

Digital Public Administration factsheet 2021

Norway

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Please note that the data collection exercise for the update of the 2021 edition of the Digital Public Administration factsheets took place between March and June 2021. Therefore, the information contained in this document reflects this specific timeframe.



1 Country Profile

1.1 Basic data

Population: 5 379 475 (2020)

GDP at market prices: 318 336 (2020)

GDP per inhabitant in PPS (Purchasing Power Standard EU 27=100): 142 (2020)

GDP growth rate: - 0.8 % (2020) **Inflation rate**: 1.2% (2020) **Unemployment rate**: 4.4% (2020)

General government gross debt (Percentage of GDP): 40.6% (2020)**

General government deficit/surplus (Percentage of GDP): -3.36% (2020)***

Area: 384 802 km² * Capital city: Oslo

Official EU language: Norwegian **Currency**: Norwegian krone (NOK)

Source: Eurostat (last update: 8 February 2021), EFTA*, Trading Economics**, Fiscal Balances

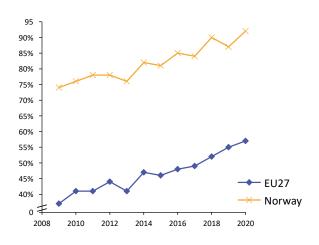
and public debt - OECD***

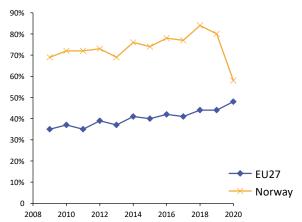
1.2 Digital Public Administration Indicators

The following graphs present data for the latest Digital Public Administration Indicators for Norway compared to the EU average. Statistical indicators in this section reflect those of Eurostat at the time the Edition is being prepared.

Percentage of individuals using the internet for interacting with public authorities in Norway

Percentage of individuals using the internet for obtaining information from public authorities in Norway

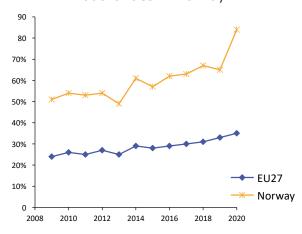




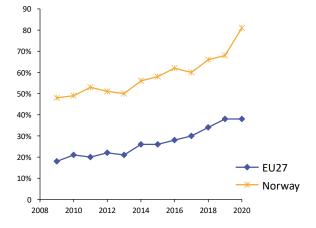
Source: Eurostat Information Society Indicators

Source: Eurostat Information Society Indicators

Percentage of individuals using the internet for downloading official forms from public authorities in Norway



Percentage of individuals using the internet for sending filled forms to public authorities in Norway

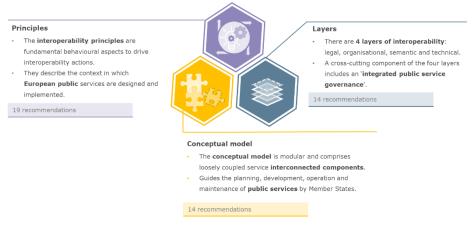


Source: Eurostat Information Society Indicators

Source: Eurostat Information Society Indicators

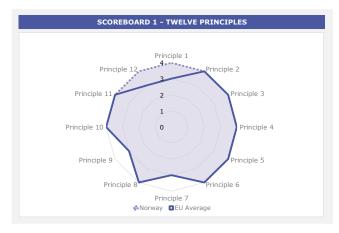
1.3 Interoperability State of Play

In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations. The picture below represents the three pillars of the EIF around which the EIF Monitoring Mechanism was built to evaluate the level of implementation of the EIF within the Member States. It is based on a set of 71 Key Performance Indicators (KPIs) clustered within the three main pillars of the EIF (Principles, Layers and Conceptual model), outlined below.



Source: European Interoperability Framework Monitoring Mechanism 2020

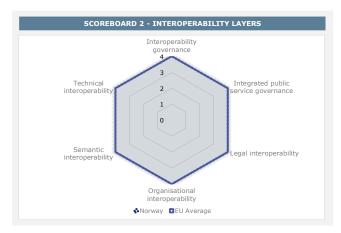
For each of the three pillars, a different scoreboard was created to breakdown the results into their main thematic areas (i.e. the 12 principles of interoperability, the interoperability layers and the components of the conceptual model). The thematic areas are evaluated on a scale from one to four, where one means a lower level of implementation and 4 means a higher level of implementation. The graphs below show the result of the second EIF Monitoring Mechanism data collection exercise for Norway in 2020.



Source: European Interoperability Framework Monitoring Mechanism 2020

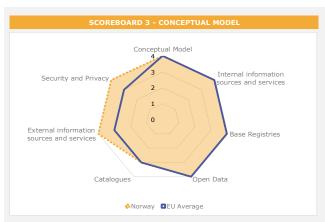
Norway's results in Scoreboard 1 show an overall very good implementation of the EIF Principles, scoring above the European average for Principle 12 (Assessment of Effectiveness and Efficiency) and 1 (Subsidiarity and Proportionality). While at the EU average, areas of improvements are concentrated in the Principles 9 (Multilingualism) and 7 (Inclusion and accessibility) for which the score of 3 shows an upper-medium performance in the implementation of corresponding recommendations. Indeed, the use of e-accessibility specifications to ensure that public services are accessible to all citizens, including persons with disabilities, the elderly and other disadvantaged groups (Principle 7 – Recommendation 14) and the implementation of information systems and

IT architecture that caters for multiple languages based on the needs of the end user in the design of European public services (Principle 9 – Recommendation 16) are partial and could be bettered to reach the maximum score of 4.



Source: European Interoperability Framework Monitoring Mechanism 2020

The Norwegian results for the implementation of interoperability layers assessed for Scoreboard 2 shows an overall very good performance with scores of 4 for all layers. Potential areas of improvement to enhance the country's implementation of the recommendations under Scoreboard 2 are in the area of interoperability governance and semantic interoperability. More specifically, the overall score of 3 for Norway in Recommendation 22, stating that public administrations should use a structured, objective and transparent approach when choosing standards and specifications, could be improved. The same can be said for the overall score of 3 for Recommendation 31, stating that public administrations should implement a high-level information management strategy to prevent fragmentation and duplication, and ensure well-managed metadata. However, it is important to note that while greater efforts could be focussed on Recommendation 22 and 31, the lower score of 3 does not negatively impact the overall interoperability governance score for Norway.



Source: European Interoperability Framework Monitoring Mechanism 2020

Norway's scores assessing the Conceptual Model in Scoreboard 3 show a very performance in the implementation of recommendations associated with security and privacy, external information sources and services, base registries, open data and internal information sources and services, and the conceptual model itself. It is interesting to note that Norway has an above-EU average score of 4 for the implementation of recommendations associated with security and privacy and external information sources and services. However, some improvements can be made in implementing recommendations related to catalogues. By putting in place a catalogue of public services, data and interoperability solutions, each with common models to

describe them (Catalogues – Recommendation 44), Norway's overall score on catalogues could be improved to reach the maximum score of 4.

Additional information on Norway's results on the EIF Monitoring Mechanism is available online through interactive dashboards.

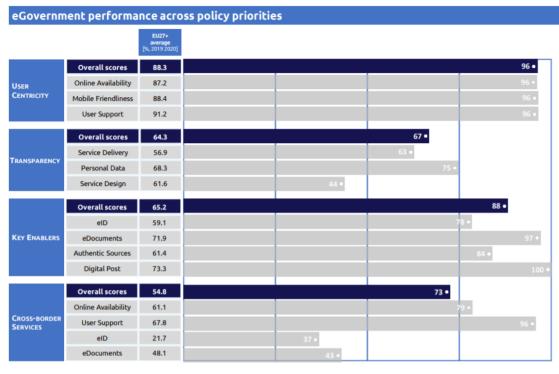
1.4 eGovernment State of Play

The graph below presents the main highlights of the latest eGovernment Benchmark Report, an assessment of eGovernment services in 36 countries: the 27 European Union Member States, as well as Iceland, Norway, Montenegro, the Republic of Serbia, Switzerland, Turkey, the United Kingdom, Albania and Macedonia (referred to as the EU27+).

The study evaluates online public services on four dimensions:

- User centricity: indicates the extent to which a service is provided online, its mobile friendliness and its usability (in terms of available online support and feedback mechanisms).
- Transparency: indicates the extent to which governments are transparent about
 (i) the process of service delivery, (ii) policy making and digital service design processes and (iii) the personal data processed in public services.
- Cross-border services: indicates the extent to which users of public services from another European country can use the online services.
- Key enablers: indicates the extent to which technical and organizational preconditions for eGovernment service provision are in place, such as electronic identification and authentic sources.

The 2021 report presents the biennial results, achieved over the past two years of measurement of all eight life events used to measure the above-mentioned key dimensions. More specifically, these life events are divided between six 'Citizen life events' (Career, Studying, Family life, measured in 2020, and Starting a small claim procedure, Moving, Owning a car, all measured in 2019) and two 'Business life events' (Business start-up, measured in 2020, and Regular business operations, measured in 2019).



Source: eGovernment Benchmark Report 2021 Country Factsheets



2 Digital Public Administration Highlights

Digital Public Administration Political Communications

In January 2020, the government presented a National Strategy for Artificial Intelligence. It is intended for the private and public sectors and focuses on describing the areas that are important for the country to invest in. For instance, Norway envisages to gain competitive advantages in fields such as health, seas and oceans, public administration, energy and mobility. Furthermore, the government plans on evaluating how industrial policy instruments can best be designed to support potential value creation and use of AI in the business sector. A section dedicated to ethics has also been introduced and covers fields such as the respect for privacy and data protection and good cyber security.

In July 2020, the government presented a White paper on innovation in the public sector to the Norwegian Parliament (*Stortinget*). The white paper focuses on how modern methodologies can contribute to developing innovative policies. The paper highlights the importance of culture, leadership and skills.

As with most activities in Norwegian public administration, political communications in 2020 and 2021 have mostly centred on the COVID-19 public health crisis. One key political communication was the guide Our New Digital Everyday Life, published in January 2021, which highlights how the pandemic has accelerated the digitalisation of society in large and public administration.

On 25 March 2021, a white paper was delivered to the *Stortinget* on the topic of 'Data as a resource – data-driven economy and innovation'. This white paper includes national principles for sharing and use of data and focusses on how data-driven technologies can present opportunities for Norwegian businesses.

Digital Public Administration Legislation

While no new legislation pertaining to digital public administration has been published recently in Norway, several acts related to digital public administration are currently being revised. The Public Administration Act and the Archival Act are being revised, in part to consider the digitalisation of public administration. The Directive (EU) 2019/882 on the accessibility requirements for products and services is currently being considered by the government for transposition into Norwegian law.

Digital Public Administration Governance

In 2020, the Norwegian Digitalisation Agency was established. The agency is the Norwegian government's foremost tool for faster and more coordinated digitalisation of the Norwegian public sector.

Digital Public Administration Infrastructure

Norway has developed a broad portfolio of national common digital solutions. Some of these are mandatory for state-level enterprises to consider, as outlined in the Digitalisation Circular; others are voluntary. Several of the Norwegian base registries are also considered part of these national common digital solutions. These common digital solutions took on increased importance in the wake of COVID-19 and were a key component in the government's response to the public health crisis. For instance, common solutions were contributed to the swift establishment of a business compensation scheme in 2020.



3 Digital Public Administration Political Communications

3.1 Specific political communications on digital public administration

Our New Digital Everyday Life

In January 2021, the Ministry of Local Government and Modernisation published a new guide titled Our New Digital Everyday Life. The guide, published in the wake of the COVID-19 public health crisis, highlights the various government initiatives that have been implemented to digitalise Norway and ensure the continuous delivery of digital public services.

White paper on Innovation in the Public Sector (Report. St. 30 (2019/2020))

In July 2020, the Norwegian government presented the White Paper on Innovation in the Public Sector to the Norwegian Parliament (*Stortinget*). The white paper focuses on how modern methodologies can contribute to developing innovative policies. The paper presents three main principles to guide innovation in the public sector:

- politicians and public authorities must provide room for manoeuvring and incentives to innovate;
- leaders must develop the culture and competences for innovation;
- public enterprises must seek new forms of cooperation.

With increased attention to the development of cross-cutting services, an innovation culture, digital leadership skills and new models for collaboration across sectors and levels of government, the paper aims to contribute in the long run to developing new business models in the public sector.

Digital Agenda for Norway – ICT for a Simpler Everyday Life and Increased Productivity

The Norwegian government adopted an information and communication technology (ICT) strategy, Digital Agenda for Norway, as set forth in the Digitisation white paper Meld. St. 27 (2015-2016) in the parliamentary year 2015-2016. The Digital Agenda has two key objectives: ensuring a user-centric and efficient public administration and achieving value creation and inclusion with digital services.

The newly adopted strategy has five key priorities:

- a user centric focus;
- ICT should constitute a significant input factor for innovation and productivity;
- strengthened digital competence and inclusion;
- an effective digitisation of the public sector; and
- a sound data protection and information security.

The effective use of ICT is essential to ensure continued economic growth and a high level of employment in Norway. Through the purposeful use of ICT, the policy aims to provide the public with a growing number of digital services. Digital self-service solutions will help improve service quality, availability and flexibility for users.

Advanced use of ICT in business and public sectors depends on a good infrastructure (broadband) and a sufficient knowledge of ICT within the population. It is important that technological solutions are accessible to everyone, including the visually and hearing

impaired. In addition, to achieve the objectives of ICT policy, the research and development of ICT and advanced ICT skills needs to be strengthened.

One Digital Public Sector: Digital Strategy for the Public Sector 2019-2025

The Digital Strategy for the Public Sector, launched in June 2019, establishes the common goals and focus areas for digitalisation activities towards 2025. It supports digital transformation throughout the public sector. The strategy's main measures focus on a user-centric service development and more efficient and coordinated utilisation of common IT solutions. This is achieved by developing a common ecosystem for digital cooperation in the public sector. The strategy requires that cybersecurity be integrated into common IT solution services development, operation and management, in accordance with the objectives of the National Cyber Security Strategy for Norway. Therefore, the main goals for 2025 aim to:

- achieve the digitalisation of the public sector in a transparent, inclusive and trustworthy way;
- perform more tasks digitally as well as the delivery of services;
- encourage citizens, businesses and voluntary organisations to communicate digitally with the public sector;
- exploit the sharing and using of data to create user-friendly services and to promote value creation for businesses;
- help local and central government agencies to develop their services based on a common digital ecosystem for cooperation; and
- help local and central government agencies to gain from digitalisation in a systematic manner.

The Action Plan accompanying this strategy is coordinated by the Norwegian Digitalisation Agency.

Digital21

Digital21 was initiated by the Norwegian Ministry of Trade and Industry as a result of recommendations in the industrial report, Meld. St. 27 (2016-2017) Industry - Greener, Smarter and More Innovative. Digital21 is a government-elected committee that gives advice and recommendations to authorities on how to facilitate business development and utilise new expertise, technology and research through digitalisation. The purpose is to create a strategy across industries and fields of expertise, where key actors support common goals and recommended measures.

The long-term goal of Digital21 is to support and accelerate digitalisation for businesses. To do so, Digital21 has identified six areas of significant importance:

- emerging technologies;
- research, development and innovation;
- competence;
- computer resources and infrastructure;
- safety; and
- public framework.

Digital21 has established expert groups in each of these six areas.

3.2 Interoperability

Norwegian Interoperability Framework

The Norwegian Interoperability Framework (NIF) was published in April 2018. It aims to help public enterprises define, develop and manage digital services, including cross-

sector services, and to facilitate the exchange of data and services between public services.

The NIF is a national transposition of the European Interoperability Framework, and covers organisational, judicial, semantic and technical aspects of interoperability.

The framework provides access to a common toolbox that contains concept definitions, models and guidelines.

The interoperability framework is also related to the Norwegian architecture principles. The principles were revised in 2019 and a new version was published in January 2020. Increased interoperability is one of the main considerations of the new version. The principles are mandatory for State-level public entities, while local and regional level public entities are strongly recommended to use the principles as well.

3.3 Key enablers

3.3.1 Access to public information

White paper on 'Data as a resource'

On 25 March 2021, a white paper was delivered to the *Stortinget* on the topic of 'Data as a Resource – Data-driven Economy and Innovation'. This white paper includes national principles for sharing and using data.

3.3.2 eID and Trust Services

New Strategy for eID

In February 2021, the Ministry of Local Government and Modernisation decided to put in place a new strategy for electronic identification (eID), due to be published later in 2021.

The main goals for eID and trust services are laid out in the One Digital Public Sector strategy. It states that all citizens should have an eID that can be used for the services they need. All groups, including foreign nationals without a Norwegian national identity number, and children and adolescents, should be able to obtain an eID at the level they have a need for it. Individuals who are unable to act digitally themselves, must have the opportunity to be represented by a proxy. Provisions must therefore be made for the use of digital authorisations and digital consent. There is also a need to facilitate the use of electronic employee IDs.

3.3.3 Security aspects

National Cybersecurity Strategy

On 30 January 2019, a new National Cybersecurity Strategy was released by the Ministry of Justice and Public Security and the Ministry of Defence. It is the fourth of its kind in the country and is intended to address issues such as the need to reinforce public-private, civilian-military and international cooperation. The primary target groups are authorities and companies in both public and private sectors, including municipalities. Moreover, the strategy lays the foundations for ensuring private individuals the necessary knowledge and understanding of risks in order to use technology in a safe and secure way.

The main goals are organised in five priority areas (preventive cybersecurity; cybersecurity in critical societal functions; competence; detect and handle cyberattacks;

prevent and combat cybercrime) and sets a two-part list of measures: part one describes key measures that support the strategy and part two lists ten basic measures that both public and private companies are recommended to implement.

3.3.4 Interconnection of base registries

Once-Only Principle

The Once-Only principle has been adopted by the Norwegian public administration. The 2016 white paper, Digital Agenda for Norway, states that one of the main priorities of the government's ICT policy is that public administration entities must reuse information rather than ask users for duplicate information that they already have provided.

3.3.5 eProcurement

Programme for Digital Procurement

By establishing the Programme for Digital Procurement, Norway aims to streamline and improve public procurement by fully digitalising the procurement process. The programme will last until 2024 and the direct implementation costs are expected to be NOK 91 million.

It aims to provide great benefits for the business sector in the form of simpler processes, less handling of paper documents and increased reuse.

An all-digital procurement process streamlines and facilitates an important and resource-intensive process. Participation in public procurement competitions takes less time and becomes more attractive to businesses, especially small and medium-sized enterprises.

For public clients, the full digitalisation of the procurement process leads to resource savings and increased quality as well as greater transparency. The potential quantitative gains directly related to digitalisation have been estimated to be approximately NOK 3.6 billion in the investment period.

3.4 Domain-specific political communications

Transportation Sector Public Data Strategy

The purpose of the Transportation Sector Public Data Strategy is to support the increased use of open public data from the transportation sector.

Data analysis can help optimise processes, decisions, and forecasts of future events. At the same time, increased use of data can contribute to efficiency, innovation and business development. Data is the "fuel" in the digital economy and in the increasingly digitalised transport sector. The potential of increased use of open public data from the transport sector is considerable.

To support this trend, the availability of public data from State-owned enterprises needs to be extended.

2025 Geodata Strategy

Geographic information concerns location objects, events and conditions. The term is often abbreviated to location data or geodata.

The 2025 Geodata Strategy was launched by the Norwegian government on 1 November 2018 and aims at addressing the needs of sectoral agencies at various government

levels, computer manufacturers, technology providers, entrepreneurs and cross-sector users. The Norwegian Mapping Authority is the national spatial data coordinator.

National Strategy for eHealth

eHealth is a prerequisite for solving the challenges of a fragmented health care system. The strategy is aimed at providing efficient, sustainable and paper-free health care services. The strategy covers the period 2017-2022, and it was updated in 2019. It builds on the ambitions of the White Paper 'One patient – One Record', including health personnel's simple and secure access to patient information, citizens' access to simple and secure digital services, and the availability of health data for quality improvement, health surveillance, management and research.

White Paper on Digital Transformation and Development Policy

The White Paper on Digital Transformation and Development Policy defines and gives direction to digitalisation in Norwegian development policy and cooperation. It aims to contribute to more efficient development cooperation and to increase the capacity of development cooperation between partners to make use of digital technologies.

Digitalisation Strategy for the Climate and Environmental Sector 2020-2024

The Digitalisation Strategy for the Climate and Environmental Sector 2020-2024 was launched in April 2020. Some of its main targets are increasing the availability of user-oriented environmental information and environmental data that are reliable, open and free-of-charge.

3.5 Emerging technologies

Powered by Nature – Norway as a Data Centre Nation

The government wants Norway to be an attractive nation for data centres and other data-centric industries. In this regard, the Ministry of Trade, Industry and Fisheries published in February 2018 the strategy Powered by Nature – Norway as a Data Centre Nation.

As the future unfolds, data will become an increasingly important resource and input for the business community as well as for society in general. This represents a major economic opportunity for Norwegian businesses and society and will be a key to government policies and priorities going forward.

National Strategy for Artificial Intelligence

On 14 January 2020, the National Strategy for Artificial Intelligence of Norway was launched. No specific time frame was applied as the government committed itself to progressively adjust it in line with technological and social developments. It states that Norway should take the lead in developing and using AI that respects individual rights and freedoms.

The AI Strategy takes as a starting point the fact that Norway is well positioned for succeeding with AI. Indeed, Norway has:

- a high level of public trust in both the business and public sectors;
- a population and business sector that are digitally competent;
- an excellent infrastructure and high-quality registry data that span over many decades;

- well-developed e-Governance and public agencies that have come a long way with digitalisation and that have the capacity and expertise to experiment with new technologies; and
- tripartite cooperation between employers, unions and government, which facilitates cooperation when restructuring is necessary.

The strategy goes on to highlight that:

- AI developed and used in Norway should be built on ethical principles and respect human rights and democracy;
- research, development and use of artificial intelligence (AI) in Norway should promote responsible and trustworthy AI;
- development and use of AI in Norway should safeguard the integrity and privacy of the individual; and
- cybersecurity should be built into the development, operation and administration of systems that use AI.

Supervisory authorities should make sure that AI systems in their areas of supervision are operated in accordance with the principles for responsible and trustworthy use of AI.

The strategy outlines the importance of regulatory sandbox initiatives as a tool in the Norwegian public administration. One example is the ongoing cooperation between the National Archival Service and the Norwegian Digitalisation Agency, where participants in the initiative are being challenged to find new and innovative ways of combining documentation management, freedom of information and personal data protection. Another example is the cooperation between the Data Protection Agency and the Norwegian Labour and Welfare Administration (NAV). It aims to stimulate innovation of ethical and responsible AI, with extra attention being paid to personal data protection. This latter initiative focusses on the specific use case of workers who need to take sick leave and helping the Labour and Welfare Administration identify people who need specific attention in a more targeted way.

Cloud Computing Strategy for Norway

Launched in 2016, the Cloud Computing Strategy addresses several challenges that public sector enterprises face when they consider using cloud services. It also lists measures the Norwegian government should take to ensure a secure and proper use of cloud computing.



4 Digital Public Administration Legislation

4.1 Specific legislation on digital public administration

Public Administration Act

The Public Administration Act sets out the procedure in cases concerning public administration. The act states that the public sector must communicate digitally with citizens by default, unless they choose to opt out.

The Public Administration Act is currently under revision. One of the main rationales for the revision is the digitalisation of public administration.

Regulation on Electronic Communication with and within Public Administration

The Regulation on Electronic Communication with and within Public Administration is intended to promote predictability and flexibility, and to facilitate the coordination of secure and appropriate technical solutions.

Regulation on IT Standards in Public Administration

The Regulation on IT Standards in Public Administration is intended to promote interoperability with and within public administration through the use of common standards and architectures. In January 2021, the Norwegian Digitalisation Agency was commissioned to evaluate the Regulation on IT Standards in Public Administration.

Digitalisation Circular

The Digitalisation Circular is an annual circular presenting the Norwegian government's main directives and recommendations for digitalisation in the public sector. The directives are mandatory for most State-level entities and recommended for local-level government (municipalities and counties).

4.2 Interoperability

No legislation has been adopted in this field to date.

4.3 Key enablers

4.3.1 Access to public information

Constitution of Norway

According to Article 100, everyone has a right of access to documents of the State and municipal administration, as well as a right to follow the proceedings of the courts and democratically elected bodies. Limitations to this right may be prescribed by law to protect the privacy of individuals or for other such purposes. It is the responsibility of State authorities to create the conditions that facilitate open and enlightened public discourse.

Freedom of Information Act

The Freedom of Information Act No. 69 of 19 June 1970 was repealed by Act No. 16 of 19 May 2006 relating to the right of access to documents held by public authorities and public undertakings. The purpose of this Act is to facilitate an open and transparent public administration, and thereby strengthen freedom of information and expression,

democratic participation, legal safeguards for the individual, confidence in public authorities and control by the public. Furthermore, it shall ease the re-use of public information.

Re-use of Public Sector Information

Norway has notified the full transposition of the European Directive on the re-use of Public Sector Information (PSI Directive). The Directive is implemented in the Freedom of Information Act.

4.3.2 eID and Trust Services

eSignatures Legislation

Act No. 81 of 15 June 2001 relating to electronic signature (Electronic Signature Act) contains detailed provisions for the electronic identification of persons and gives qualified electronic signatures equal status to traditional signatures for administrative purposes. The Act, updated on 17 June 2005, implements the relevant Directive 1999/93/EC.

eIDAS Regulation

The eIDAS Regulation (EU Regulation 910/2014) is a legal act on European level setting rules for secure and seamless use of electronic identification and electronic transactions in the European Single Market. Since its introduction in 2014 it has been progressively introduced in the whole EU/EEA area. The eIDAS Regulation has been incorporated into Norwegian law, coming into effect in June 2018.

4.3.3 Security aspects

Personal Data Act

The purpose of Act No. 31 of 14 April 2000 relating to the processing of personal data (Personal Data Act) is to protect natural persons from the violation of their right to privacy through the processing of personal data. It ensures that personal data is processed in accordance with the fundamental respect for the right to privacy, including the need to protect personal integrity and private life, and that personal data is of adequate quality. This Act transposes Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data into Norwegian law

An updated Personal Data Act came into effect July 2018, incorporating the General Data Protection Regulation.

Personal Data Regulations

The regulations on the processing of personal data (Personal Data Regulations) were laid down by the Royal Decree of 15 December 2000 pursuant to Act No. 31 of 14 April 2000 on the processing of personal data (Personal Data Act), as amended on 23 December 2003.

4.3.4 Interconnection of base registries

Population registry

The Population Registry Act is divided into six different chapters:

- 1. organisation of the registry;
- 2. information and notification requirements;
- 3. confidentiality;
- 4. use of the registry's information;
- 5. penalty clauses; and
- 6. domicile registration of cabinet members and members of parliament.

The Act positions the population registry as a central national registry, which includes records of persons, who are or have been residents of Norway, who were born in Norway and who were assigned ID numbers. The State must ensure the maintenance of the population registry, bearing its costs. The information in the registry is gathered for tax, electoral and population analyses purposes by local tax assessment offices and is overseen by the Directorate of Taxes (*Skattedirektoratet*). Information from the registry, e.g., names, addresses, citizenship, identification numbers, employment and civil status of individuals, is only accessible by authorised public sector offices. However, citizens may apply to access the information from the registry for legal purposes.

Companies Registry

The registration of companies is regulated by the Law on Legal Entities No. 15 of 3 June 1994 with its respective amendments. The Law is also known as the Entity Registration Act. The Law aims to promote efficient use and coordination of public information regarding legal persons, sole proprietorships and other registries through the creation, organisation and operation of a national registry. It regulates the type of entities to be registered and the information to be recorded, the relationship with the affiliated registries, the notifications to the registry, the registration, the inspection of messages, and the exchange and disclosure of information. Private businesses have access to public information through the commercial distributor.

Land Registry

The Law on Land Registration and the Law on Cadastre regulate the operation of the Land Registry and the Cadastre. The former refers to the Land Registry authorities and all the information regarding the registration procedure. The latter regulates the maintenance, access, collection and processing of data, public fees, sanctions and fines related to the Cadastre. Even though no former definition exists regarding land registry, the Law on Cadastre defines the cadastre as "the country's official registry of real estate properties, residential buildings and addresses".

4.3.5 eProcurement

Public Procurement Act

Norway notified the full implementation of Directives 2004/17/EC and 2004/18/EC of the European Parliament and of the Council of 31 March 2004 which state that in view of new developments in information and telecommunications technology and the simplification that these can bring in terms of publicising contracts, and the efficiency and transparency of procurement procedures, electronic means should be put on a par with traditional means of communication and information exchange.

eInvoicing Legislation

B2B eInvoicing has been mandatory for central government entities in Norway since 2011. In 2019 new legislation has been introduced to make eInvoicing mandatory for all public sector entities, both at State and municipal level. eInvoicing is regulated by

Regulation FOR-2019-04-01-444 (Forskrift om elektronisk faktura i offentlige anskaffelser).

4.4 Domain-specific legislation

eCommerce Act

The eCommerce Act No. 35 of 23 May 2003 transposes into national law the EU Directive on Electronic Commerce (Directive 2000/31/EC). It applies to electronic commerce and other information society services and regulation and control of such services by public authorities. Its purpose is to ensure free movement of information society services within the European Economic Area (EEA).

Electronic Communications Act

The Electronic Communications Act No. 83 of 4 July 2003 aims to ensure sound, reasonably priced and future-oriented electronic communications services for Norwegian users through the efficient use of society's resources. This is to be achieved by facilitating sustainable competition, as well as stimulating industrial development and innovation. The Act regulates the transmission of electronic communications in addition to the associated infrastructure, services, equipment and installations.

Archival Act

The Archival Act No. 126 of 4 December 1992 aims to secure a holistic documentation of society. The purpose of the act is to guarantee that documentation, which has cultural, research, administrative and rights-based importance, is kept for the future. The act provides rules for archiving in public administration, including electronic archiving.

4.5 Emerging technologies

No legislation has been adopted in this field to date.



5 Digital Public Administration Governance

5.1 National

5.1.1 *Policy*

Minister of Regional Development and Digitalisation

In 2018, a new position was appointed within the Ministry of Local Government and Modernisation with responsibility for the Department of ICT Policy and Public Sector Reform. A dedicated Minister, namely the Minister of Digitalisation, was awarded responsibility for the department with responsibility for ICT policy, electronic communications and business-oriented ICT. Furthermore, the ministerial position has since been awarded responsibility for the administration and modernisation of the public sector, including the supervision of the Norwegian Digitalisation Agency. The renamed Minister of Regional Development and Digitalisation fulfils the Local Government and Modernisation Ministry's responsibility for national policies and strategies regarding information society in general. The Ministry is responsible for the coordination of the government's efforts to reform and recondition the public sector; formulating the strategy and policy for the use of ICT in society; the government's administration policy, including, amongst other things, government use of organisational structures and other supervision instruments; and finally providing socio-economic and other fact-based analyses of the public administrative sector and the use of resources in the public sector.



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5.1.2 Coordination

Ministry of Local Government and Modernisation

The Ministry coordinates all aspects of national ICT policy and the modernisation of the public sector. Through its dedicated Minister for Regional Development and Digitalisation who oversees the department of ICT Policy and Public Sector Reform, it coordinates eGovernment activities, namely public sector development and ICT policy.

Norwegian Digitalisation Agency

As of 1 January 2020, Altinn, the data management section of the Brønnøysund Register Centre, and parts of the Norwegian Agency for Public Management and eGovernment (Difi) have been merged to form the Norwegian Digitalisation Agency.

The Agency is the Norwegian government's foremost tool for faster and more coordinated digitalisation of the Norwegian public sector. It is subordinate to the Ministry of Local Government and Modernisation.

The role of rule setter within digitalisation, expertise within information security, responsibility for the operation of Difi's common IT solutions, management of the Altinn cooperation, the Co-Financing Scheme and innovation scheme Stimulab, as well as the Authority for Universal Design of ICT, will all become part of the Norwegian Digitalisation Agency.



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The Norwegian Digitalisation Agency is the secretariat for several advisory bodies related to digitalisation, including Skate, an advisory body for strategic cooperation on digitalisation of the Norwegian public sector, the Architecture and Standardisation Board, which advises on issues related to standards, interoperability and national architecture, and the Digitalisation Board, which is a voluntary advisory board for digitalisation projects in the public sector.

5.1.3 Implementation

Ministry of Local Government and Modernisation, Department of ICT Policy and Public Sector Reform

The Department of ICT Policy and Public Sector Reform is responsible for the work associated with policy implications concerning the prevalence of ICT in the public sector. It has an active, horizontal presence in the implementation process as it is the main

body responsible for initiating and administering policies related to ICT and eGovernment.

Since 2016, the Norwegian government has co-financed ICT-projects that are economically profitable through a co-financing scheme for ICT projects. The goal is to realise better and faster digitalisation projects, and to aid the realisation of the government's Digital Strategy for the Public Sector 2019-2025. The government has an innovation scheme named StimuLab, which aims to promote the user's perspective in public service innovation. The progress of StimuLab was detailed in a report in October 2020, examining what has been achieved in the four years since StimuLab was launched and the experiences from the 21 projects that had received funding thus far.

5.1.4 Support

Ministry of Local Government and Modernisation, Department of ICT Policy and Public Sector Reform

The Department of ICT Policy and Public Sector Reform is responsible for promoting public sector development. A key area of activity is to promote government reforms, aiming at a more efficient public sector through the use of ICT.

Norwegian Agency for Public and Financial Management

The Norwegian Agency for Public and Financial Management (DFØ) is mandated to help ensure sound financial management in Norway's government institutions and that the government reaches its goals through good governance, organisation, management and decision-making support.

Government Administration Services

The Government Administration Services (DSS) is a government agency aimed at providing synergy for ministries with cost-effective and reliable shared services, including the operation of computer systems. It reports directly to the Ministry of Local Government and Modernisation, which utilises the DSS as a means of improving the way the national government functions.

Norwegian Centre for Information Security (NorSIS)

The objective of Norwegian Centre for Information Security (NorSIS) is to provide advice and guidance on information security in Norway. It seeks to make ICT a natural part of everyday life by raising awareness about threats and vulnerabilities, advising on specific measures and contributing to forming positive attitudes in information.

National Cybersecurity Centre

Norway established a National Cybersecurity Centre in 2019. The Centre has a national responsibility for cyber security, including national level ICT risk assessment. It brings together cyber security expertise from a range of government and private sector entities, law-enforcement bodies and research institutions.

ICT-Norway

ICT-Norway is an association representing the country's ICT industry. Its overall strategy is to create good business and development opportunities for its members, to promote their interests and to provide effective, value-added services. It also acts as a problem-solver and a network, information, contacts and resource provider.

Abelia

Abelia is a business association of Norwegian knowledge and technology-based enterprises dedicated to improving the business environment for its member companies. It aims to promote the industry's contribution to economic growth and social progress. By influencing policy, Abelia improves business opportunities for members and supports initiatives that stimulate demand for members' products and services. Base registry coordination.

National Resource Centre for Data Sharing

Established in September 2020, the National Resource Centre for Data Sharing works to promote the sharing and reuse of data by disseminating knowledge about relevant regulations and contribute to an efficient and user-oriented public sector that utilises the potential found in data and data sharing to create user-friendly services. The centre is part of the Norwegian Digitalisation Agency and will facilitate innovation, development of new services and value creation by sharing data between public activities and between the public and private sector and researchers. The Centre was developed as part of a commitment made in the One Digital Public Sector digitisation strategy.

One key component of the Centre is the national toolbox for data sharing, launched in January 2021. The toolbox is an overview of agreements, solutions, standards, architectures, regulatory support and guidelines for roles and responsibilities that are relevant when sharing data. It is presented as a customised process guide for the main target groups: data consumers and data providers, and aims to help them in their user journey.

5.1.5 Interoperability coordination

Norwegian Digitisation Agency

The Norwegian Digitisation Agency is the main body responsible for interoperability activities in the country.

5.1.6 Base registry coordination

Norwegian Tax Administration

The Norwegian Tax Administration is subordinate to the Ministry of Finance and is responsible for the National Population Register.

Norwegian Public Roads Administration (NPRA)

The Norwegian Public Roads Administration (NPRA) is responsible for the Vehicle Registry. Moreover, it collects large amounts of data on roads and traffic, which are made available as open data.

Brønnøysund Registry Centre

The Brønnøysund Registry Centre (*Brønnøysundregistrene*) is a Norwegian government body responsible for the management of numerous public registers in Norway and is subordinate to the Ministry of Trade and Industry. The registries it governs include:

- the Central Coordinating Register for Legal Entities;
- the Registry of Business Enterprises;
- the Registry of Company Accounts;
- the Registry of the Reporting Obligations of Enterprises;
- the Registry of Mortgaged Moveable Property;

- the Registry of Bankruptcies;
- the Registry of Marriage Settlements; and
- the Registry of Political Parties.

Since 2017, the Brønnøysund Registry Centre has been developing a new registry platform called BRsys. The platform is an important solution for the digital communication between businesses, citizens and the government in Norway. In the autumn of 2020, an important milestone was reached: the launch of the first service developed on the new platform. The Business Compensation Scheme, a government measure to mitigate the financial effects of the COVID-19 public health crisis and the infection control measures was also realised in part using the new registry platform.

Norwegian Mapping Authority

The Norwegian Mapping Authority is responsible of the Land Registry and the Cadastre. The Land Registry, serving as a central database, is fully digitised. The Norwegian Mapping Authority does registration of documents, data checking and recording. The Norwegian Cadastre is a public registry of real properties, including information on buildings and addresses. The Cadastre is administered and technically hosted by the Norwegian Mapping Authority. Municipalities undertake cadastral surveying. These two central databases are technically linked, providing an integrated online service to users.

5.1.7 Audit

Office of the Auditor General of Norway

The Office of the Auditor General (OAG) ensures that the community's resources and assets are used and administered in compliance with the decisions of the parliament. It is responsible for auditing, monitoring and advising all State economic activities, performing financial audits, performance audits and corporate control. The Auditor General has an independent status vis-à-vis government administration and reports the results of its auditing and monitoring activities to the parliament.

5.1.8 Data Protection

Data Protection Agency

The Data Protection Agency is an independent administrative body which is entrusted with the application of data protection laws. It verifies organisations' compliance on processing personal data, regulates the processing of sensitive data through licences and advises on matters concerning the protection of privacy.

Privacy Appeals Board

The Privacy Appeals Board is the appeal body for decisions made by the Data Protection Agency. It considers appeals against decisions made by the Data Protection Agency pursuant to the Personal Data Act and several other acts.

5.2 Subnational (federal, regional and local)

5.2.1 *Policy*

Regional and Local Authorities

The general approach to eGovernment in Norway is decentralised. Norway is divided into 11 counties and 356 municipalities with independent decision-making responsibilities in the ICT area.

5.2.2 Coordination

Norwegian Association of Local and Regional Authorities

The Norwegian Association of Local and Regional Authorities (KS) has been given a clearer role in coordinating digital transformation efforts at the local and regional levels (municipalities and counties), both within the local and regional sector and between local, regional and State levels.

5.2.3 Implementation

Regional and Local Authorities

Regional and local authorities carry out projects within the framework of their competences.

The Ministry of Local Government and Modernisation and the KS have established a financing scheme for digitalisation projects in municipalities and counties, called Digifin. The scheme rewards projects that develop solutions that can be reused in other municipalities and counties. Financial contributions to the scheme come from the Ministry, the KS and participating municipalities and counties.

5.2.4 Support

Norwegian Association of Local and Regional Authorities

The KS is an association of municipalities and counties aiming at contributing to ICT development by: protecting the municipal sector's interests with respect to central authorities, suppliers and other interest groups; contributing to the development of standards and requirement specifications for the exchange of information, integration of solutions and joint tools, ideally in cooperation with central authorities; inspiring and contributing to competence development in the municipal sector through proposals and recommendations, benchmarking, development of guidelines and establishing experience exchange networks.

The KS holds regular meetings with the Ministry of Local Government and Modernisation, at political and administrative levels. It also participates in several boards, committees and working committees in other ministries and various government departments that deal with ICT issues.

5.2.5 Interoperability coordination

No responsible organisations have been reported to date.

5.2.6 Base registry coordination

No responsible organisations have been reported to date.

5.2.7 Audit

No responsible organisations have been reported to date.

5.2.8 Data Protection

No responsible organisations have been reported to date.



6 Digital Public Administration Infrastructure

6.1 Portals

6.1.1 National Portals

Ovelse.no Portal

Ovelse.no is a platform owned by the Norwegian Directorate for Civil Protection (DSB) and is operated by the Norwegian Cyber Range at the Norwegian University of Science and Technology (NTNU). Launched in October 2020, the platform hosts an exercise package targeted at Norwegian organisations. The purpose of these exercise scenarios is to increase awareness of digital vulnerabilities and to make various organisations better prepared to handle incidents with regard to information security. All the exercises are set up as discussion exercises, and the methodology is based on the DSB's method booklets for exercise planning.

Norge.no Portal

Norge.no is a gateway and guide to digital services from public authorities in Norway. Users can find digital services via the portal's topic menu, search function or eight life situation descriptions.

The portal also has information about digital communication between public authorities and citizens. Norge.no also presents citizens with information about the Norwegian public sector's digital mailbox and Digital Contact Information Register.

All public authorities are obliged to send mail to citizens digitally, using a secure digital mailbox. Citizens who do not wish to receive post digitally, may opt to receive official letters and documents via paper mail. In order to use a secure digital mailbox, citizens must have an electronic ID and keep their digital contact information updated in the national contact register. The contact and reservation registry has been up and running since 2014.

Altinn Portal

The Altinn Portal, which has been redesigned to improve user experience, offers seamless services to ease the reporting burden imposed by government agencies. It is a solution to develop and maintain forms and work processes, together with a reporting solution to facilitate the information flow from businesses to government. Businesses file their reporting information to Altinn either through an internet portal website, or by using their own internal information systems or software packages. Individuals can also file their personal income tax electronically through Altinn.

As Norway's Point of Single Contact (PSC), Altinn is tasked with the provision of all information needed by any European service provider interested in starting a business in Norway.

Standardisation Portal

The Standardisation Portal aims to inform its users about the standards that are mandatory or recommended for use in the Norwegian public sector. The standards on this website are mostly related to ICT; however, standards related to areas such as public contracts, semantics and service-oriented architecture can also be found. The main goal regarding its activities with standards within the public sector is to strive towards better coordination among public authorities and services, transparency and efficiency.

GeoNorge Portal

The GeoNorge Portal is the national portal for the 'Norway Digital' geospatial infrastructure. It is the largest open, standards-based eGovernment component in daily use in Norway. It constitutes the umbrella for a large number of geospatial eServices, making basic geographic information and a variety of thematic information readily available. The information provided by the portal enables geospatial data to be used by different communities, including public administration and environmental management bodies. The infrastructure also includes a gateway for distributing the information to non-partners and the private sector.

Moreover, GeoNorge makes geographical data in digital format available to citizens; the data is collected in a central system (Norway WEB digital download) which can be accessed by citizens via a username and password authentication mechanism. By accessing the system, citizens can consult and download files on elevation data, administrative boundaries, transformation formulas, as well as related topics like cultural heritage, herding and many more. The system provides both county and national data.

6.1.2 Subnational Portals

Norge.no Portal

The Norge.no Portal is a portal of services both at the State, regional and local levels. It presents services both according to topics and to life events. Typically, life events involve public services at both the State and municipal level.

6.2 Networks

Current infrastructure

Norway has an adequate infrastructure for telecommunications networks, services and eGovernment which allows for system interoperability and data interchange between administrations. In certain areas, the government has taken the initiative to support the creation of specific infrastructure as exemplified in the National Health Network which links five regional networks and provides a single information exchange platform in the health and social sectors.

Trans European Services for Telematics between Administrations

Norway is part of the Trans European Services for Telematics between Administrations (TESTA) network service, which provides data exchange with guaranteed performance and high level of security between public administrations in European states. Currently there are 10 connected administrations in Norway.

6.3 Data Exchange

Datafabrikken

In October 2020, the Norwegian government agreed to allocate NOK 16 million to the Norwegian Digitalisation Agency to establish a Data Factory (*Datafabrikken*) in cooperation with DigitalNorway, starting in 2021. The project aims to make it easier for small and medium-sized enterprises to take part in the computer-driven economy. It will provide expertise on data sharing and data connection, and support a number of government strategies, including the government's Digitalisation Strategy and National Strategy for Artificial Intelligence.

In *Datafabrikken*, providers and users of data will have access to functions and resources that are necessary to create digital services and new industries based on data. *Datafabrikken* will mediate data available from various sources and help small and medium-sized enterprises and start-up companies to obtain relevant data and support to process the data. The data disseminated through *Datafabrikken* will come from private businesses and public enterprises.

eHealth Big Data Analysis

A platform for big data analysis within the health sector is under construction. The platform will include easy and secure access to health data and synthetic test data and various shared analytical services. Additionally, a portal for easier access to health data for researchers and practitioners has also been established.

Reference Architectures for exchange of data and documents

The Norwegian Digitalisation Agency has published reference architectures for three general patterns of data and document exchange: lookup, delivery and notification. The architectures are based on international best practices, including a European reference architecture for eDelivery. It has been adopted to a Norwegian context through the Agency's cooperation with public and private sector enterprises.

6.4 eID and Trust Services

MinID

MinID allows citizens to access public services that require a medium-high level of security. Examples of such services include: applying for a loan from the Norwegian State Educational Loan Fund; applying to upper secondary school; changing a tax return; changing a family doctor; changing an address in the National Population Register. It is used by 2.6 million Norwegians. MinID makes use of the ID-Gateway, the common platform for eID in the Norwegian public sector.

Responsibility lies with the Norwegian Digitalisation Agency.

In the wake of the COVID-19 public health crisis, many foreign nationals had to leave their jobs in Norway and return home. Some of these people were entitled to unemployment benefits, which need to be accessed with an eID. However, many of these foreign workers did not have such an eID. In order to remedy this, the MinID was further developed with a MinID Passport. The MinID Passport allows users to scan their own passport and take pictures with facial recognition in order to verify their identity, thus allowing employees abroad to access the unemployment benefits they are entitled to. In addition, the technical solution is a breakthrough as a new method of issuing eIDs, in that users do not have to show up physically to get one.

Buypass, Commfides and BankID eID solutions

BuypassID, Commfides and BankID enable citizens to access public services that require a medium and high level of security, as well as services that require the highest level of security. This applies to health information and the signing of documents, among other services. BankID is also used by citizens to access their online bank accounts.

ID-Gateway

The Norwegian Digitalisation Agency provides the eID solution ID-Gateway (*ID-porten*), which is a common infrastructure for the use of eIDs in the public sector. The first version (1.0) of ID-Gateway was introduced in November 2009 and is currently used with MinID (the common log-in system for accessing online public services). This eID

platform facilitates the use of several types of eID and offers more advanced electronic public services. Furthermore, it gives the opportunity to various entities to provide more person-sensitive services, related to health information.

Responsibility lies with the Norwegian Digitalisation Agency.

NOBID

Norway manages the Nordic-Baltic eID Project (NOBID), which aims to secure borderless access to digital services throughout the Nordic-Baltic region for citizens and businesses using their own national eIDs.

Coordination responsibility is held by the Norwegian Digitalisation Agency.

6.5 eProcurement

Anskaffelser.no Portal

The Norwegian Agency for Public and Financial Management manages the Anskaffelser.no Portal for all actors involved in public procurement. It contains tools and information, and its expertise favours efficient procurement transactions with the public sector. The portal offers advanced, complete eProcurement and eCommerce services guiding all interested parties through eProcurement stages, from planning to competitive conduct, including follow-up and liquidation.

The portal includes eHandel.no, which specialises in eCommerce. The website offers extended services and information on eCommerce, the newly-established eCommerce platforms and electronic invoicing. These services aim at offering easy access to comprehensive information about eCommerce and guidance on how eCommerce services can be an effective tool for better, easier and safer purchases. The purpose of eHandel.no is to give public sector entities and their suppliers easy access to a user-friendly and affordable tool for operational eProcurement.

Doffin: Public Procurement Database

Doffin aims to facilitate public authorities in complying with Norwegian public procurement regulations by allowing the creation and publication of tender notices. Since all notices are published on this platform, it is also a great resource for suppliers interested in business opportunities in the public sector. Tender publication is mandatory on Doffin, while eProcurement services are not. It is administered by The Norwegian Agency for Public and Financial Management.

EHF

Norway uses a standard for electronic invoicing and credit notes – EHF. All invoices to and from public sector entities use the EHF standard format, via the Peppol eDelivery network. All recipients of electronic invoices and their contact addresses are registered in ELMA, a registry managed by The Norwegian Digitalisation Agency.

6.6 ePayment

No particular infrastructure in this field has been reported to date.

6.7 Knowledge Management

National Data Catalogue - Data Norway

Norway has a National Data Catalogue. It provides an overview of data sets, APIs, concepts and information models that have been registered and made available by public agencies, making it both easier to search for public sector data and re-use it, for example for analytical purposes. The directory was established following the merging of data.norge.no and the National Data Catalogue, making it easier to create user-friendly services for citizens and ensuring better access to data for public and private enterprises. The catalogue addresses the need to discover, evaluate and access data. The directory is built on a flexible architecture, offering solutions for both mature and less mature data providers and consumers. Furthermore, the directory was developed with an open-source code, allowing users to spot missing functionalities and develop them on their own or ask the Digitalisation Agency for cooperation in creating them.

eInnsyn

The common solution eInnsyn, based on the previous Electronic Public Records (OEP) solution, is a tool that allows central government agencies to publicise their public records online. The new solution enables more openness and accessibility regarding public information and strengthens the freedom of information. The solution was launched in January 2018.

National Archival Services of Norway

The National Archival Services have provided common standards and specifications for digital archiving, which are now used by most public organisations in the country. It should be noted, however, that compatibility among large public databases remains relatively limited.

The National Archives provide a shared platform for publishing digitalised archive material, called the Digital Archives. The publishing platform is mainly used by the National Archives but is also open to other Norwegian archives, e.g. municipal and regional archives.

Norway Digital programme

Norway Digital is a nation-wide programme for cooperation on the establishment, maintenance and distribution of digital geographic data. The aim is to enhance the availability and use of quality geographic information among a broad range of users, primarily in the public sector. All institutions participating in the programme bring their own data into the infrastructure so as to make it available to the other partners.

Municipal Data Lakes

The city of Bergen was one of the first municipalities to establish a data lake. This implies that the Bergen municipality is partnering with Bouvet, a consultancy, in establishing a data lake. The project ensures sharing and reusing data across divisions in the municipality, as well as facilitating new innovation and digitalisation partnerships. The private sector is invited to build their own solutions on top of the data in the data lake. The beneficiaries are the people living in Bergen, the municipality's partners and local businesses. Other municipalities, notably Stavanger, have also taken steps to establish a data lake.

Test Norway (TENOR)

Test Norway (TENOR) is a tool developed to provide dynamic, synthetic test data that can be used, for instance, in system development testing. Currently TENOR provides synthetic test data from the National Population Register, and more sources will be added.

6.8 Cross-border platforms

European initiatives

Through its participation in EU-programmes, for example CEF Telecom, ISA² and Horizon 2020, Norway aims to support and develop cross-border cooperation, research, innovation and digital service development. The Research Council of Norway and the Norwegian Digitalisation Agency coordinate Norway's participation in these programs.

The Brønnøysund Register Centre is a member of the European Business Registry, and takes part in the Business Registry Interconnection System (BRIS) project.

Norway is part of the TESTA network service, which provides data exchange with guaranteed performance and high level of security between public administrations in European countries. Currently there are 10 connected administrations in Norway. Norway, through the Norwegian Labour and Welfare Administration (NAV), also makes use of the Electronic Exchange of Social Security Information (EESSI). The EESSI enables social security bodies across Europe to exchange information more rapidly and securely.

The Brønnøysund Register Centre and The Norwegian Maritime Authority (NMA) participate in the TOOP-project (Once-Only principle).

Norway is also an active contributor to the Your Europe portal. Norway is also a member of INSPIRE , EULIS and EUCARIS.

Nordic Initiatives

A pilot has been implemented between Norway and Sweden on the exchange and verification of ID, based on the eIDAS Regulation. Norway is part in the NOBID project, which aims to enable access to national digital services to users from the Nordic and Baltic countries.

Moreover, since 2016 a collaboration-project between all the Nordic governments called SmartGovernment has been in place. The project was funded by Nordic Innovation, an instrument under the Nordic Council of Ministers, which is an official inter-governmental body for cooperation in the Nordic region. SmartGovernment aims to create a platform for transactional reporting of business data for small and medium businesses in order to reduce, or even eliminate, the need for reporting and facilitate B2B use of information. For the 2018-2020 period the project focussed on interoperability, automated flow of data, rules for exchange of business data, and communication and stakeholder engagement. The success of SmartGovernment solutions depends on extensive access to base registries.

Last but not least, the tax authorities of Denmark, Iceland, Norway, Finland and Sweden operate the Nordisk eTax, a portal in collaboration with the Nordic Council of Ministers. The Nordisk eTax addresses people who live in one Nordic country but have income or assets in another Nordic country.

6.9 Base registries

KOSTRA

The Municipality-State-Reporting KOSTRA system allows municipalities and counties to report electronically to the State data on the economy, schools, health, culture, the environment, social services, public housing, technical services and transport, and communication. KOSTRA focuses on two main purposes: providing better information about the municipalities at central and local government level and striving for more efficient reporting.

National Population Register

Information on everyone living in Norway is gathered for tax, electoral and population analysis purposes by local tax assessment offices. This information is registered in the National Population Register (Folkeregisteret) and is overseen by the Directorate of Taxes (Skattedirektoratet). Information from the National Register (e.g. names, addresses, citizenship, identification numbers, employment and civil status of individuals) is only accessible by authorised public sector offices. However, members of the public may apply for access to information from the National Registry for legal purposes. Applications for information from the National Registry are processed by local tax assessment offices and the Office of the National Register.

Altinn

A common technical platform, called Altinn, was created for the public sector to exchange data from base registries with the purposes of prefilling digital forms, reporting to the public sector and for lookup-services in the base registries, e.g. the National Population Registry and the Central Coordinating Register for Legal Entities. Altinn, now run by the Norwegian Digitalisation Agency, contains an authorisation module that governs access to services by the role of individuals and businesses. The businesses roles, e.g. director, board member, accountant, are managed in the Entity Registry. The Norwegian Entity Registry (or Central Coordination Register for Legal Entities, CCR) contains information about both businesses and public entities (meant as governmental agencies). A new registry, currently under development within the Brønnøysund Registry Centre, will add authorisation by proxy. This will furthermore extend the authorisation component in Altinn. The authorisation component also manages data sharing with user consent. Moreover, Altinn maintains the Norwegian metadata repository SERES, which is a standard for the design of web forms in Altinn.

In June 2020, Altinn 3.0 was released. The end-of-life for the technology upon which Altinn was previously built, namely Microsoft Inpath, was announced. The development of Altinn 3.0 was therefore crucial to guarantee its future. As part of Altinn 3.0, Altinn Studio was developed. Altinn Studio can be used to develop and run everything from simple forms to complete applications. This solution is based on open-source components and has been developed to allow service owners to develop modern applications on a scalable and future-oriented infrastructure for citizens and businesses.

Land registry and Cadastre

The Norwegian Mapping Authority is responsible of the Land Registry and the Cadastre. The Land Registry, serving as a central database, is fully digitised. The Norwegian Mapping Authority does registration of documents, data checking and recording. The Norwegian Cadastre is a public registry of real properties, including information on buildings and addresses. The Cadastre is administered and technically hosted by the Norwegian Mapping Authority. Municipalities undertake cadastral surveying. These two central databases are technically linked, providing an integrated online service to users.

Business Registry

The Brønnøysund Register Centre (*Brønnøysundregistrene*) is a Norwegian government body responsible for the management of numerous public registers in Norway and is subordinate to the Ministry of Trade and Industry. Among the registries that the authority governs are the Central Coordinating Register for Legal Entities, the Registry of Business Enterprises, the European Business Registry, the Registry of Company Accounts, the Registry of the Reporting Obligations of Enterprises, the Registry of Mortgaged Moveable Property, the Registry of Bankruptcies, the Registry of Marriage Settlements, and the Registry of Political Parties.

Contact and Reservation Register

The Contact and Reservation Register is a Norwegian base register containing information on citizens' digital contact data, e.g. mobile phone number and e-mail address. It also contains information on citizens' preferences in terms digital mailbox, language used for digital communication and willingness to receive mail digitally. It is run by the Norwegian Digitalisation Agency.

6.10 Emerging Technologies

No particular infrastructure in this field has been reported to date.



7 Cross-border Digital Public Administration Services for Citizens and Businesses

Further to the information on national digital public services provided in the previous chapters, this final chapter presents an overview of the basic cross-border public services provided to citizens and businesses in other European countries. Your Europe is taken as reference, as it is the EU one-stop shop which aims to simplify the life of both citizens and businesses by avoiding unnecessary inconvenience and red tape in regard to 'life and travel', as well as 'doing business' abroad. In order to do so, Your Europe offers information on basic rights under EU law, but also on how these rights are implemented in each individual country (where information has been provided by the national authorities). Free email or telephone contact with EU assistance services, to get more personalised or detailed help and advice is also available.

Please note that, in most cases, the EU rights described in Your Europe apply to all EU member countries plus Iceland, Liechtenstein and Norway, and sometimes to Switzerland. Information on Your Europe is provided by the relevant departments of the European Commission and complemented by content provided by the authorities of every country it covers. As the website consists of two sections - one for citizens and one for businesses, both managed by DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) - below the main groups of services for each section are listed.

7.1 Life and Travel

For citizens, the following groups of services can be found on the website:

- Travel (e.g. Documents needed for travelling in Europe);
- Work and retirement (e.g. Unemployment and Benefits);
- Vehicles (e.g. Registration);
- Residence formalities (e.g. Elections abroad);
- Education and youth (e.g. Researchers);
- Health (e.g. Medical Treatment abroad);
- Family (e.g. Couples);
- Consumers (e.g. Shopping).

7.2 Doing Business

Regarding businesses, the groups of services on the website concern:

- Running a business (e.g. Developing a business);
- Taxation (e.g. Business tax);
- Selling in the EU (e.g. Public contracts);
- Human Resources (e.g. Employment contracts);
- Product requirements (e.g. Standards);
- Financing and Funding (e.g. Accounting);
- Dealing with Customers (e.g. Data protection).

last update: October 2021

The Digital Public Administration Factsheets

The factsheets present an overview of the state and progress of Digital Public Administration and Interoperability within European countries.

The factsheets are published on the Joinup platform, which is a joint initiative by the Directorate General for Informatics (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT). This factsheet received valuable contribution from Mr Lars Erik Myhre, Senior Advisor at the Norwegian Digitalization Agency.



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The ISA² Programme has evolved into Interoperable Europe - the initiative of the European Commission for a reinforced interoperability policy.

The work of the European Commission and its partners in public administrations across Europe to enhance interoperability continues at full speed despite the end of the ISA² programme. Indeed, enhanced interoperability will be necessary to unlock the potential of data use and reuse for improved public services, to enable cross-border collaboration, and to support the sector-specific policy goals set by the Commission for the future.

Interoperable Europe will lead the process of achieving these goals and creating a reinforced interoperability policy that will work for everyone. The initiative is supported by the Digital Europe Programme.

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