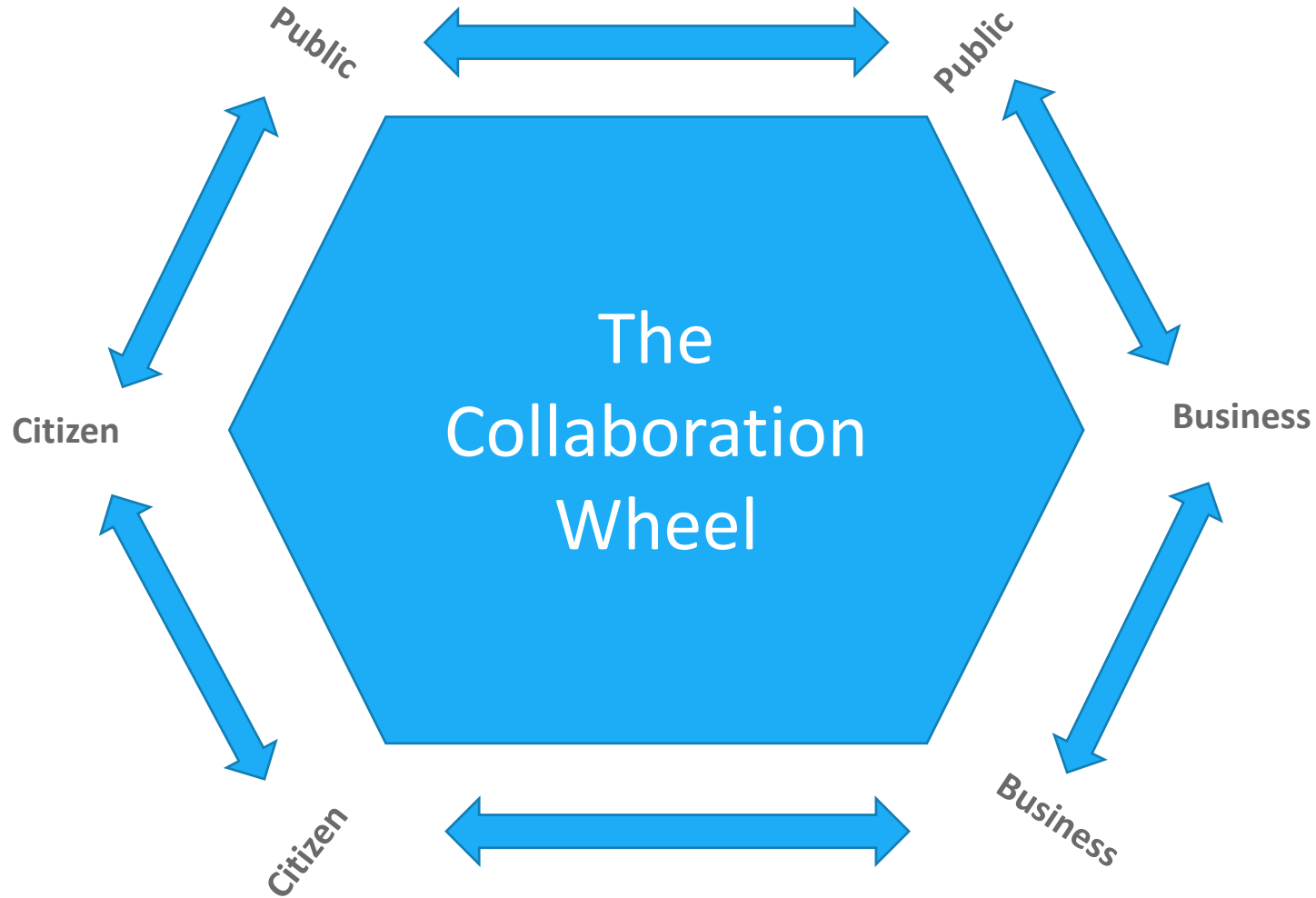
f.eks.

*Recommendation 36:*  
Develop **shared infrastructure**, reusable services and information sources that can be used by all public administrations.

*Recommendation 37:*  
Make authoritative sources of information available to others while using access and control mechanisms to ensure **security and privacy** in accordance with the relevant legislation.

*Recommendation 41:*  
Put in place **catalogues of public services, public data** and interoperability solutions and models for describing them.

**"Inside - Out"**  
**Public sector needs for task solving = Exercise of the authorities**



**"Outside - In"**  
**Private sector needs = Innovation and business development**