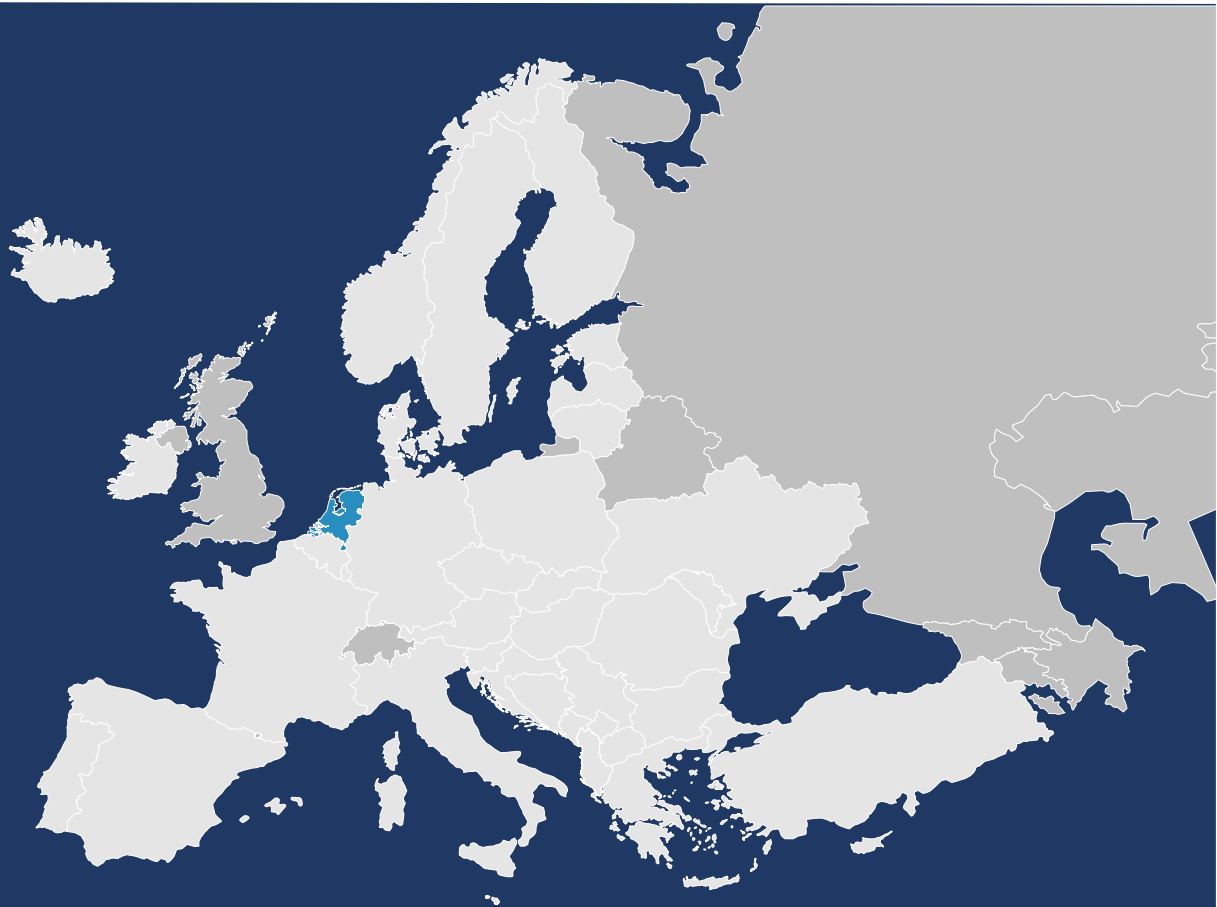




THE NETHERLANDS

2024 Digital Public Administration Factsheet

Supporting document






Main developments in digital
public administrations and
interoperability

AUGUST 2024

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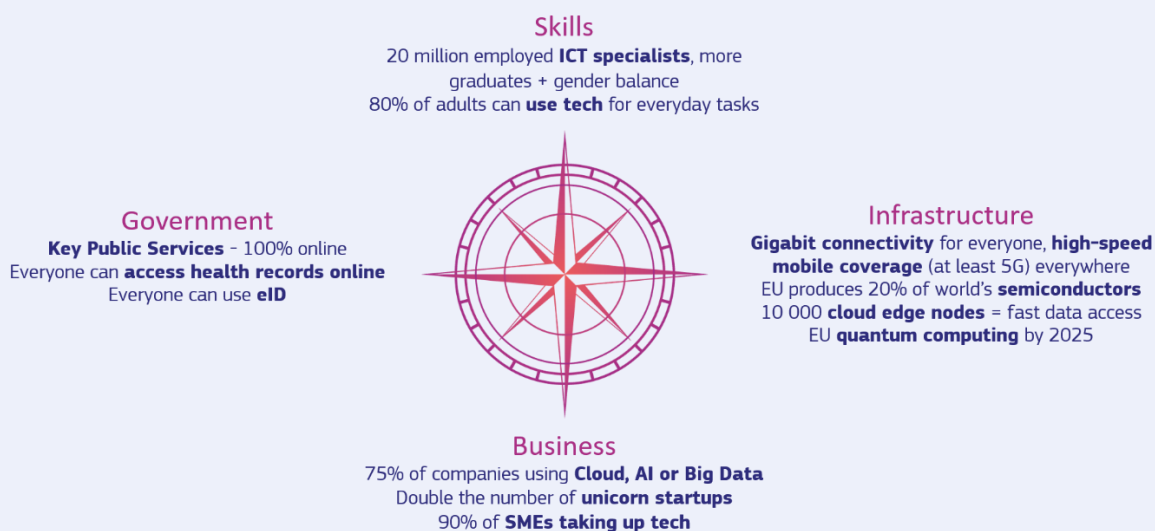
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Icons Glossary		
<i>Political Communication</i>	<i>Legislation</i>	<i>Infrastructure</i>
		

2030 DIGITAL DECADE

The **Digital Decade policy programme 2030** sets out digital ambitions for the next decade in the form of clear, concrete targets. The main goals can be summarised in 4 points:

- 1) a digitally skilled population and highly skilled digital professionals;
- 2) secure and sustainable digital infrastructures;
- 3) digital transformation of businesses;
- 4) digitalisation of public services.



The production of the **Digital Public Administration factsheets and their supportive documents** support the objectives and targets of the Digital Decade programme. By referencing national initiatives on the digital transformation of public administrations and public services, as well as interoperability, they complement existing data and indicators included in the Digital Decade reports and related resources. They also highlight and promote key initiatives put in place or planned by EU countries to reach the Digital Decade's targets.



1. 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 divided in three pillars. The EIF Monitoring Mechanism (MM) was built on these pillars to evaluate the level of implementation of the framework within the Member States. Whereas during the previous, the MM relied upon three scoreboards, starting from the 2022 edition it includes an additional scoreboard on cross-border interoperability, assessing the level of implementation of 35 Recommendations. The mechanism is based on a set of 91 Key Performance Indicators (KPIs) clustered within the four scoreboards (Principles, Layers, Conceptual model and Cross-border interoperability), outlined below.

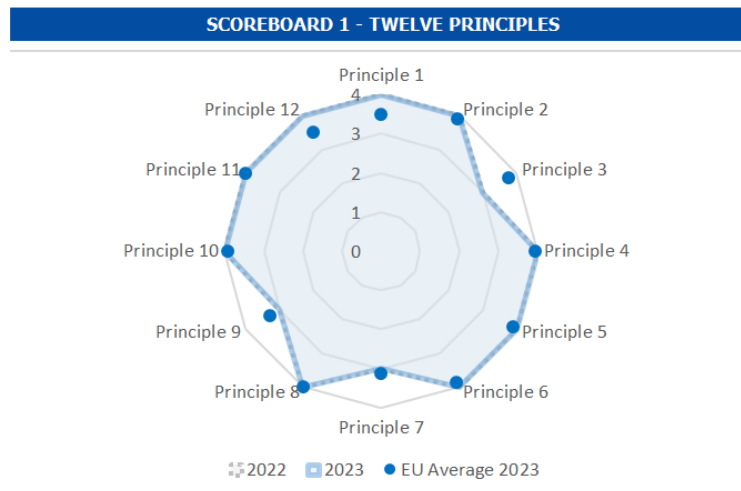
Starting from the 2022 edition, an additional scoreboard, **Scoreboard 4**, focusing on cross-border interoperability, has been incorporated. This scoreboard assesses the adherence to 35 Recommendations outlined in the EIF framework. Specifically, it encompasses Interoperability Principles 2, and 4 through 11 from Scoreboard 1, all recommendations pertaining to Interoperability Layers from Scoreboard 2, as well as Conceptual Model recommendations 36 to 43 and 46 to 47 from Scoreboard 3.

Scoreboard 1 Interoperability Principles		Scoreboard 2 Interoperability Layers		Scoreboard 3 Conceptual Model	
	Recommendation(s) n°		Recommendation(s) n°		Recommendation(s) n°
Principle 1 - Subsidiarity and Proportionality	1	Interoperability Governance	20-24	Conceptual Model	34-35
Principle 2 - Openness	2-4	Integrated Public Service Governance	25-26	Internal information sources and services	36
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Principle 7 - Inclusion and accessibility	14			Security and Privacy	46-47
Principle 8 - Security and privacy	15				
Principle 9 - Multilingualism	16				
Principle 10 - Administrative simplification	17				
Principle 11 - Preservation of information	18				
Principle 12 - Assessment of Effectiveness and Efficiency	19				

Scoreboard 4 Cross-border Interoperability

Source: European Interoperability Framework Monitoring Mechanism 2023

Each scoreboard breaks down the results into thematic areas (i.e. principles). The thematic areas are evaluated on a scale from one to four, where one means a lower level of implementation and four means a higher level of implementation. The graphs below show the result of the EIF MM data collection exercise for the Netherlands in 2023, comparing it with the EU average as well as the performance of the country in 2022.

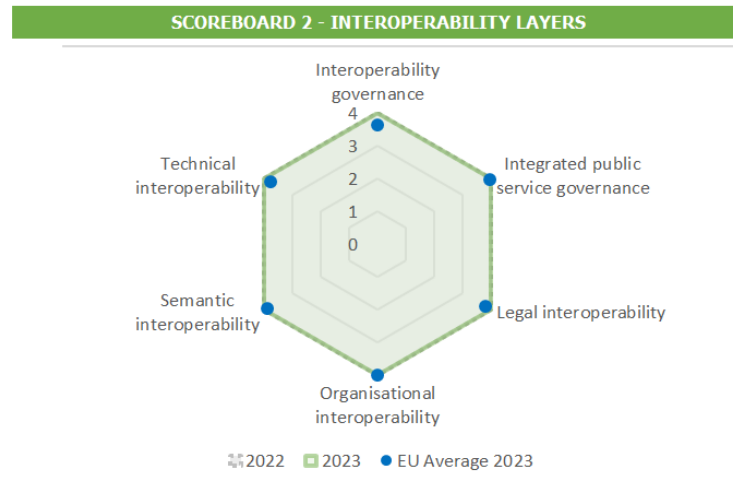


Source: European Interoperability Framework Monitoring Mechanism 2023

The Netherlands results in Scoreboard 1 stand for an overall good implementation of the EIF Principles. The Netherlands even performed above the European average for Principle 1

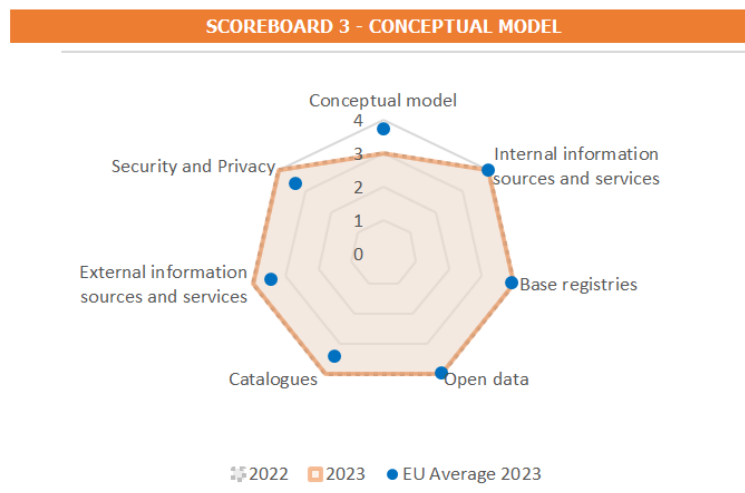


(Subsidiarity and Proportionality). Potential areas for improvement relate to the implementation of Principles 3 (Transparency). Particularly, the provision of internal visibility and external interfaces for European public service to make administrative procedures available and accessible online (Principle 3 – Recommendation 05) is partial and could be improved to reach the maximum score of 4. In addition, the Netherlands could increase its score on Principle 9 (Multilingualism) to reach the maximum score of 4 by enhancing its use of information systems and technical architectures that cater for multilingualism when establishing a European public service (Recommendation 16) and more specifically, the total number of language resources proposed to users.



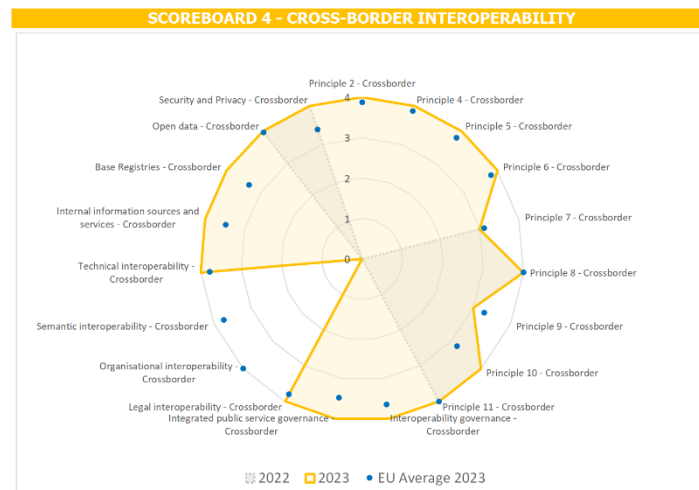
Source: European Interoperability Framework Monitoring Mechanism 2023

The Netherlands’ scores in Scoreboard 2 illustrate a perfect performance of the country with scores of 4 in all the interoperability layers. Small areas for improvement to strengthen the country’s implementation of the recommendations under Scoreboard 2 concern the areas of Interoperability Governance, specifically Recommendation 23 on the use of ICT catalogues, as well as Semantic Interoperability, where the Netherlands could improve on their policies supporting the reuse of Public Sector Information within public administration, by the private sector (Recommendation 30).



Source: European Interoperability Framework Monitoring Mechanism 2023

The Netherlands results in relation to the Conceptual Model in Scoreboard 3 show a very good performance of the country. The Netherlands reached a high performance in Security and Privacy, performing better than the European average in this area, as well in External information sources and services, and in Catalogues, where it also outperformed the European average. To improve its score on Conceptual model, the Netherlands should increase the extent to which public administrations take into account the conceptual model proposed by the EIF (Recommendation 34).



Source: European Interoperability Framework Monitoring Mechanism 2023

The results of the Netherlands on Cross-Border Interoperability in Scoreboard 4 show a very positive performance of the country. Particularly, the Netherlands reached the maximum score of 4 in almost all thematic areas, including seven Principles. However, the Netherlands still has margin for improvement in relation to several indicators where the country obtained a lower performance, such as Principle 7 (Inclusion and accessibility – Cross-border). For instance, further efforts may focus on fully complying with European accessibility standards of the Directive of accessibility to websites and mobile applications of public-sector bodies (Recommendation 14).

Additional information on the Netherlands' results on the EIF Monitoring Mechanism is available online through [interactive dashboards](#).

Curious about the state-of-play on digital public administrations in this country?

Please find here some relevant indicators and resources on this topic:

- Eurostat Information Society Indicators
- Digital Economy and Society Index (DESI)
- eGovernment Benchmark
- Repository of good practices on the EIF implementation



2. Digital transformation of public administrations

Main digital strategies, action plans and legislations



Value Driven Digitalisation Work Agenda

With the formation of a new cabinet in January 2022, the National Digitalisation Strategy was replaced by a new [Priority Framework for Digitalisation](#), which sets out four priority areas for digitalisation in the Netherlands: strengthening the foundations for digitalisation; digital economy; digital government and digital society. These overarching government-wide priorities have been worked out in separate agendas. The [Value Driven Digitalisation Work Agenda](#) focuses on the conditions for values-driven implementation and digitalisation in society, with an eye for both opportunities and risks. The agenda covers digital government and parts of the foundations for digitalisation of the priority framework. The work on an inter-administrative Agenda for a Digital Society is ongoing and will cover crosscutting digitalisation issues related to tackling societal challenges. It is based on the understanding that everyone should be able to participate, maintain trust in digitalisation and have control over their digital lives, with a government that sets a good example, seizes opportunities and pays attention to all parts of the Kingdom.

These ambitions have been translated into five tracks:

1. Everyone must be able to participate in the digital age.
2. Everyone must be able to trust the digital world.
3. Everyone must be in control of their digital lives.
4. The digital government must adhere to a values-driven and transparent methodology.
5. The digital society in the Dutch Caribbean must be strengthened.

The Value Driven Digitalisation Work Agenda of 4 November 2022¹ puts public values at the core of the digital transition and tackles topics such as online identity and data control, rule of law, digital inclusion, privacy, democracy, equal treatment and policies for a digital government that works for all. On 22 December 2023, the Updated Values-Driven Digitalisation Work Agenda 2024² was presented. This agenda tackles topics such as skills and knowledge, privacy and data protection, cybersecurity, identity system, algorithms and ICT organisation and ICT systems.

Digitalisation of internal processes



I-strategy

In September 2021, the Ministry of the Interior and Kingdom Relations submitted the [I-strategie Rijk 2021-2025](#) to Parliament [[Kamerstuk 26643, nr. 779 | Overheid.nl > Officiële bekendmakingen \(officielebekendmakingen.nl\)](#)]. This I-strategy is aimed at the central government and it describes the generic activities of the CIO council (the interdepartmental council of Chief Information Officers). The agenda deals with ten different themes related to: reliable information and data; well-functioning, consistent and robust ICT; knowledge and skills; and strategic I-governance. With the [letter of 15 July 2022](#) [[Kamerstuk 26643, nr. 899 | Overheid.nl > Officiële bekendmakingen \(officielebekendmakingen.nl\)](#)], the Parliament was informed about the progress.



National API Strategy

In order to facilitate the adoption of the API technology within the government, the Netherlands has developed a [Dutch API Strategy](#). Parts of the strategy are informative and parts are normative and have been adopted as a national standard ([Rest API Design Rules](#) and the [NL GOV Assurance profile for OAuth 2.0](#)). The [Developer Overheid](#) portal was launched in 2019 to provide access to all information targeted at IT developers within government and all

¹ Values-Driven Digitalisation Work Agenda | Report | Government.nl

² Values-Driven Digitalisation Work Agenda (digitaleoverheid.nl)

subcontractors. Currently this website gives as an overview of the available APIs within the government along with some tools and tips on how to develop APIs in accordance with the Dutch API strategy.

Digitalisation supporting the EU Green Deal

No particular initiatives in this field have been reported to date.





3. Interoperability and data

Interoperability Framework



Policy Framework for the Further Development of the Digital Government Infrastructure

The Policy Framework for the Further Development of the Digital Government Infrastructure was published in connection with the publication of [the Generic Infrastructure Vision](#). The policy framework includes some principles aimed to develop the policy for the digital government basic infrastructure and to further develop the generic functions of the digital government basic infrastructure. The generic functions are based on agreements, standards and building blocks.



NORA

The purpose of the [Netherlands Government Reference Architecture](#) (*Nederlandse Overheid Referentie Architectuur*, NORA) is to be a guiding and driving tool. It contains frameworks and existing agreements for the lay-out of the Dutch governmental information management system. Realising services within the scope of these frameworks and agreements ensures smooth cooperation with other services, and optimal re-use of existing solutions. All government parties have endorsed the NORA. (NORA 3.0). Through the NORA, their organisations know the relevant agreements needed for cooperation and improvement of their services. By adhering to the design principles and standards, IT solutions meet the cohesion and standardisation demands. The NORA provides a framework for eGovernment components acknowledged by all stakeholders. Partners can use it to accelerate development in their organisations to a common framework. For the use of mandatory and recommended open standards, the NORA maintains a persistent link to the standards lists of the Standardisation Forum.

Data access, management and reuse

Open data



Open Government Vision and Action Plan

The Netherlands has a long history of promoting open data. Closely interlinked with the 2017 digital ambitions, the [Open Government Vision and Action Plan](#) were presented to the Parliament on 1 September 2013. The vision paper described different developments around the topic of open government and underlined the importance of more openness from an economic, democratic and societal perspective. Three main themes were addressed in the vision paper: more transparency around government activities, government responsiveness to initiatives from society, and government accountability. The main principle was an active disclosure of information.

The fifth [Action Plan for Open Government 2023-2027](#) contains commitments by the government, civil society organisations, local governments and knowledge institutions to improve government transparency in the Netherlands. A broad range of parties is involved in designing and implementing the Open Government Action Plan 2023-2027. The action plan was developed in close cooperation with the civil society coalition 'Talking about information' and is based on the ideas, suggestions and lessons learned from stakeholder meetings, discussions with partners inside and outside government, the experiences from previous action plans and the reviews of the Independent Review Mechanism (IRM).



Open Data and Reuse of Public Sector Information

The Directive on open data and the re-use of public sector information, also known as the Open Data Directive ([Directive \(EU\) 2019/1024](#)), entered into force on 16 July 2019. It replaces the Public Sector Information Directive, also known as PSI Directive ([Directive 2003/98/EC](#)), dating back to 2003 and was subsequently amended by [Directive 2013/37/EU](#). The Open Data



Directive has been successfully transposed into national law, adopted by Dutch Parliament and is in effect since 18 June 2024.

 **National Data Strategy**

The governmental agenda on data strategy, [NL Digitaal](#), was published in March 2019 and [updated](#) in April 2020. The agenda focuses on the flow of data in society and is aimed at optimal and responsible use of data in public administration bodies. The agenda aims at data driven approaches for solving societal issues, promoting public values, improving the quality of data and the efficient reuse thereof, sharing knowledge about data driven working, investing in people, organising and changing culture.

In 2021, the [Dutch Inter-administrative Data](#) strategy was published. The strategy outlines how all levels of government can tackle societal challenges using data in an effective and responsible way. The data strategy also contains initial suggestions for data system functions that should be available to all government bodies. Lastly, the data strategy elaborates on the need for orchestration of responsible data sharing.

 **Government Information (Open Government) Act**

Freedom of Information legislation was first adopted in the Netherlands in 1978. It was replaced by the [Act of 31 October 1991 on Public Access to Government Information](#). Under the 1991 Act, any person can request information related to an administrative matter if it is contained in documents held by public authorities or companies carrying out work on behalf of a public authority. A revised version of the law, the [Open Government Act \(Wet open overheid; Woo\)](#) entered into force on 1 May 2022. Some of the changes include shortening of the time period to respond to information requests and putting more emphasis on active disclosure of information.

Base registries

The smart exchange of data from the system of base registries enables the government to operate more efficiently and to improve its service.

From 2000 onwards, work has been done to realise the current operational system of 10 base registries, each anchored in legislation according to [12 agreed common principles](#). Already in 2003, principles were agreed for the selection of base registries, and the requirements for the legislation for each base registry.

The interconnection between Dutch registries has been established and the volumes of data exchange is steadily increasing. The [GDI monitor](#) visualises the number of users connected to base registries and the amount of messages sent per year.

Furthermore, consistency between registries is [being monitored](#). Six base registries are partly or fully available as open data: BAG, BRV, BRK, BRT, BGT. The open geodata sets are available in the [PDOK platform](#).

Four system services, [Digikoppeling](#), [Digilevering](#), [Digimelding](#), and [Stelselcatalogus](#), support the base registries and are described under the heading 'data exchange'.

Part of the Inter-administrative Data strategy is developing the system of base registries towards a federative data sharing eco-system, which includes more sector registries, in line with the development of data spaces. The goal is to develop a trust framework which makes it easier to share data in a responsible way.

The following table lists the Dutch base registries:

National	
Business and Tax	The Trade Registry (HR) contains all data concerning businesses and legal entities. All other economic actors are also listed in this registry. This guarantees legal security when doing business. All government bodies will be required to make use of this registry. For instance, a municipality will have to consult the Trade Registry when searching for company details. The Ministry in charge is the Ministry of Economic Affairs and Climate Policy. It is regulated by the Trade Registry Act . This act describes the fundamentals for the creation of the Business Register (for instance, promoting legal certainty in trade), defines who is in charge of the register (the Chamber), and what kind of companies are registered. It details the information about companies, the person to whom they belong, legal persons, and other data. The Act also



	includes articles regarding the provision and the use of data (use by administrative bodies, one-time data provision, etc.), the change of data already entered in the register and data quality (controls to ensure the availability, performance, security, accuracy and completeness of data).
Transportation / vehicles	The Vehicle Records Base Registry (BRV) lists data of vehicles, vehicle registration documents and holders of vehicle registration documents. The Netherlands Vehicle Authority (RDW, <i>Dienst Wegverkeer</i>) provides information from the registry to authorities, citizens, and businesses. The Ministry in charge is the Ministry of Infrastructure and Water Management.
Land	<p>The Topography Base Registry (BRT) is a unique source of information for all mid- and small-scale topographic maps (1:10 000 or smaller) with which government authorities can easily exchange geographic information. It is kept by the Land Registry. The Ministry in charge is the Ministry of the Interior and Kingdom Relations.</p> <p>The Large Scale Topography Base Registry (BGT) is a digital map of the Netherlands, which records buildings, roads, waterways, plots and railway lines in a uniform way. The map is accurate up to 20 centimetres and contains many details, just as you would see in reality. In short, it documents the spatial organisation of our physical surroundings: trees, roads, buildings. The Ministry in charge is the Ministry of the Interior and Kingdom Relation.</p>
Population	The Personal Records Base Registry (BRP) is the base registry for personal data within the base registries system. The Dutch government uses the data recorded in the BRP. Amongst other things, these are: name, date and place of birth, address, and family ties. Other organisations also use BRP data, for instance pension funds and research institutions. The Municipal Personal Records Registry (GBA) and the Registry of Non-Residents (RNI) together constitute the Personal Records Base Registry (BRP). The Ministry in charge is the Ministry of the Interior and Kingdom Relations. The BRP is supported by the BRP law which is applicable since 2015 and it sets the following objectives: i) promoting the efficient provision of personal data; ii) modernising the registry; and iii) managing the corresponding legal protection and privacy of individuals . It describes how the registration should be organised and who should be responsible for managing data and central facilities. Additionally, the legislation describes the specific information personal records must include and the registration process. This law details the information the registry can provide.
Other	<ul style="list-style-type: none"> • Base Registry for Addresses and Buildings (BAG) The Base Registry for Addresses and Buildings (BAG) contains municipal basic data of all addresses and buildings inside a given municipality. The data is collected in a National Facility (<i>Landelijke Voorziening, BAG LV</i>). The Dutch cadastre manages BAG LV, and provides data to public offices, institutions, companies, and private citizens. The Ministry in charge is the Ministry of the Interior and Kingdom Relation. • Cadastral Records Base Registry (BRK) The Cadastral Records Base Registry (BRK) consists of the cadastral registration and the cadastral map (Kadastrale Kaart). Cadastral data are used by many clients as the foundation for their own work processes. In that sense, the Dutch cadastre has been a base registry for a long time. The cadastre's products remain available through MijnKadaster and other channels. Direct links to other key registries will enable incorporation of the data of other registries into the cadastral registry and products. The Ministry in charge is the Ministry of the Interior and Kingdom Relations. • Income Base Registry (BRI) The Income Base Registry (BRI) contains the total income or taxable annual income of everybody who files an income tax return. Government organisations use the BRI to determine supplements, subsidies or benefits. The income registered in the BRI is called registered income. Users can view



	<p>their registered income (for the previous tax year) on MijnOverheid (MyGovernment). The Ministry in charge is the Ministry of Finance.</p> <ul style="list-style-type: none"> • Property Valuation Base Registry (WOZ) The Property Valuation Base Registry (WOZ) consists of several data needed to assign value both to an immovable property and a stakeholder. These are: the 'established value' (WOZ value), a BAG-listed address, and a link to cadastral parcels and/or addresses, and to BAG dwellings, stations, berths, and/or objects. The Ministry in charge is the Ministry of Finance. • Subsoil Base Registry (BRO) The Subsoil Base Registry (BRO) contains all public data concerning the Dutch subsoil. The BRO Act, which came into effect on 1 January 2018, requires that source data owners provide and use soil and underground data in a digital form. The requirements will be expanded step by step in the next four years. The data in this key registry have been validated and are of importance for activities like freshwater procurement, underground transport and mining, but also for activities on the surface, like energy transition, housing construction and infrastructural projects. The Ministry in charge is the Ministry of the Interior and Kingdom Relations.
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Dutch Base Registries System

The system of base registries has been operational for a decade. In June 2019, the Court of Audit published the investigation into the base registries system operation and [issued an advice](#) to the Minister of the Interior and Kingdom Relations. In response to this advice and the discussions in Parliament, the government issued letters about the further development of the system, including its [intentions to set up a central reporting point](#) and [develop a vision on the future of the system](#). In November 2020, the government issued a [letter to Parliament](#) about the current developments and further improvement of the system of base registries, including a central hotline for reporting errors in the registrations and the latest scheme for the base registries and its interconnections. In January 2021, the central reporting point (*Meldpunt Fouten in overheidsregistraties*, MFO) was realised. The MFO helps citizens, companies and organisations solve problems with regard to all government registries.

Data Exchange Services of the Base Registers System

The smart exchange of data from the system of base registers enables the government to operate more efficiently and to improve its service. Four system services support base registries in their aim to offer their catalogue of products and services to users in a consistent way. The system of base registries identifies the following system services, namely, [Digilevering](#), [Digimelding](#), [Digikoppeling](#) and [Stelselcatalogus](#):

- [Digilevering](#) distributes up-to-date and accurate key registry data to key registry clients in the shape of event messages, for instance the relocation of a company, the birth of a person, or a change in somebody's income. Each recipient organisation is responsible for determining which data are relevant;
- [Digimelding](#): the information stored in key registries must be up-to-date and reliable. One of the tools used to guarantee the quality of the key registries is [Digimelding](#) (digital notification), which enables users to report back. All base registries users have a legal duty to report any mistake in their data that they may be aware of. Reporting back contributes to efficient operations management within the government, improves the level of service, and increases the opportunities to fight fraud;
- [Digikoppeling](#) sets out interface standards and contains agreements for the exchange of messages between authorities. One [Digikoppeling](#) implementation in an IT-environment enables users to exchange messages with all authorities, and to join nearly all generic functions of the digital government basic infrastructure, for instance the key registries. Governmental as well as private organisations performing a public task can use [Digikoppeling](#); and
- [Stelselcatalogus](#): the System Catalogue lists data contained in the base registries system, what they mean, and how they are interconnected. The System Catalogue is targeted to inform policy makers and legislation lawyers. The source code for [Stelselcatalogus](#) can be found as open-source software in Github through the OSSG ([OpenSourceSoftwareGevenscatalogus](#)).

Data platforms and portals

The following table lists the Dutch data platforms and portals infrastructures:

<p>Overheid.nl: Government Portal</p>	<p>The Overheid.nl portal, which translates to government.nl for English speakers, was introduced in the first eGovernment action plan of 1999. It contributes to transparency in public administration. <i>Overheid.nl</i> serves as the central access point for all information relating to government organisations. The portal provides information about services for persons and businesses, divided by themes, life events and location. It provides all national legislation, official publications, local and regional legislation and offers internet consultation services. The portal links to EU legislation, the Open Data Portal and the common website of the ministries, with documents, publications and news items on all domains. The portal also offers access in the form of a personalised environment. Between 2018 and 2023, the number of documents published per year on Overheid.nl quadrupled, from 17,000 in 2018 to 71,000 in 2023.</p>
<p>Ondernemersplein: Business Portal</p>	<p>The Ondernemersplein (business.gov.nl for English speakers) portal is the point of contact for businesses and entrepreneurs in areas such as legislation, subsidies and permits. The information provided covers all levels of government. It is made available through various channels (websites, email, telephone and chat) and focuses on the issues and needs of the business community. In 2023 there were a total of 10.3 million visits to the portal. 3.2 million of these visitors accessed the international site business.gov.nl. With regards to the Dutch version of the portal, 76% of users were positive about the website, the percentage increasing to 84% for business.gov.</p>
<p>Woo-index</p>	<p>In 2023, the Woo-index went live, an online portal designed to make it easier to find actively disclosed government documents. The Open Government Act (Wet open overheid; Woo) mandates the active disclosure of 17 information categories by all governing bodies. This obligation is being implemented in a phased manner over the course of two years,</p>





	<p>from 2024 to 2026. Public authorities disclose these categories of information through the Woo-index, making it easily accessible to citizens. The Woo-index has been operational since June 2023. It will be expanded to include an advanced search function, allowing users to search the text of all disclosed documents available through the Woo-index. Moreover, the portal includes a higher-level forum in which entrepreneurs discuss matters of direct concern.</p>
<p>Cooperating Catalogues</p>	<p>The Cooperating Catalogues is a standard to provide citizens and businesses with a one-stop-shop entry for government products and services, wherever they may start searching. Cooperating Catalogues is a standard for publishing and exchanging metadata about products and services. The information from Cooperating Catalogues will be available on the portals overheid.nl and ondernemersplein.nl, as well as on the websites of participating government organisations.</p>
<p>Mijnoverheid.nl; Portal for Personal Services</p>	<p>Mijnoverheid.nl is a portal for personal services in which citizens can access personalised information and digital messages from the government. As of the end of 2023, 10.3 million accounts had been activated, a 6.0% increase compared to the previous year. The portal offers the following functionalities:</p> <ul style="list-style-type: none"> ▪ Citizens can access registers, and view their personal data registered by government, such as their address and family data, work & income data, pension data, and data regarding real estate and vehicles. In 2023, Dutch citizens viewed their personal data 15.3 million times. Through a link to the organisation responsible for the Personal Records Base Registry (BRP), citizens can also see which organisations are entitled to receive data from each base registry; since 2023, citizens can view the energy efficiency category the house they own and/or the house they live in (for example, their rental house). ▪ Citizens can receive messages from different government organisations in their secure message box. The Tax



	<p>Department is one of the key customers of this service. In 2023, a total of 85.7 million messages were sent to the message box; a 6.2% increase compared to the previous year. In October 2018, the message box app was launched to enable citizens to easily read mail from the government on a smartphone or tablet; and</p> <ul style="list-style-type: none"> ▪ Citizens can follow the workflow, after having applied for services with participating municipalities. A total of 45 organisations were connected to the workflow functionality at the end of 2023.
<p>Open Data Portal</p>	<p>The Open Data Portal provides an overview of all available datasets held by governmental organisations in the Netherlands. The portal and registry are initiated and governed by the Dutch Ministry of the Interior and Kingdom Relations. The Netherlands Publication Office (KOOP) is responsible for site maintenance and development. Over 1,670 Dutch government organisations list their available data in about 23,617 datasets. Currently, over 1,302 Dutch government data items are available in English.</p>
<p>Nationale Portalen; sdg.rijksoverheid</p>	<p>The Single Digital Gateway (SDG) regulation specifies that certain information on dealings with the government and governmental organisations by citizens, businesses and non-profits must be notified on Your Europe. The decentral governments (municipalities, provinces and water boards) publish this information on the "Nationale Portalen" (Eng: "National Portals") in Dutch (sdg.rijksoverheid.nl) and in English (sdg.government.nl), which is in turn automatically notified on Your Europe. The portals are developed and maintained by the Public Information and Communications Office (DPC), commissioned by the Ministry of the Interior and Kingdom Relations (BZK). The portals have streamlined the process of publishing the required information and allow information to be re-used, significantly reducing the amount of effort required from decentral governments to comply with the SDG regulation and ensuring that the information is up to standard. The</p>



	<p>data portal is updated daily by harvesting processes, API updates and individual users. The data registry is based on the CKAN software platform and Drupal 8.</p>
<p>Diginetwerk</p>	<p>Diginetwerk connects (existing) physical government organisation networks to one another. This results in a single closed virtual government network. Within that network, government bodies are able to securely exchange data. Diginetwerk provides connectivity and increases efficiency, because one organisation requires just one connection to be able to exchange data with various government organisations.</p>

Cross-border infrastructures

The following table lists the European cross-border infrastructures of which the Netherlands is part of:

<p>European Business Registry</p>	<p>The Netherlands is a member of the European Business Registry (EBRA), which is a network of national business registries.</p>
<p>EUCARIS</p>	<p>The Netherlands is a member of EUCARIS, the European Car and Driving Licence Information System, allowing the exchange of vehicle and driving license information among its member nations.</p>
<p>TESTA</p>	<p>The Trans European Services for Telematics between Administrations (TESTA) network is used for a number of cross-border use cases.</p>
<p>EU Digital Wallet</p>	<p>The Netherlands is part of the EUDI Wallet Consortium. And The Netherlands is part of the Potential Consortium.</p>
<p>MyHealth@EU</p>	<p>The Netherlands is a member of the MyHealth@EU network to exchange patient summary data with other EU member states through the National Contact Points for eHealth (NCPeH).</p>
<p>Once-Only Technical System (OOTS)</p>	<p>The Netherlands is actively involved in the implementation of the Once-Only Technical System (OOTS) as part of the Single Digital Gateway (SDG) regulation, to be used for cross-border sharing of information between public administrations within the EU. To this end, a base implementation (“Basisinrichting OOTS”) is being developed to support Competent Authorities when integrating OOTS into their procedures.</p>
<p>EMREX</p>	<p>The Dutch executive education authority (DUO) maintains a connection between its diploma registry and the EMREX network, allowing diplomas to be shared with other participating countries.</p>

<p>Internal Market Information System (IMI)</p>	<p>The Netherlands has implemented the Internal Market Information System (IMI), used to exchange information across borders between public authorities within the EU.</p>
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4. Digital transformation of public services



Digital public services for citizens



Digital Government Law

The **Digital Government Law** (*wet Digitale Overheid*) was passed by the Senate on 21 March 2023 and entered into force on 1 July 2023. The main objective of the draft law is to ensure safe access of Dutch citizens and businesses to (para-) governmental agencies. The law also sets minimum mandatory standards.



Administrative Law

Legislation on Administrative Law contains general rules concerning the relationship between the government and individual citizens, companies and the like. The 2004 amendment of the law regulates administrative electronic traffic (mod. 2004). Since 1 May 2024 an additional modification has been implemented to establish the right for digital interaction with government.



Unique Identifying Numbers Law

The **Unique Identifying Numbers Law** introduces a unique personal number in order to increase the efficiency of the administration and to improve services to citizens. To achieve this, the legislation includes information about the management, creation and assignment of numbers.

eInvoicing



eInvoicing Legislation

The **EU eInvoicing Directive 2014/55/EU** was implemented in national legislation by means of a Decision which amended the Dutch Procurement Law and the Dutch Procurement Law for the Defence and Safety Domain. The amendment of the procurement laws is known as **eInvoicing legislation**.

Furthermore, in the Netherlands, B2G eInvoicing has been mandatory since January 2017 for central government agencies. Since 18 April 2019, all government bodies were obliged to accept and process eInvoices.



NLCIUS

The **NLCIUS** is the development and enactment of a national derivative (substandard) of the European standard CIUS. The NLCIUS is maintained by **Standardisation Platform eInvoicing (STPE)**. Furthermore, the STPE supports and stimulates the implementation and use of the European Norm and the technical implementation of eInvoicing solutions within sub-central government bodies (provinces, municipalities and water board authorities). More information on eInvoicing is available [here](#).

eHealth and social security



Electronic Exchange of Health Data Law (Wegiz)

The **Electronic Exchange of Health Data Law (Wet elektronische gegevensuitwisseling in de zorg, Wegiz)** sets the legal framework to appoint mandatory electronic exchange of specific sets of health data, with the aim to adopt interoperability standards and improve patient care and outcomes. This law has been in effect since 1 July 2023.



National Vision and Strategy for an integrated health information system

The Ministry of Health, Welfare and Sport the National Vision and Strategy (NVS) on 31 March 2023. This national approach was co-produced with the National Health Information Council (Informatieberaad Zorg), representing the main stakeholders in the Dutch healthcare ecosystem: payers, patients, professionals, providers and government. The Vision and Strategy take into account European and other international developments such as the (upcoming) European Health Data Space regulation (EHDS) and use of international interoperability standards.

Other key initiatives



Approach to Digitalisation in the Judiciary

The Ministry of Justice and Security published its [approach to digitalisation](#) in the criminal justice domain. This approach addressed the need for improving information through the digitalisation of procedural documents throughout the entire criminal justice chain, both for internal use and for exchanges with third parties.



Electronic Announcement Act

The [Electronic Announcement Act](#) established the obligation for national government official publications to be published on the internet rather than on paper (official journals, local papers etc.). The aim of the latest amendment, that came into force on 1 July 2021, is to define the obligation for administrative bodies (including local and regional government bodies) to publish all official announcements and publications on [officielebekendmakingen.nl](#), and also to arrange a digital e-mail service informing citizens about relevant announcements and publications that relate to their specific living environment.



SUWI Act

The [SUWI act](#) defines mandatory digital interactions between citizens and government in the employment and income domain, in particular with the Employee Insurance Agency (UWV).



iDeal

The Netherlands relies on the private sector for the ePayment infrastructure. Many national and international ePayment solutions are available. Currently, the most widely used online ePayment solution is [iDeal](#). iDeal allows customers to make online payments using direct transfer from their bank account.

iDeal is a Dutch private sector product, and all major banks participate in the initiative (ABN AMRO, ASN Bank, bunq, ING, Knab, Rabobank, RegioBank, Revolut, SNS, Svenska Handelsbanken, Triodos Bank, Van Lanschot). About 130 000 online shops and other organisations offer iDeal as a payment method. There are currently more than 50 million iDeal transactions every month.

Digital public services for businesses



Services Act

The [Services Act \(*Dienstenwet*\)](#) simplified the business activities for service providers in all EU Member States. It implemented the [EU Services Directive](#) which took effect on 28 December 2009, and incorporated the main rules from the EU Services Directive into Dutch law. It introduced the right for entrepreneurs to interact with government digitally for a specific set of services.



Standard Business Reporting

The Standard Business Reporting (SBR) provides governments and businesses with an unequivocal, cost-effective, secure and adaptable method for the exchange of business information between organisations in a reporting chain. With SBR the Dutch Government and businesses in the Netherlands have come to an agreement regarding the way accountability information is being reported. This leads to an undisputed set of financial information.





The SBR is already operational. The following organisations accept or require the SBR: Tax and Customs Administration (e.g. Value Added Tax, Corporation Tax Return), Chamber of Commerce (annual reports), Central Statistical Office (production and investment statistics), and banks (annual credit reports). In 2022, 61 reporting types based on the SBR framework were in use, adding up to a total of 48 million SBR messages exchanged.



Open Standards

The Dutch government promotes open standards to ensure interoperability, supplier independency and increased internet security. In the Netherlands, some open standards are mandatory on a 'comply or explain' basis, while some internet standards will be legally mandatory in the upcoming Digital Government Law (*wet Digitale Overheid*) or all public services. Others are recommended. The Standardisation Forum has published a [list of open standards](#). To ensure the use and adoption of open standards, such as electronic exchange and internet security. The Dutch government can rely on the support and advice of the Standardisation Forum.

Public procurement



Procurement Act

Since 1 April 2013, the [Procurement Act 2012](#) has become applicable to all procurement processes conducted by (semi) public organisations in the Netherlands. More information is available on the [PIANOO portal](#).



PIANOO

The government procures around EUR 73 billion worth of work, services and supplies every year. [PIANOO](#), the Dutch Public Procurement Expertise Centre, was set up to professionalise procurement and tendering in all government departments, with a view to improving efficiency and compliance with the rules. Professional procurement can contribute to successful policy and offers value for taxpayers' money. PIANOo brings procurement and tendering experts together, pools knowledge and experience and provides advice and practical tips. The Expertise Centre also fosters dialogue between public contracting authorities and private sector companies. PIANOo works for and with a network of around 3 500 public procurement and tendering professionals. PIANOo is part of the Dutch Ministry of Economic Affairs and Climate Policy.



Tendered

[Tendered](#) is the online marketplace for public procurement in the Netherlands. Tendered supports the entire tendering procedure for all contracting (central, regional and local) authorities and suppliers. It is a key instrument in meeting EU objectives for eProcurement and automatically publishes contract notices that exceed the EU threshold on Tenders Electronically Daily (TED). Tendered is administered by PIANOo.

Digital inclusion and digital skills



Count on Skills programme (Tel mee met Taal)

One of the central measures is the [Count on Skills programme \(Tel mee met Taal\)](#), which offered subsidies for activities aiming to improve the literacy, including digital literacy, of adult citizens at regional level, as well as to encourage citizens to become more active and informed in the digital society. Through the programme, municipalities received EUR 85.5 million annually to fund courses in libraries, community centres and work settings. Since the Count on Skills programme was first launched, 14 municipalities have started to set up their network of local support and the amount spent for courses focusing on digital skills has increased, showing an overall rise in interest and need for digital tools. The programme's effort is further supported by the setting up of a network of about 700 local information points, where more than 100 000 citizens overall sought help on many kinds of digital questions including, for instance, the use of online public services. This reflects an overall good interest reported in the Eurobarometer 2024, according to which 36% of Dutch respondents believe improving human support to help access



and use digital technologies and services would be very significant, representing one of the highest EU scores.

The Digital Society Alliance

The **Digital Society Alliance** (*Alliantie Digitaal Samenleven*) is a good example of a measure that develops, since 2019, various initiatives to provide support for customers facing digital challenges. In 2023, for example, the Digital Society Alliance and the banking sector introduced Banking Information Points that Dutch citizens can use to get help with their online banking services. The Netherlands intends to continue funding the project with approximately EUR 2.1 million annually until 2025. Another good example of a tool that was created to allow citizens to practice their digital skills is the Digihandig app, which was completed in 2023 and helps users to learn how to use online apps in an interactive way. With more than 1000 downloads, Digihandig has received multiple good reviews, particularly from senior citizens learning how to use mobile banking, install new apps or make safe searches on the internet.

Npuls

Npuls works on a future-proof education sector which gives an impetus to innovation and uses the opportunities offered by digitalisation. Npuls focuses on vocational education institutions, universities of applied sciences and research universities. The goal of Npuls is to work towards a sector providing high-quality education continuously keeping itself updated and relevant. Npuls invests in the development of a knowledge and technology infrastructure for higher education and vocational training, the establishment of Centers for Teaching and Learning at every institution and the arrangement of transformation hubs such as Data & AI, XR and open education.

National Education Lab AI

In the **National Education Lab AI (NOLAI)** teachers, academics and businesses work together to improve the quality of primary and secondary education using smart and inclusive technology. NOLAI also researches the opportunities and risks of new AI- technologies for education and examines the pedagogical, societal and social implications of the use of these new smart technologies in the classroom.

Expertise point for digital literacy

In November 2023, the Expertise Point for Digital Literacy has been introduced to support education personnel with questions about and teaching of digital literacy. The Expertise Point was established at the request of the Ministry of Education, Culture and Science. Kennisnet and SLO are jointly responsible for the implementation. This expertise point supports the Basic Skills Master Plan, which helps schools to strengthen the basic skills of students.

Concept learning goals for digital literacy

This year, the national expertise centre for the curriculum in the Netherlands (SLO) introduced a new core objective on digital literacy. The three domains are considered in the core objectives are:

- 1) practical knowledge and skills,
- 2) design and create, and,
- 3) Interaction between technology, digital media, people and society.

These domains cover the four learning areas in digital literacy: practical ICT skills, media literacy, digital information skills, computational thinking. After the summer, the testing phase of these core objectives will begin.

RADIO

The **National Academy for Government Digitisation (RADIO)** offers courses and various digital learning forums for policymakers and other civil servants to gain more insight into and gain experience with digitisation and computerisation.

'User Needs First' Community

Gebruiker Centraal (loosely translated as 'User Needs First') is a community of professionals working on digital government services. The project strives for a more user-friendly digital government for everyone, also people with functional impairments. It promotes and share (practical) knowledge about the use of plain language. Furthermore, it provides tips and tricks for making governmental websites and processes more accessible. Within this project there are

multiple communities. Each community has a certain subject it is interested in and shares knowledge about. Examples of these subjects are plain language, customer experience and design thinking. People that participate in these communities work at various levels of government (national, regional and local).





5. Trust and Cybersecurity

eID and trust services



eIDAS Regulation

The Regulation on electronic identification and trust services for electronic transactions in the internal market (EU Regulation 910/2014) entered into force on 1 July 2016 and sets standards for electronic identification and trust services for electronic transactions in the single market. The national eIDAS Implementation Act has been applicable since March 2017. The act implements parts of the eIDAS Regulation by means of changes in existing Dutch laws such as the Telecommunications Law, Civil Law and General Administrative Law. The eID part is transposed in the Digital Government Law, which entered into force in March 2023. The Dutch Parliament was regularly updated about the eID programme, the development of the Dutch EDI-wallet and revision of the eIDAS regulation. In the first quarter of 2024, a first version of the Dutch EDI-wallet was published on Github and Figma.

The revised eIDAS regulation entered into force on 20 May 2024. The regulation's main innovation is the introduction of the European digital identity wallets. The Commission must adopt implementing acts for technical specifications of EDI-wallets by the end of November 2024 and of the qualified certificates for website authentication by the end of May 2025. Member States must provide at least one European digital identity wallet within 24 months of the date of entry into force of the implementing acts.



DigiD

In the eID approach, public and private authentication solutions coexist. The public solution for citizens (DigiD) is reserved for G2C authentications. The policy aims at strengthening DigiD in two ways: on the one hand by introducing new certificates on ID cards and driving licences to have a higher level of trust, and on the other hand by accepting private authentication solutions under strict conditions in order to promote resilience.

DigiD enables individuals to identify themselves for digital services. DigiD offers security: you know who you are dealing with. Using DigiD, the Citizen Service Number (BSN) of the person logging in is disclosed. This makes it possible to check the information already on file for that individual and offer personalised services. At this moment, logging in involves a username and a password, and in some cases a text message for further verification. In July 2017, the DigiD App was launched.

DigiD is available at three levels:

- Basic (username and password: DigiD);
- Medium (DigiD + sms-authentication or using the DigiD app), which both represent a stork QAA level 2; and
- Substantial (the DigiD app upgraded with an ID verification), stork QAA level 3.

Although it is not mandatory by law yet, DigiD has become the main authentication system for citizens.



DigiD Authorise

DigiD Authorise enables users of a digital service to authorise someone to act on their behalf. This can come in handy if the user is not familiar with using computers or digital services or wants to defer the task to someone who is more knowledgeable in the subject matter. DigiD Authorise users do not need to disclose their own DigiD to the person they authorise and grant the authorisation only for one specific service. In 2022, companies and organisations made 12 689 requests for the use of DigiD authorisations.



Administrative Facility BSN

The administrative facility citizen service number (*Beheervoorziening burgerservicenummer*, BV BSN) is in charge of generating, issuing, managing and consulting the citizen service number (BSN). The BV BSN controls access to the identifying data in the underlying authentic registries (Municipal Key Registry Personal Data, or GBA in Dutch, and the Non-Residents Records Database). It also controls access to the verification registries for identity documents to verify identity at the counter.



eRecognition

eRecognition (*eHerkenning*) is the eIdentity Trust Framework enabling authentication for government agencies and businesses. With an *eHerkenning* authentication token, users can log in to online services offered by government agencies and businesses. Authentication tokens are technology neutral; therefore, a range of options is available for users (e.g., SMS, OTP, certificate, user name/password). The four assurance levels provided by STORK are reused within *eHerkenning* in combination with a registry of mandates: users must be mandated by their organisation for the tasks they are allowed to perform. At the end of 2021, a total of 0.75 million eRecognition means had been issued, accepted by over 500 public organisations where almost 17 million authentications were made.



PKIoverheid

The **Public Key Infrastructure (PKI)** for the government (*PKIoverheid* in Dutch) facilitates reliable digital communication inside and with the Dutch government. PKIoverheid is a very high-grade, safe infrastructure, based on digital certificates. A PKIoverheid certificate is used for: website security, remote authentication, legally valid electronic signatures and encryption of electronic messages.



eIDAS Koppelpunt

The **eIDAS infrastructure** has been functional since eIDAS was up and running. The Netherlands strives to connect to notified eID means within the shortest time possible in order to increase traffic. Dutch inbound traffic is rapidly increasing since many countries have been able to use their eID mean in the Netherlands. In 2023, the number of authentications eIDAS with DigiD NL to EER was 96 735. The number of authentications eIDAS with eRecognition NL to EER was 3326. The number of authentications from EER to NL was 197 593.

Cybersecurity



Netherlands Cybersecurity Strategy 2022-2028

The **Netherlands Cybersecurity Strategy 2022-2028** was published in October 2022. The strategy describes the government's vision on the security of the digital society and the role played by public authorities, businesses and the public within it. It is accompanied by an action plan that sets out specific actions aimed at making the Netherlands more secure.

The strategy sets out aims and actions across four pillars. The first pillar is enhancing the cyber resilience of the government, businesses and civil society organisations. The second is providing secure and innovative digital products and services. The third is countering cyber threats posed by states and criminals, and the fourth is ensuring sufficient cybersecurity expertise, strengthening education on cybersecurity and boosting public cyber resilience.



Government Information Security Baseline

In October 2018, a **policy letter** was sent to the Parliament concerning measures to improve information security in the public sector. As a follow up, the **Government Information Security Baseline** (*Baseline Informatiebeveiliging Overheid*, BIO) has been effective since 1 January 2020. The BIO is the basic information security framework encompassing all layers of the public sector: central government, municipalities, provinces and water authorities.



General Data Protection Regulation

The **General Data Protection Regulation (EU) 2016/679** has been applicable as of 25 May 2018. It ensures that the same privacy rules apply across the European Union. In the Netherlands, the GDPR has been transposed into law.





6. Innovative technologies

Artificial Intelligence (AI)



Public Values and Technology in Society

The Dutch government aims to recognise and understand at an early stage, new technologies or new technological applications with a potentially significant impact on society. We do this to identify both opportunities and risks through the lens of public values and human rights. Then - when necessary - we can propose an appropriate response and possibly policy adjustment from the government. In that context, the Dutch government commissions tech scans from an independent scientific institute, the Rathenau Institute. These tech scans highlight opportunities and risks of digital technologies and also describe action options for the government. Tech scans on [Generative AI](#) and [Immersive Technologies](#) were conducted in 2023. In 2024, The Rathenau Institute performs a tech scan on neurotechnology.



Netherlands AI Coalition

Created in the frame of the Dutch Digitalisation Agenda, the [Netherlands AI Coalition \(NL AIC\)](#) aims at substantiating and stimulating AI activities in the Netherlands. The NL AIC is a public-private partnership with over 400 organisations in which the government, the business sector, educational and research institutions, as well as civil society organisations collaborate to accelerate and connect AI developments and initiatives. The ambition is to position the Netherlands at the forefront of AI knowledge and application for prosperity and well-being, with due observance of both Dutch and European standards and values.

To strengthen the position of the Netherlands and to make the most of the opportunities, a long-term programme called [AiNED](#) has been drawn up by the NL AI Coalition. The programme accelerates the development and application of AI so that the Netherlands can reap the economic and social rewards of AI and keep pace with other leading countries. EUR 22 944.5 million from the National Growth Fund will boost knowledge, innovation, and talent for AI in the Netherlands in the coming years. Several Ministries, including the Ministry of the Interior and Kingdom Relations, funded an *Nederlandse Organisatie voor Wetenschappelijk Onderzoek* (Dutch Research Council, NOW) call in the *Nationale Wetenschapsagenda* (Dutch Research Agenda, NWA) programme for ELSA labs. The Ministry of the Interior and Kingdom Relations subsidised the ELSA labs 'Poverty and Debt'.

The Netherlands is also working on a public European Digital Innovation hub, an important connection to provide knowledge and instruments to those involved in developing and implementing innovative, digital solutions. The Netherlands supports the development of labs and innovation hubs on AI. Good examples of such initiatives are the [Civic Lab](#), focusing on human-centric AI and the [ELSA Lab](#) on personal finance, poverty and debts, in connection with the NL AIC.



Government-wide vision on generative AI of the Netherlands

As one of the first EU member states, the Dutch government has published its [government-wide vision on generative artificial intelligence \(AI\)](#). This vision describes the opportunities and risks associated with generative AI. It also addresses relevant laws, regulations, and policies. Lastly, the vision contains a set of concrete actions to ensure responsible development and use of generative AI that benefits society as a whole. The vision on Generative AI was published on 18 January 2024.



Netherlands Algorithm Registry, Algorithm Authority

The Dutch government has launched a national algorithm register, in which the public sector publishes information about their algorithms (<https://algoritmes.overheid.nl/en>). Information published by governments about their algorithms is public and searchable. Publication of the algorithm register is one of the actions in the Values-Driven Digitalisation approach and contributes towards transparency, encouraging trust in the public sector. In early 2023, the Dutch Algorithm Authority ('DCA'), part of the Dutch Data Protection Authority, started



its activities aimed at strengthening the (regulatory) oversight of algorithms in the Netherlands for both the public and private sectors. The DCA contributes to better oversight of algorithms and AI in the Netherlands. The DCA does this by providing overarching risk analysis, strengthening cooperation between regulators, and contributing to the development of guidance for regulations that include an algorithm component.

Algorithm Framework

The Dutch government has recently developed an Algorithm framework for the public sector (in Dutch: *algoritmekader*) which shows what (legal) requirements are in place for the responsible use of algorithms and AI. This enables better implementation of laws and regulations and gives guidance for all phases of the life cycle of algorithm deployment. Best practices, use cases and input from both end users and the regulatory body help make this Algorithm framework a useful and practical tool.

FRAIA (Fundamental Rights and Algorithm Impact Assessment)

As one of the first EU member states, the Dutch government has published a tool to help map the risks to human rights in the use of algorithms and to take measures to address these risks. The tool was developed in 2021 and is called The Fundamental Rights and Algorithm Impact Assessment (FRAIA). In Dutch the tool is called *Impact Assessment Mensenrechten en Algoritmes*.

Amsterdam AI Registry

The cities of Amsterdam and Helsinki (Finland) have launched [open AI registries](#) that track how algorithms are being used in the municipalities with the aim to ensure that the AI used in public services operates on the same principles of responsibility, transparency, and security as other local government activities; and to improve both the availability of services and the experiences of customers.

Distributed Ledger Technologies

Dutch Blockchain Coalition

As part of the [Dutch Digitalisation Agenda](#), the [Dutch Blockchain Coalition \(DBC\)](#) is a joint venture between partners from the government, knowledge institutions and industry. The DBC's mission is to promote reliable and robust blockchain technologies, create the best possible conditions to allow blockchain applications to arise, and utilise blockchain as a source of trust, welfare, prosperity and security for the Dutch society. For this mission, the DBC is mainly a catalyst and facilitator that activates and connects within a broad public-private network.

In both the AI and blockchain coalitions the application of new technologies in public administration is addressed. In connection with the two main coalitions mentioned above, the Dutch government focuses on building a [Community of Practice](#), providing guidelines and instruments to develop and deploy new technology solutions – mainly AI and blockchain – to solve societal challenges and improve public services. Use cases are stimulated using a variety of instruments, such as hackathons, pre-commercial procurement and buyer groups.

Big data

No particular initiatives in this field have been reported to date.

Cloud & edge computing

Cloudpolicy

The Ministry of the Interior and Kingdom Relations published a new policy for the use of cloud solutions by the national government in August 2022 [[Kamerbrief Rijksbreed cloudbeleid 2022 | Kamerstuk | Rijksoverheid.nl](#)]. This policy contains conditions for keeping information safe, avoiding a vendor lock-in and benefiting from new technologies.



Internet-of-Things (IoT)

No particular initiatives in this field have been reported to date.

Quantum Computing



Quantum Innovation Hub Rijksoverheid

The Dutch state is actively anticipating the emergence of quantum computing. It has a [Quantum Innovation Hub Rijksoverheid](#) that explores what quantum computing can mean for the country, and it is funding research on quantum technologies with 615 million euros through a programme called Quantum Delta NL. The Dutch government is including quantum computing in its technology governance policies and should enable that Dutch science and industry to make optimal use of it.

Gigabit and wireless high-speed networks



5G and the Netherlands Authority for Consumers & Markets

In December 2018, the Netherlands Authority for Consumers and Markets (ACM) released a [paper on 5G](#), the next generation of mobile networks. The paper covers regulation and the regulator's role regarding 5G. Throughout the paper, ACM explains where 5G overlaps with its duties and highlights that market participants need to make choices concerning the roll-out of the 5G-network, and the ACM would like to help them in that development process within the boundaries of its regulatory framework.



Connectivity Action Plan

In July 2018, the Ministry of Economic Affairs and Climate Policy published the [Connectivity Action Plan](#), which refines the objectives of the Dutch Digitalisation Strategy and outlines the government's efforts to remain the European digital leader. Its aim is to provide high-quality connectivity that can serve a wide range of demands and is available at competitive prices anytime and everywhere. In this Plan, the Dutch government supports the EU Gigabit Society targets. All households should have the opportunity to access broadband networks of at least 100 Mbps and, as of 2024, about 98.5% of Dutch households already have a very fast connection of 1Gbit/s.

GovTech



TechLeap.nl

TechLeap.nl helps quantify and accelerate the Dutch tech ecosystem by creating the optimal climate for tech companies to launch programs and initiatives for improving access to capital, market and talent. Techleap.nl is making the Netherlands home for tomorrow's tech leaders. One of the chief instruments it offers is the Finder, which you can use to explore the ecosystem and find start-ups, scale-ups, investors, corporations, accelerators, service providers, and more.

Others



Experimental Law on Self-Driving Vehicles

On 1 July 2019, the [Experimental Law on Self-Driving Vehicles](#) was enacted, enabling public road tests involving self-driving under defined conditions. Prior to the approval from the Minister of Infrastructure and Water Management, applications for such tests were assessed by the Netherlands Vehicle Authority (RDW), the police, road authorities, and the Dutch Institute for Road Safety Research (SWOV). They verify whether the prevention of traffic safety risks is

sufficiently warranted. This aims to place the Netherlands at the forefront among the countries that are getting ready for self-driving transport.



7. Digital Public Administration Governance



For more details on the Netherlands' responsible bodies for digital policy and interoperability, its main actors, as well as relevant digital initiatives, please visit the [NIFO collection](#) on Joinup.

National

Ministry of the Interior and Kingdom Relations

With the inception of the former cabinet on 10 January 2022 as well as in the following cabinet which will be incepted in July 2024, a Minister for Digitalisation has been appointed. Digital policies, however, are carried out in various departments revolving around the Ministry of the Interior and Kingdom Relations (BZK), the Ministry of Justice and Security (J&V) and the Ministry of Economic Affairs and Climate Policy (EZK). Sectoral ministers are responsible for ICT in their domains.

Digital Government Policy cooperation

Since 2022, government bodies and service providers with public duties have been collaborating under the Long-Term Programme for Digital Government Infrastructure (MIDO). This initiative aims to modernise the Generic Digital Infrastructure (GDI), working together as a unified government.

Reliable, accessible, and secure

The government is committed to ensuring that public digital services are reliable, accessible, and secure. The GDI stands at its core, providing basic digital provisions, standards, and products such as DigiD and MijnOverheid. The GDI is the foundation for public services to citizens and businesses and facilitates cooperation among government bodies and public organisations.

Modernising the GDI

In the coming years, the government plans to modernise the GDI. Since January 2022, the Ministry of the Interior and Kingdom Relations (BZK) has taken charge of this interdepartmental initiative. This joint approach focuses on the continued development of the GDI's building blocks. Key considerations include the capabilities required of the GDI, the resources needed to achieve these, compliance with national and international laws and regulations, and the need for an intergovernmental approach.

MIDO as a governance model

For this reason, MIDO was established. This programme unites governments and public service providers. Its core components are:

- **The MIDO framework:** Principles and agreements for the governance and funding of the GDI, and how organisations collaborate on the GDI.
- **The GDI multi-year vision:** Outlines the intended development of the GDI over 5 years.
- **The GDI programming plan:** An overview of all activities scheduled for the coming year, including operation, management, and development of the GDI, along with the budget.



Government ICT Unit

The **Government ICT Unit (ICTU)** is an independent consultancy and provides organisation services to the government. The objective of the **ICTU** is to support the government with the development, introduction and implementation of innovative ICT applications (mainly government wide solutions). The **ICTU** is a non-profit organisation which executes programmes under commission (mostly commissioned by the central government). The **ICTU** also conducts the day-to-day management of **NORA** and is responsible for further development on behalf of the Ministry of the Interior and Kingdom Relations.

Government Shared Services for ICT (Logius)

Logius is an agency of the Ministry of the Interior and Kingdom Relations. It manages government-wide ICT solutions and common standards. **Logius** supplies products relating to access, data exchange, standardisation and information security. Examples include the **DigiD** authentication service, the Dutch government **PKI** and **Digi** network. **Logius** also hosts the Secretariat of the Standardisation Forum, which provides administrative supports for the Netherlands Standardisation Forum.

Standardisation Forum

The Netherlands **Standardisation Forum** (*Forum Standaardisatie*) supports the Dutch government in the use and adoption of open standards, such as internet security and electronic exchange ones. In addition, it monitors the use of open standards in the public sector. The **results** are annually submitted to the Parliament.

The Standardisation Forum promotes interoperability, not only within the government system itself, but also in relations between government agencies on the one hand and citizens and businesses on the other. The Standardisation Forum reports to the **Intergovernmental Consultative Body on Digital Government (OBDO)**.

Additionally, the **Standardisation Forum** fosters cross-border interoperability with its motto "*Exchange of information does not stop at the border*", making direct references to the **European Multi-Stakeholder Platform on ICT**.

Data Protection Authority

The **Data Protection Authority (DPA)** supervises compliance with acts that regulate the use of personal data. As such, it oversees the compliance with and application of the **Personal Data Protection Act**, the **Data Protection [Police Files] Act** and the **Personal Records Base Registry and BRP Law**.

Subnational (Federal, Regional and Local)

Association of Netherlands Municipalities

The **Association of Netherlands Municipalities** (*Vereniging van Nederlandse Gemeenten, VNG*) develops the digital agenda for municipalities to steer the digitalisation in municipalities.

The **VNG** developed the **Value-based Information Society: Digital Agenda for Municipalities 2024** in 2020, an agenda with three focus areas: enabling, leveraging the potential, and interpreting/reflecting. The 2024 agenda builds further on the **Digital Agenda 2020**. The accomplishment of the agenda is the responsibility of the **VNG-committee on Information Society**, consisting of mayors and aldermen from municipalities. Moreover, **VNG Realisatie** is responsible for the development and management of municipal eGovernment standards. It acts as a partner of municipalities on information management.

At the regional level, coordination is organised by the **Association of the Provinces of the Netherlands** (*Interprovinciaal Overleg, IPO*) and the **Waterschapshuis**, an organisation that supports IT collaboration between different water authorities in the Netherlands.

8. 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 as well as 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.

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).

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).

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 Digital Services (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT). This factsheet received valuable contribution from the Ministry of Health, Welfare and Sports, the Ministry of the Interior and Kingdom Relations and the Ministry of Justice and Security.



The Digital Public Administration Factsheets are prepared for the European Commission by Wavestone.

An action supported by Interoperable Europe

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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