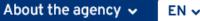
Finnish Digital Agency – towards a smoothly functioning Finland

@DVVfi@suomifi@jani_ruuskanen

Mr. Jani Ruuskanen Chief Senior Specialist jani.ruuskanen@dvv.fi





Digital and Population Data Services Agency (aka Finnish Digital Agency)

Launched 1.1.2020

Population Register Centre and the District Register Offices (9) merged to form one agency.





Individuals 🗸 Organisations 🗸

About the agency 🗸 🛛 EN 🗸

Ο



A total of 36 offices. ~1000 employees.

FY2021 budget 101 Million Euros + separate project-based funding.







Mission

To promote the digitalisation of society. To ensure the availability of data. To offer services for customers' life events.

Values

We operate courageously by reforming, supporting and appreciating. We create trust and care about the future.

Future trends

Problems will

become more

complex

Digitalisation is everywhere

The population will age and become more diverse The relationship between the environment and the economy is changing

The security environment will become more complex



Future trends – the key trends affecting our operations

Digitalisation is everywhere

The increasing presence of technology makes it possible to better meet people's needs. When taking advantage of technology, the opportunity for humane and safe interaction must be secured for everyone.

Problems will become more complex

Because of the complex, intertwined challenges, there is a need to learn to think in a new way, work together with different actors to address systemic phenomena, and influence the different interactive relationships between phenomena by experimenting and learning. Digitalisation is everywhere

Problems will become more complex

The population will age and become more diverse

The security environment will become more complex

The relationship between the environment and the economy is changing The relationship between the environment and the economy is changing

Changes in ideas, lifestyles and consumption habits will increase the importance of ecology and sustainability. Climate change forces people to make choices and creates new opportunities.

The security environment will become more complex

Global polarisation and uncertainty in international politics create hybrid threats. Reliance on technology increases the extent of threats and damages and their impacts on individuals, communities and society.

The population will age and become more diverse

The sustainability gap in the public sector resulting from the unbalanced dependency ratio makes it more difficult to maintain the welfare society. New competences and new ways of working are needed to solve the mismatch.

The planet of local solutions

The planet of local solutions is a society based on trust where services are nonadjacent but close to people



Trust

The Finland of platforms

Finland is a society based on trust in which the actors engage in goal-oriented cooperation



Cooperation

The wilderness of lonely individuals

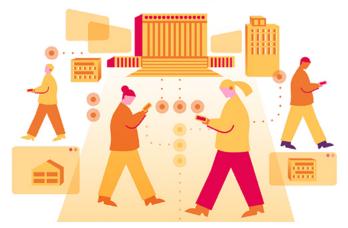
In the wilderness of lonely individuals, the renewal of services depends on the competence of strong local actors



https://dvv.fi/en/digihumausreport2022

The worksite of digital gaps

The worksite of digital gaps is an administration-oriented society where services are created through co-operation between actors



https://dvv.fi/en/-/weak-threats-and-strong-opportunities-for-digitalisation

Digital and Population Data Services Agency's services

Notary and legal recognition services	Supervision services provided by guardianship services	Population information services	Digital services for companies and public authorities
Marriage ceremony and right to officiate at weddings	Lifecycle of guardianship and continuing power of attorney	Registration and confirmation of life events	Support services for electronic service use: Identification services, Authorisation services
Notarial services and certification of purchase	Supervision	Moving and immigration	Support services for electronic service use: Secure transmission of data
Inheritance and family wealth matters, donations		Tasks related to elections and citizens' initiatives	Disclosure of registered data Population Information System's information services
Gonations			Disclosure of registered data Other information services
			Digitalisation support services: Digital security services
			Other digitalisation support services



Organisations •

About the agency ~



Individuals v



5 571 899

(2.11.2022)

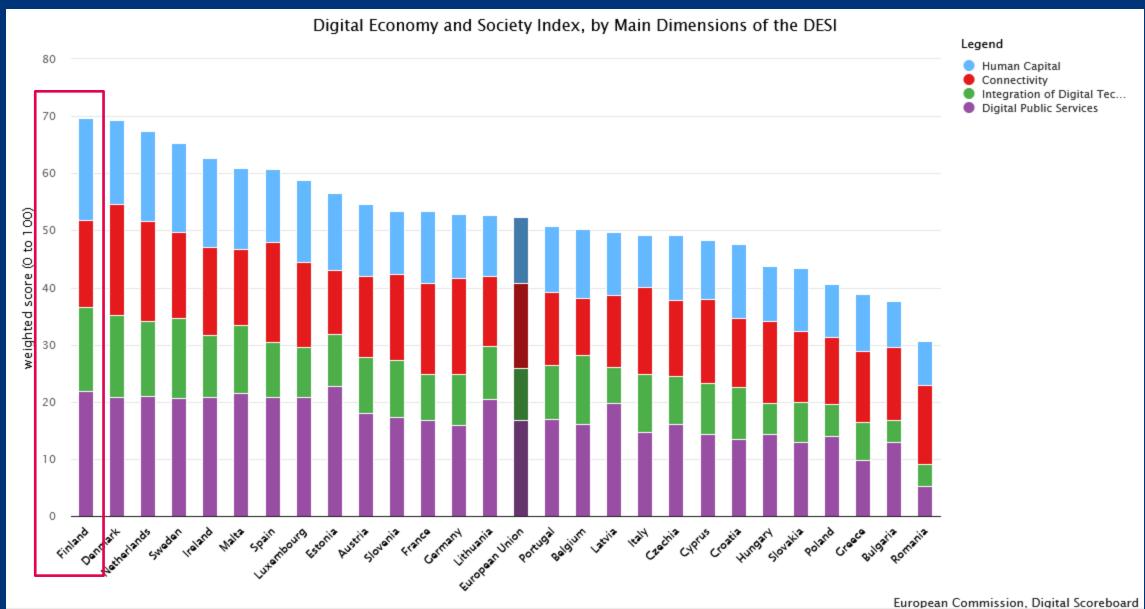
Population of Finland



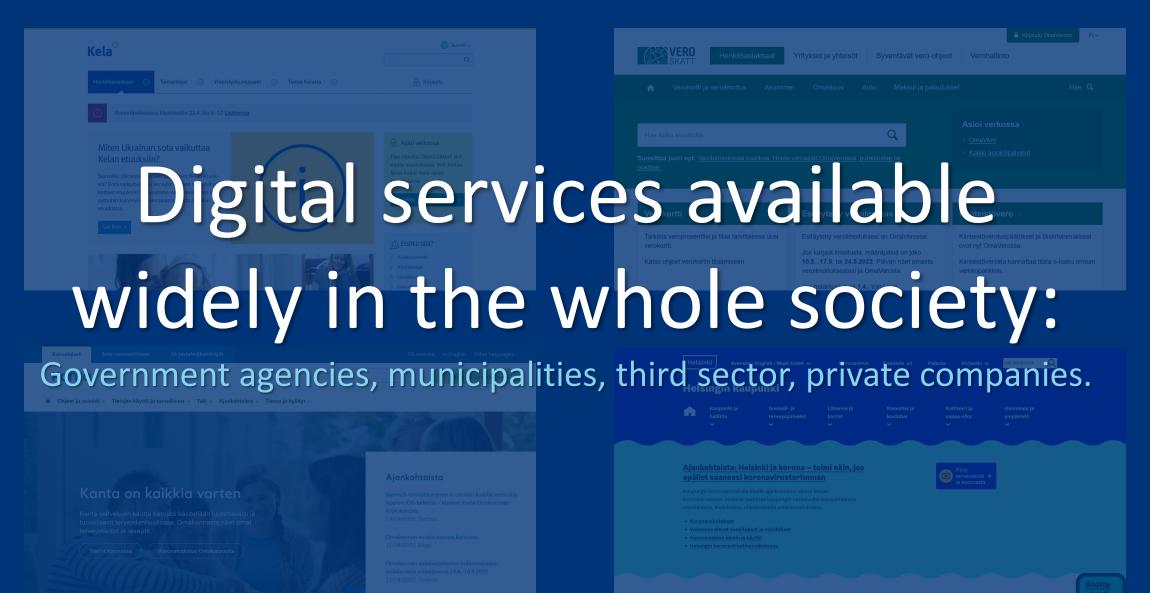


Worlds happiest country since 2018

(World Happiness Report 2022)



Digital Economy and Society Index 2022







Population Register established in 1971

Population Register Centre in 1969



Population information system

- The national population register (Population Information System) contains vital records and address information of Finnish citizens and resident aliens.
- Besides information on persons, the system contains data on buildings and apartments.
- Data from the central population register is shared with authorities, businesses and citizens (within limits set by law in detail)
- The system is an essential part of the national information infrastructure, providing one of the "basic building blocks" for the implementation of various digital services
- Enables reliable compilation of voter lists for elections and fully automated censuses.

Population register system reform 2023 >

...and digital identity!

E Reform contents

- From 2023:
 - Registration to be made available for wider scope of foreign nationals
 - Digital on-boarding to population register (e.g. from abroad)
 - New "century signs" in the ID code
 - New information on source of personal data registered
 - Passport or no ID papers, digital or face-to-face identification
- From 2027:
 - Gender neutral ID codes issued
 - Gender-neutrality only partial, since current ID codes are not changed
- This will form the basis for the new Finnish e-ID!

Digital Identity (launching in 2023)



Digital ID

Digital identity document to be used in both online and offline services.



eID for foreigners

Mobile application for foreigners that need to use digital services in Finland.



Code Display

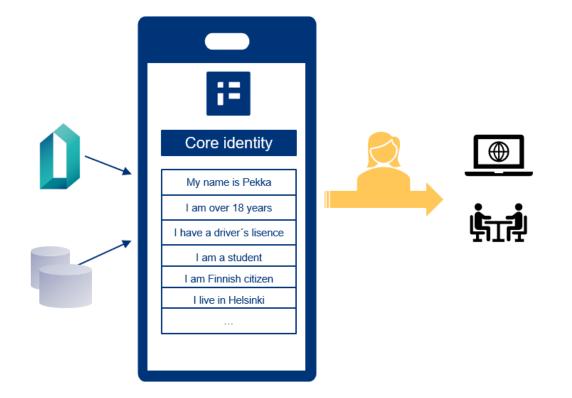
Alternative eID solution for persons not using a mobile device.

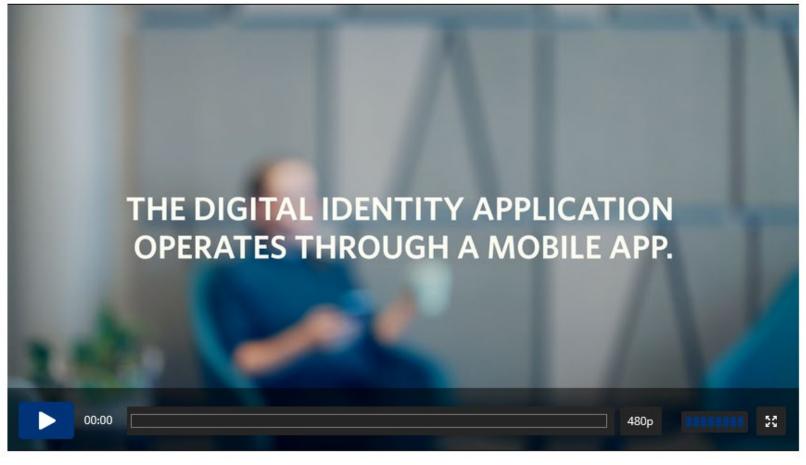


Goal: Digital wallet for information certified by government agencies

Expand the set of personal data certified by the government agencies that can be transmitted to the other party during use of the services.

Secure the forming and development of selfsovereign identity solutions based on a core identity certified by the state.





DVV:n julkiset videot

O 3

Digital proof of identity

https://dreambroker.com/channel/m06sxbf0/jwcs1udm

Example: automated certificates from Population Register 1/9

Digital and Population Data Services Agency Extracts and certificates from the Population Information System

SERVICE · NATIONWIDE · PUBLIC SERVICE

For an acceptable purpose, you can order certificates containing personal data stored in the Population Information System.

If you have been asked to provide an extract from the population register, it might refer to a life certificate or report on family relationships. The content of the certificate depends on the purpose of use. Always ask the person requesting the certificate what information it should contain.

You can order standard certificates for yourself and your dependants, i.e. a certificate of life, a residence certificate and a birth certificate. You can also order a marriage certificate and a marital status certificate for yourself.

If you need details of family relationships, for example, for your certificate or if you order a certificate for another person, you can order a free-form certificate. For a free-form certificate, you can select more extensive information.

You can also order an EU translation form or an Apostille for the certificate.

You can order certificates in Finnish, Swedish or English. You can also order certificates in Spanish, Italian, French or German.

Petition for appeal or complaints

Use the service

See all e-services, telephone services and service locations related to this service.

Suomi.fi

E-services (2 pcs):

- Certificates from the Population Information System -service
- Sending classified mail to the Digital and Population Data Services Agency

Telephone services (1 pcs):

> Telephone service: Certificates from the Population Information System

Service locations (37 pcs):

- Digital and Population Data Services Agency, Porvoo
- Digital and Population Data Services Agency, Hyvinkää
- Digital and Population Data Services Agency, Kokkola

Example: automated certificates from Population Register 2/9

Certificates from the Population Information System	- Identification	Digital self-	
Ordering a certificate Additional information		service.	
Certificates from the Population Information Syste	em		
In this service, you can order certificates issued by the Digital and Population Data Services Agency. To orde online banking codes or Mobile ID. The certificates are subject to a fee and and the payment is made as an o order.	.,	0,	
need an extract from the population register (virkatodistus), what should I order?			
Certificates to Finland If you order a certificate for a Finnish actor, you will receive the certificate as an electronic PDF document. N document, and you cannot add a translation form or an Apostille certificate to it later. You can download the certificate as soon as you have made the payment. The certificate can also be deliver use Suomi.fi Messages yet, you can enable it when you order the certificate. Certificates will not be delivere reasons, by email.	red to Suomi.fi Messages. If you	do not	
Certificates sent abroad If you order certificates for a foreign authority or for some other foreign actor, they will be posted to your ho	ome address because certificate	25	

Example: automated certificates from Population Register 3/9

Choosing

certificate

type.

Open the certificate and start the order:

Birth certificate

You can use your birth certificate to give proof of your official date of birth. You may need this certificate, for example, when moving abroad arregistering as a resident of another country. Schools and kindergartens in other countries may also require a birth certificate. You can ord at the same time a particular certificate both for yourself and your dependants. You get a separate certificate for each individual.

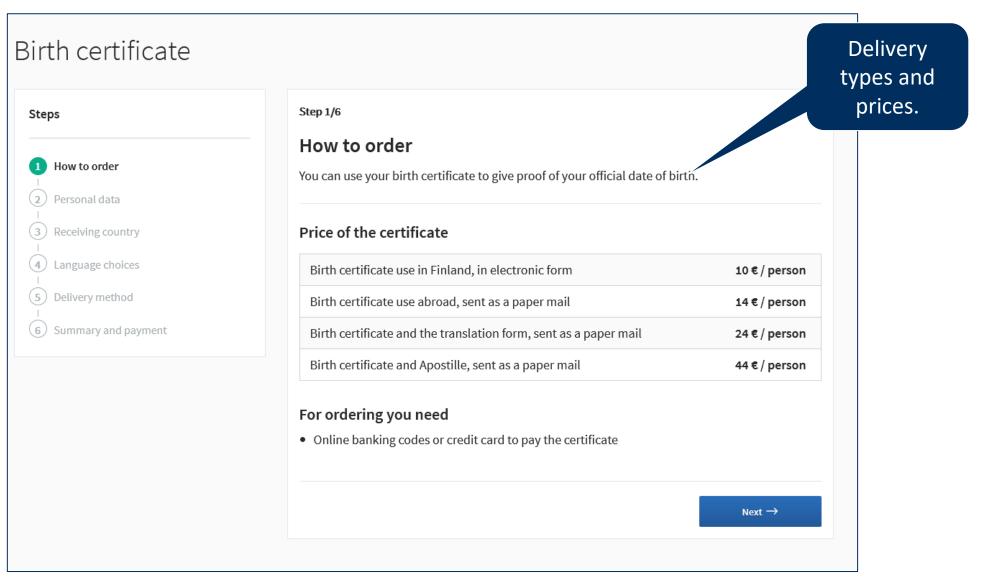
The certificate includes the following information:

Name, former names, date of birth, municipality of residence at birth, country of birth, sex, citizenship and municipality of residence. The certificate also includes your parents' names, dates of birth, municipalities of birth, countries of birth and nationalities. If you were born before 1953, your parents' personal data might not be in the population information system and cannot be included in the certificate.

You can also choose to include your personal identity code on the certificate. Parents' personal identity codes will not appear on the certificate.

Ordering a certificate You can order a certificate after identification.	Order certificate
Civil status certificate	
 Life certificate Marriage certificate 	
Residence certificate	

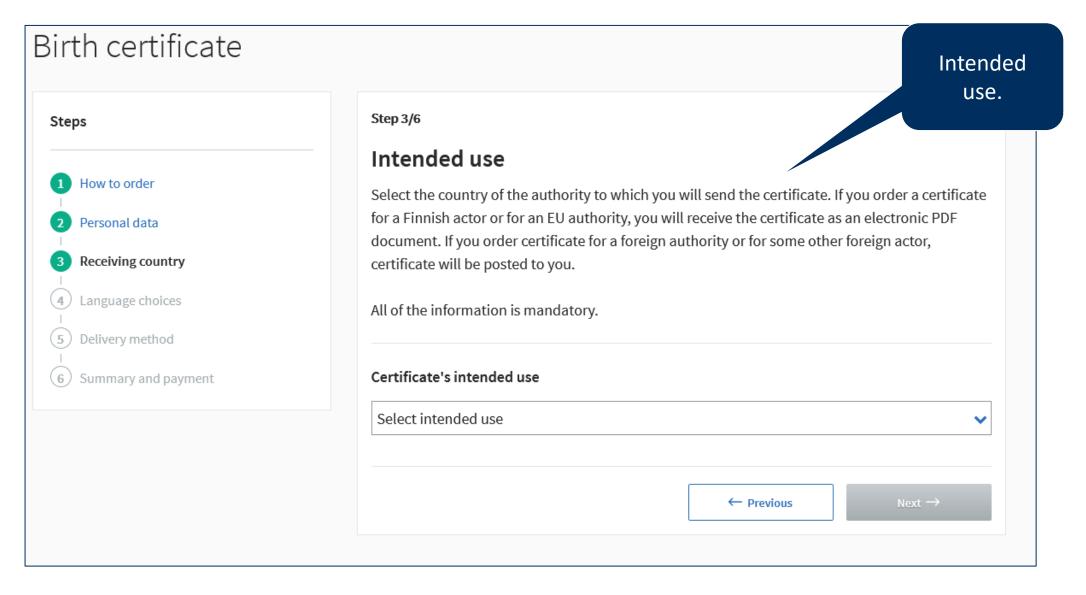
Example: automated certificates from Population Register 4/9



Example: automated certificates from Population Register 5/9

Birth certificate	Personal data options on each type.			
Steps	Step 2/6			
1 How to order	Personal data			
 Personal data 3 Receiving country 4 Language choices 	You can order at the same time a particular certificate both for yourself and your dependants. You get a separate certificate for each individual. If you order a particular certificate for several individuals at the same time, your selections will apply to all the certificates. If you would like the certificates to include different information, you must order the certificates separately. You can start placing a new order after paying for the current one.			
 Comparing a choice of the comparing a choice of the choice	Personal identity codes I also want personal identity code to be shown on the certificate.			
	← Previous Next →			

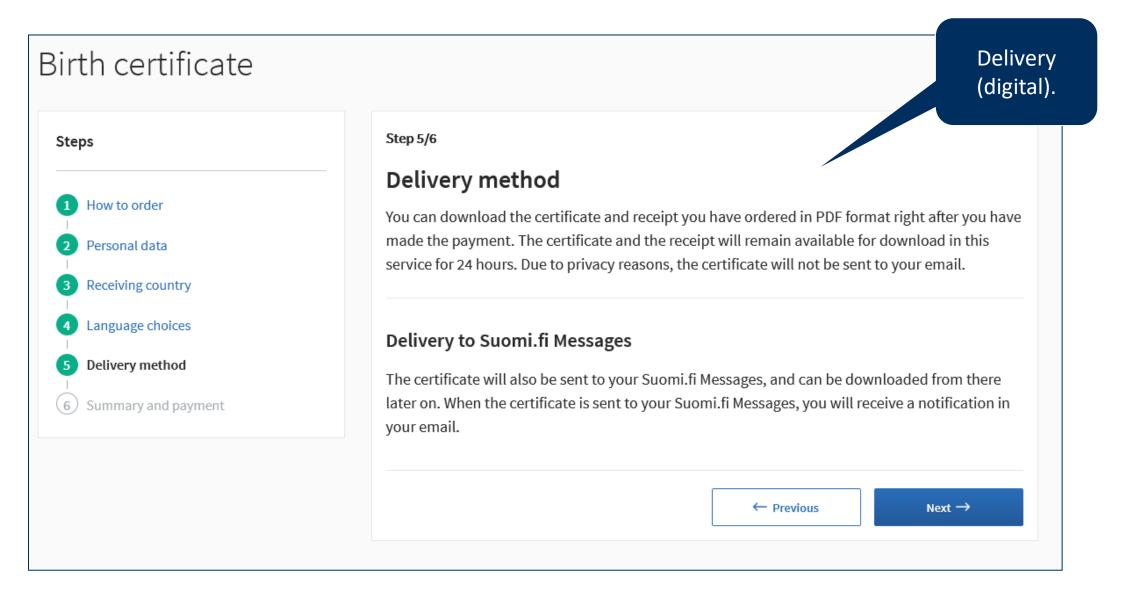
Example: automated certificates from Population Register 6/9



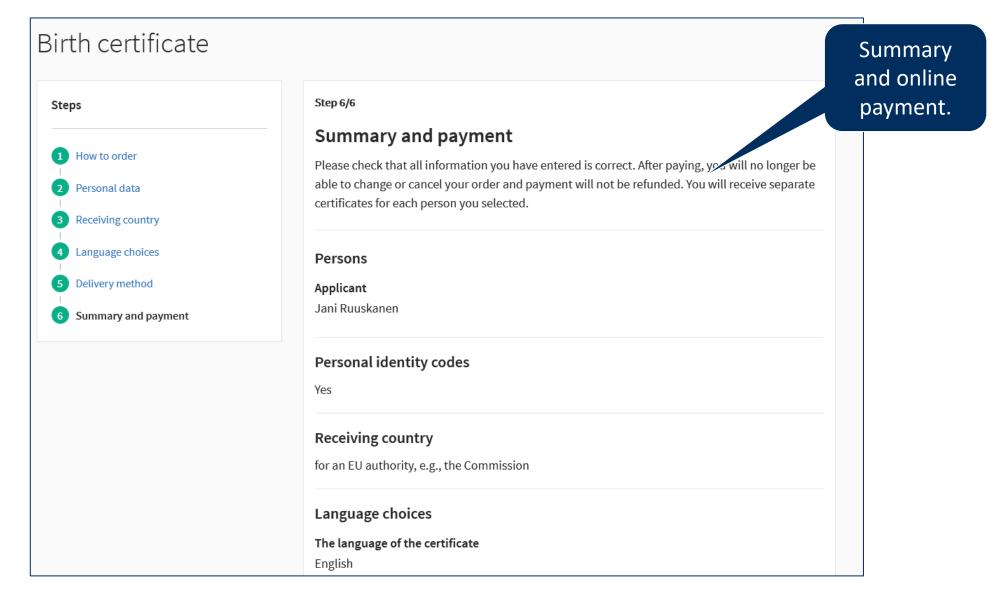
Example: automated certificates from Population Register 7/9

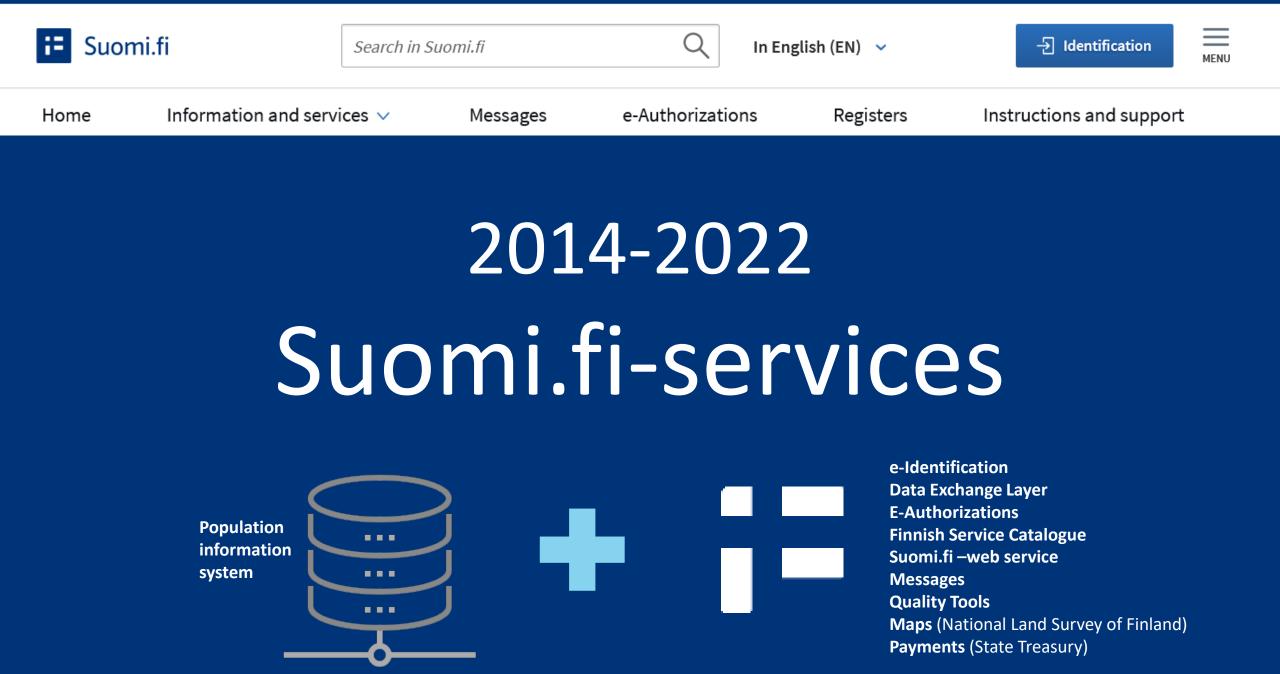
eps	Step 4/6	
	Language choice	
How to order	Select certificate language.	
Personal data		
Receiving country	Select certificate language *	
Language choices	 Finnish 	
) Delivery method	 Swedish 	
Delivery method	 English 	
Summary and payment		

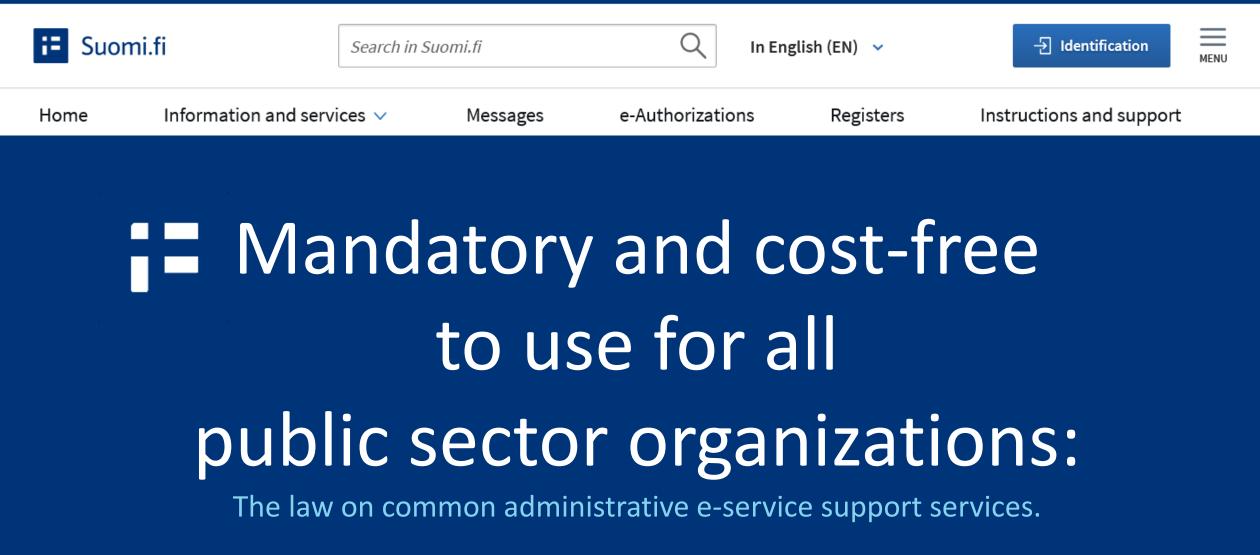
Example: automated certificates from Population Register 8/9



Example: automated certificates from Population Register 9/9







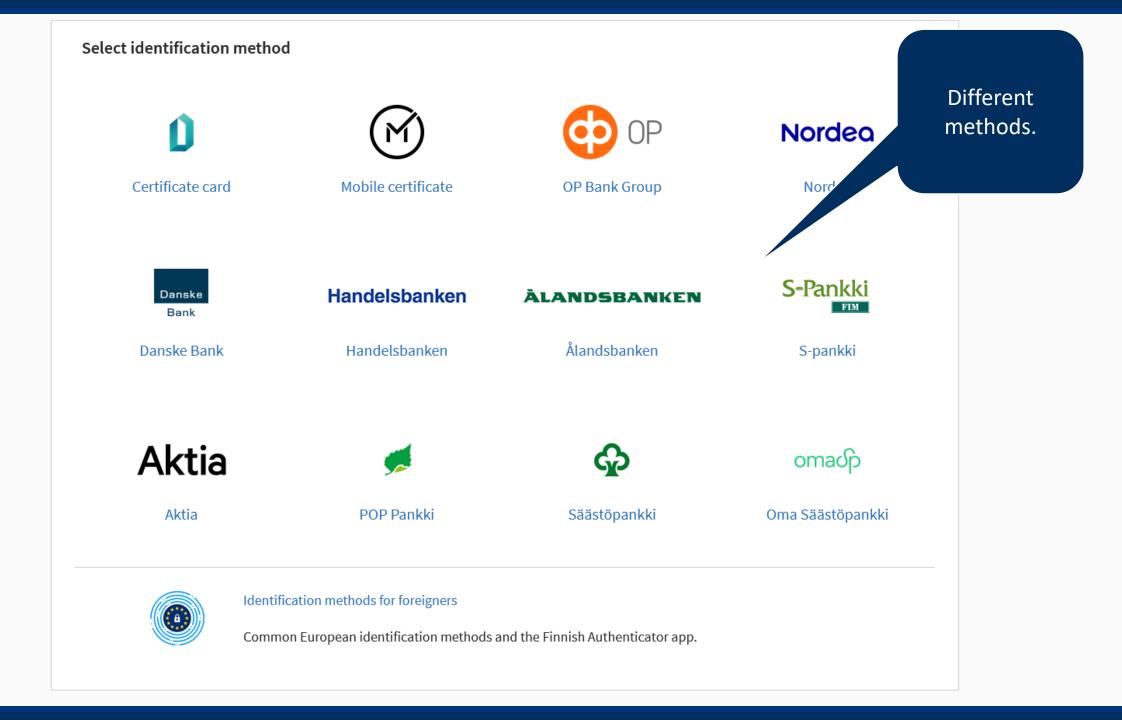
(Legislation since 15.7.2016)

e-Identification

$200\ 000\ 000$

(identifications to public digital services in 2021).





= e-Identification

(i)

Make sure that you use the service in a secure manner After you have finished using the service, log out from the service itself, and close the browser.

You are identifying yourself to the service

suomi.fi TEST

The following details are transmitted	when you submit your identification:
---------------------------------------	--------------------------------------

Personal identity code:	210281-9988
Last name:	Demo
First names:	Nordea
Municipality of residence:	Turku
Postal address:	Mansikkatie 11 , 20006 TURKU

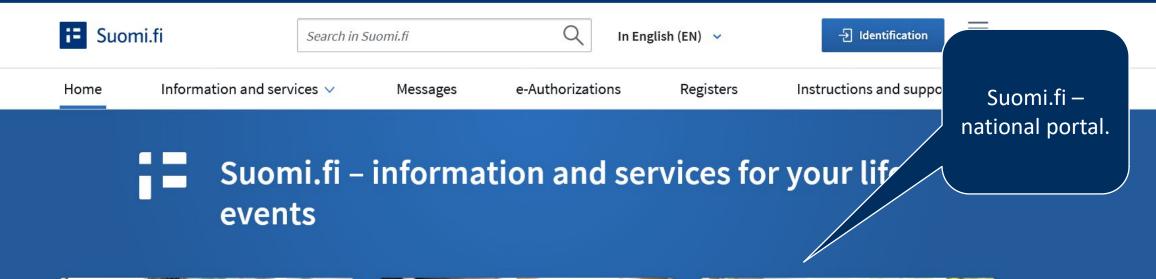
Continue to service

Cancel

Information from Population Register can be provided to the digital service. Alive?

Your personal data needed for identification has been retrieved from the Population
 Information System. You can check your personal data on the Suomi.fi Personal Data page.

The service requires your personal data for identification. Details on the data processing are available after you have identified yourself in the service





New services for the unemployed – more individual services and job search targets will be specified

> Read the new guide for the unemployed



You can now find professional qualifications easily in the Company's permits section

> Go to company permits

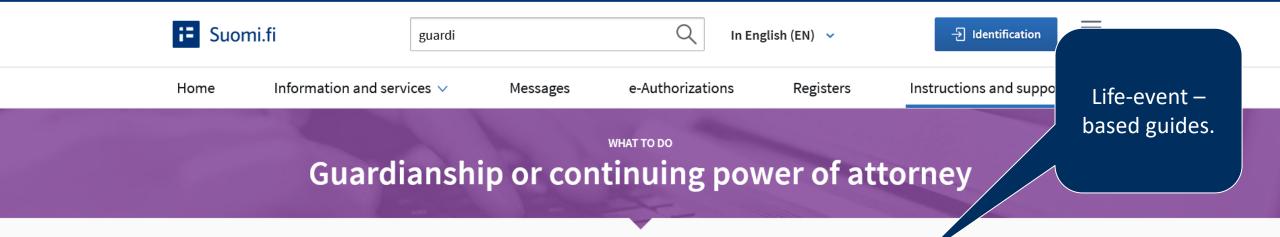


How will money and other assets be distributed during divorce?

See the tips on how to prepare for divorce

Show more 🗸

<u>https://www.suomi.fi</u>





When is guardianship needed? Are you preparing a continuing power of attorney for yourself?

In this guide, you can find answers to such questions as what is meant by guardianship, when is a guardian needed and what is meant by continuing power of attorney.

First select the person whose affairs you wish to manage. By answering the questions below, you get the right instructions and services for your situation.

Whose affairs would you like to manage?

○ An adult close to me

Myself (I want to be prepared for the future)

 \bigcirc My child who is under 18

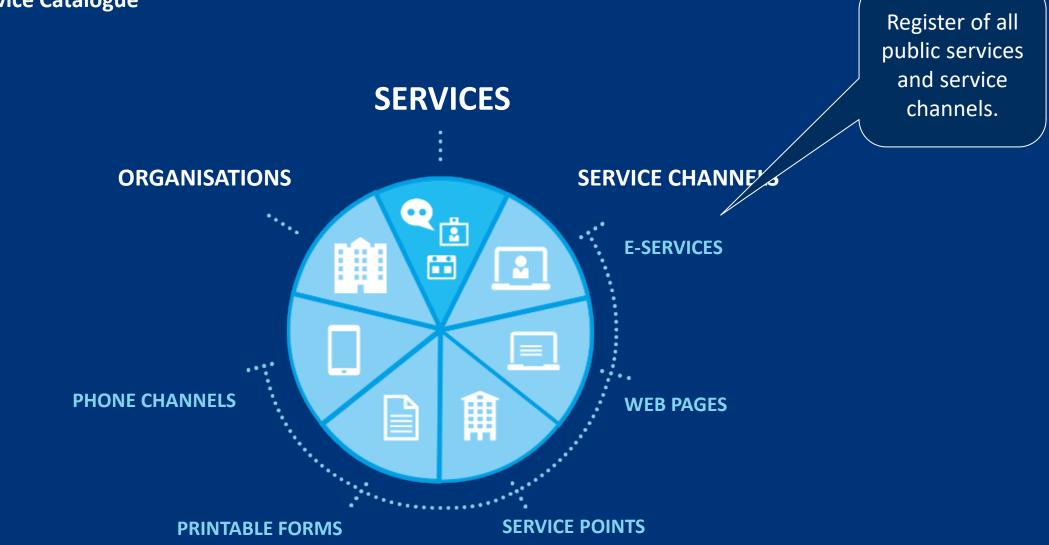
https://www.suomi.fi

Suomi.fi

ែំ) ma ាក្រ info info	ecoming a carer and the everyday life of an infor- lal carer is guide answers questions such as who can be an informal carer, what ormal care support includes, what the informal carer's tasks are and how ormal care can end.					Wizards and services.
	structions and services for your situation:					
		o Preliminary questions the su	ubmission of the application, unless its processing requires mo	ore time than usual.		
Is your loved one i	in need of care?	Reflecting on your own situation App	ply for informal care support	~		
○ A minor		Everyday life of an informal carer				
🔿 An adult		Applying for services and benefits	awing up an informal care agreement	~		
What is your own s	situation?	Applying for informal care support	ow do I handle matters with the municipality in the future	×		
A pensioner		How do I apply for Kela services and Update	ted: 9/24/2021			
A student		benefits?				
	part-time or full-time)	Can I get support for childcare?	the service			
	d jobseeker (I receive unemployment be	Substitute carer				
Outside work	rking life (I do not receive unemploymen	Tax deductions Choose Alajä		• Preliminary questions	If you are a pensioner, you can act as a carer and receive an informal	
	etown of your loved one	Help for a smoother everyday life	a1v1	Reflecting on your own situation	informal care allowance and a fee do not affect old-age pension, but i disability pension.	it may affect a
Enter municipa	ality's name	→ Look after your own well-being				
			mation c	→ Recognising a care situation	Will I accrue a pension for the informal care allowance?	
	Start → Skip que	informal carer or care recipient		Is informal care the right solution for me?	Updated: 9/27/2021	
		• End of care	4.1.	What does informal care support		
Content is pro	aduced by	O. Chaeldist	/ do l a dition to	Include?	Apply for a pension online	
Content is pro		you at	ipply for	How do I know what services we could get?		
		faster. Even i	r. if you ha	Are there alternatives to informal care?	Access services online (1)	
		can sti	till be en	The effect of a carer's allowance on	Finnish Centre for Pensions	
		munic	cipality	other benefits	Claim your pension	
		Ber	enefits gr	Informal care as a student	You can apply for your pension online from most pension providers us application service (available in Finnish or Swedish).	ing their electronic
				Informal care as a pensioner	Go to the e-service (2*	
				The effect of carer's allowance on		
				unemployment benefits		
				Can I have a full-time job?	The effect of carer's allowance on unemployment bene	fits
				Will I be able to work flexibly and take time off work?	You can enter into an informal care agreement even if you are register	
					the TE Office. You must notify the TE Office of your informal carer stat become one.	
				• Everyday life of an informal carer	become one. Your entitlement to unemployment benefits depends on the employn	ient nature of your
				• End of care	informal care role. The TE Office will assess whether you can accept fu	ull-time work as an
				• Checklist	informal carer. If you are tied to full-time or 24-hour care, it is usually accept full-time work. In this case, you are also not entitled to unemp	
					If you enter into an informal care agreement as an unemployed jobse entitled to an unemployment benefit for four months. After four mont	

https://www.suomi.fi

Finnish Service Catalogue



Based on CPSV-AP by ISA² (Common Public Service Vocabulary Application Profile)

Open data (CC 0)

(https://api.palvelutietovaranto.suomi.fi/swagger/ui/index.html)

Includes accessibility information of service points and digital services.

State Treasury

Notification of will to the State Treasury

SERVICE · NATIONWIDE · PUBLIC SERVICE

The contents of the will are made known to those who stand to inherit. Without heirs, the contents of the will are made known to the State Treasury.

Service channels:

- > Telephone service (1 pcs)
- > Info on website (1 pcs)

The Municipality of Sipoo

Agreements on Care of Child and Parental Visiting Rights

SERVICE · SIPOO · PUBLIC SERVICE

Parents may agree on a child's custody, living arrangements and the parents' visiting rights at a child supervisor's office.

Service channels:

- > Telephone service (1 pcs)
- > Service location (1 pcs)
- > Info on website (1 pcs)

Making an appeal to the administrative court

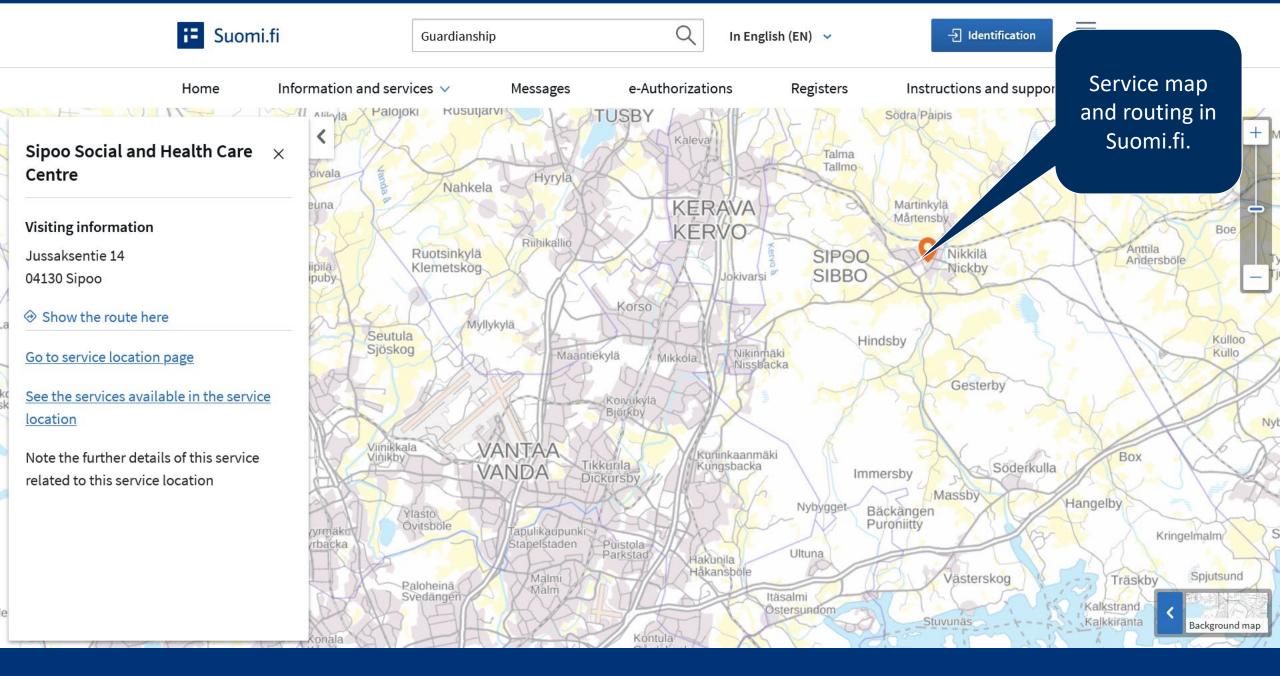
INFORMATIVE CONTENT

A decision made by an authority usually always contains information about appealing against the decision.

https://www.suomi.fi

Services and service channels in Suomi.fi.

Guardianship SERVICE + SIPOO + PUBLIC SERVICE The appointment of a guardian is a last resort option to organize the management of a client's affairs. Therefore, the appointment of a guardian will require there is no other way to ensure that the affairs of the person in need of help are managed in an appropriate manner. The Digital and Population Data Services Agency is the guardianship authority, and as such determines a person's need for guardianship and, where necessary, appoints a guardian or submits an application to the courts. Duties of the Guardian	in Suomi.fi. se the service ee all e-services, telephone services and rvice locations rated to this service. elephone services (1 pcs): Sipoo municipality switchboard
The guardian protects the client's interests and represents them in matters that have been entrusted to the guardian. A guardian is most often appointed to manage their client's financial affairs and property. Furthermore, the guardian must always see to it that the client receives suitable care, treatment and rehabilitation. A guardian can also be appointed to an individual task, such as the sale of an apartment or property on behalf of their client. It is also possible that the guardian is appointed to represent the client in matters related to health care or treatment of illness, but this is not common. Who Can Act As a Guardian?	ervice locations (1 pcs): Digital and Population Data Services Agency, Porvoo



https://www.suomi.fi

Digital services in Suomi.fi for identified users

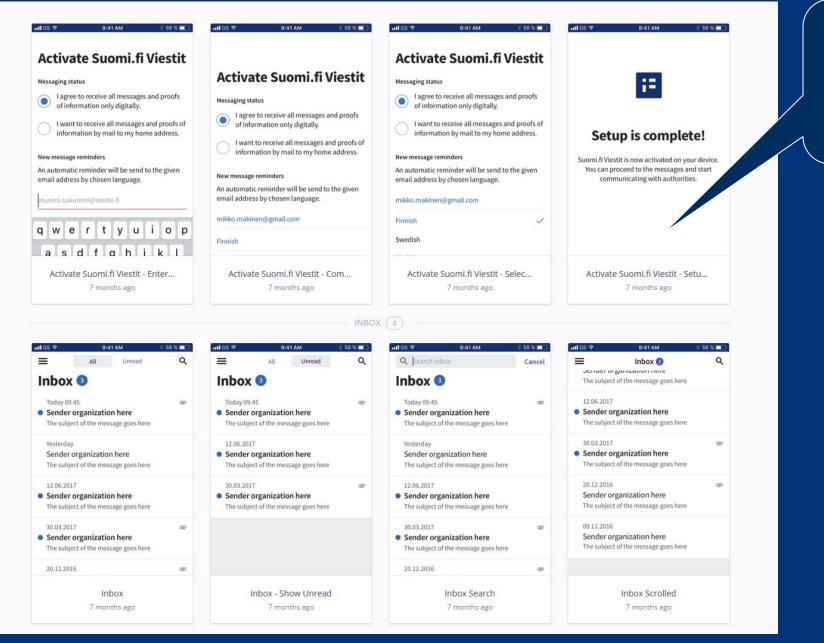
:= Suomi.fi		Search in S	uomi.fi	Q	In Engl	lish (EN) 🖌	Nordea Demo LOG OUT	Access to my
Home I	nformation and services	~	Messages	e-Authorizatio	ons	Registers	Instructions and suppo	data in
Home > Registers	> Your data							different registers in
Persor	nal data					Related t	o your persz 👍 data	Suomi.fi.
	enna Tuula Maija been retrieved from the F	opulation I	nformation Syst	em 4/5/2022, at 1	5:27 Open all	You can find	is and support d frequently asked questions on nal data in Population	1
Basic inform	mation				~	Information	•	
Personal re	lationships				~	System 🗹		
Address de	tails				~		sonal data correct?	
Real estate	and buildings				~	personal da	e errors or shortcomings in you ata, you can request that the a be corrected.	
Membershi	p of a religious commun	ity			~	> Instructio data 🖸	ons for correcting the personal	
Non-disclo	sures of personal inform	ation			~	uata 🗆		

https://www.suomi.fi

Suomi.fi Search	in Suomi.fi Q In English (EN) 🗸	Nordea Demo
Home Information and services \checkmark	Messages e-Authorizations Registers Instruction	ns and suppo (Suppoint of the suppoint of the
Home > Messages > Inbox		(Suomi.fi- messages)
Messages	🗘 Act on	beb
INBOX 28960	Inbox	£
SENT	 City of Helsinki, Education division 	today, 04:14
COMPOSE MESSAGE	Automaattinen tervehdys kasvatuksen ja koulutuksen toimialalta	()
SETTINGS	 Digital and Population Data Services Agency Suomi.fi-valtuudet / Suomi.fi-fullmakter / Suomi.fi e-Authorizations 	yesterday Ø
YOUR DEVICES	• City of Helsinki, Education division Automaattinen tervehdys kasvatuksen ja koulutuksen toimialalta	yesterday Ø
	• Digital and Population Data Services Agency Suomi.fi-valtuudet / Suomi.fi-fullmakter / Suomi.fi e-Authorizations	2/5/2022
	City of Helsinki, Education division Title	2/5/2022 <i>O</i>

https://www.suomi.fi

Messages



Digital post (Suomi.fimessages, IOS and Android app).

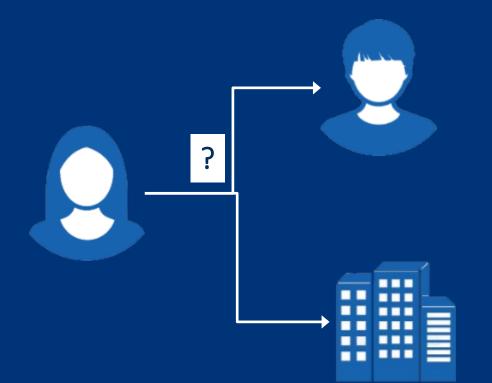
20 000 000 messages (2021, ~1 000 000 users).



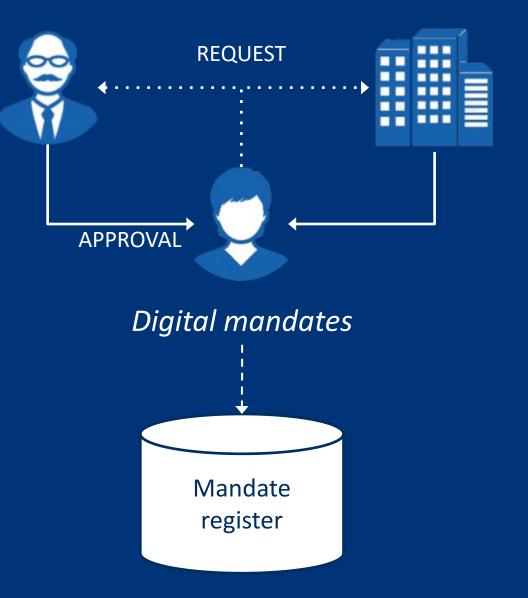
1. COUNTRY (in the world to enable digital authorizations in 2017).

Registry based checking of a person's authority for making transactions on behalf of other persons or organizations

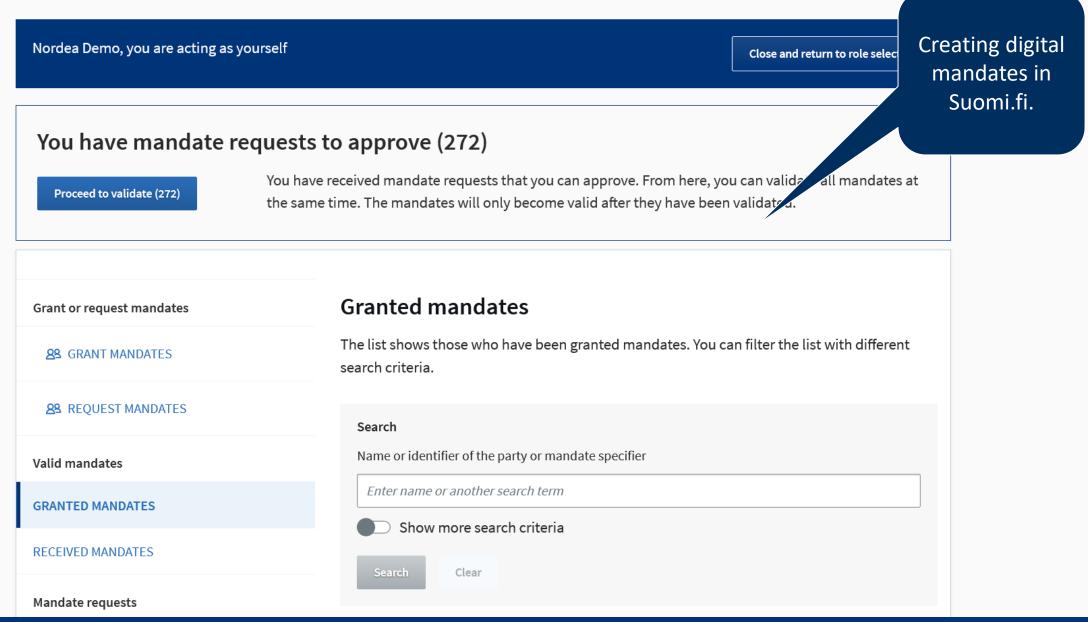
(e.g., population information system and business register).



Requesting and/or creating digital authorizations (citizens themselves in Suomi.fi-portal).



Personal mandates



https://www.suomi.fi

3200000000

(digital mandates created by citizens since 2017).





$3-5\ 000\ 0000$

(queries per month).



A standardized way to exchange data between organizations and countries.



Joint development and funding: (X-road technology: Estonia + Finland + Iceland)



Organized by The Nordic Institute for Interoperability Solutions

(https://www.niis.org).



First cross-border use cases / Finland-Estonia: **Business register data** Finland Tax-information **Population register:** Death Iceland Estonia Birth Change of address Change of name Marriage

Development

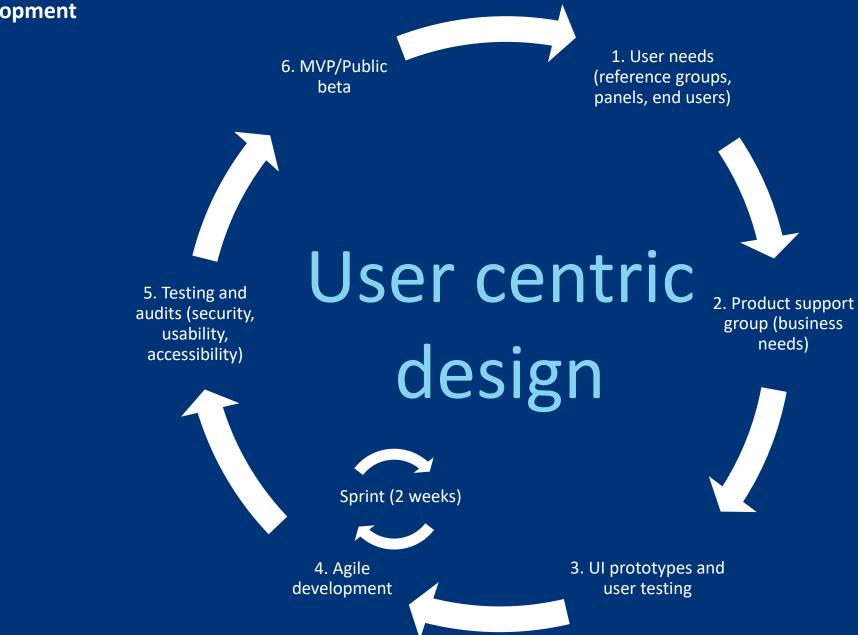
Development

Development

Agile development: Scalable Agile Framework and DevOps (AWS)

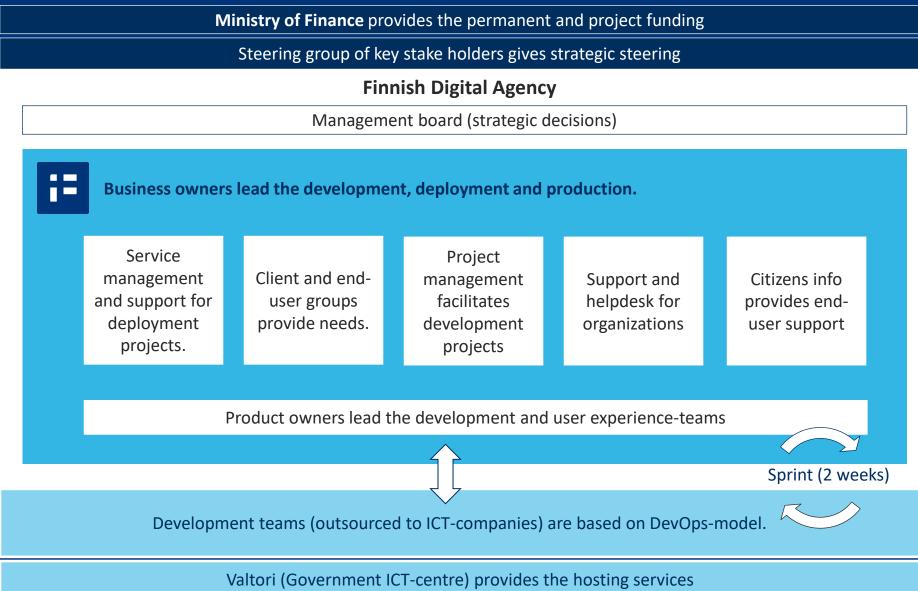


Development



Accessibility work in Suomi.fi-services: (WCAG 2.1 / A+AA requirements) (https://www.youtube.com/watch?v=E5-4RGBsIAU).

Governance



Suomi.fi - support services Background material

The Suomi.fi Quaity Tools



Self-assessment tool

Includes a national set of criteria that organisations can use to evaluate their digital services internally.

Customer Feedback Tool

For collecting feedback from users right after use of the service, includes a star rating and open feedback.



Utilisation Rate Measurement Tool

For monitoring the utilization rate of services and the transition of the usage between different channels.

Data monitoring



Analysing the collected information using the summary view or with interface.





Suomi.fi-	Quality Tools: Self-assessmen [®]	t In English (EN) 🔨
Palveluhallinta	In English (EN) ~ $\underset{MENU}{=}$	Suomeksi (FI)
vice Management > Quality Tools > A sample service fo	r demonstration > Self-assessment	På svenska (SV) In English (EN)
Start	Instructions before using the service The service explains the information required for using the service and how	Answer distribution
nstructions before using the service nswered 10 / 10	 service use proceeds. Before using the service, the customer has been told what information and materials are needed for using the service. 	Yes 45% Partially 13%
ervice use situation nswered 13 / 13	○ Yes	No 9%
sability nswered 10 / 10	Partially No	Not applicable 33%
ectronic support services for service use nswered 9 / 9 ata security and data protection	Observations or development measures?	0% 20% 40%
nswered 5 / 5	Here's a comment of mine that will not show to other organizations.	Download the claims as XLSX ⊡
ummary	2. Before using the service, the customer has been told how much the service costs. Yes	Result calculated from answers Yes and Part
Download the claims as XLSX I	 Partially No Not applicable 	77 %
	Observations or development measures?	
	Type here (within organisation, not displayed externally)	Compared to previous evaluation $+8\%$

Suomi.fi-Quality Tools: Customer Feedback In English (EN) 🔺 Suomeksi (FI) På svenska (SV) Share your opinion. How was your transaction? In English (EN) (AR) بالعربية The feedback is used to develop the service. Eesti keeles (ET) We use the privacy statement to report on the processing of personal data. На русском (RU) Davvisámegillii (SE) Privacy statement 🗹 Af soomaali (SO) Enter a star grade 1 = dissatisfied, 5 = satisfied Average of customer feedback Distribution of customer feedback between 5 Number of feedback (satisfied) and 1 (dissatisfied) $\star \star \star \star \star \star \star$ 3.49 12 5 stars (23) 10 4 stars (5) Tell us more about your experience! Do not enter personal information in the feedback. You cannot use the feedback 3 stars (4) form or receive a response to your feedback. 2 stars (2) Total: 47 responses 1 star (13) Enter a detailed description 14.09 15.09 16.09 17.09 18.09 19.09 20.09 21.09 For the period: 9/14/2022 - 9/21/2022 Send Translate the feedback Show feedback with grade All . Showing original feedback. Feedback Grade Date X.X@XXX.fi 02.09.2022 **ONN NNN NNNN**

Suomi.fi-Quality Tools: Accumulated data (also public section available for comparison without customer feedback)

E Suomi.fi			In English (EN) 🗸		
Quality data on public e-services > Tennis courts / Varaamo Accumulated data: Tennis of Organisation: Service: Service channel: City of Turku Tennis courts TVaraamo T SUMMARY CUSTOMER FEEDBACK SELF-ASSESSMENT Select tracking period Last 90 days	COURTS / Varaar	no	Show results		
Customer feedback average 3.14 ★★★☆☆☆ 7 feedbacks	Utilisation qua	quality			
Customer feedback average tree	٥	476 357 238 119 0 	Utilisation quantity trend		

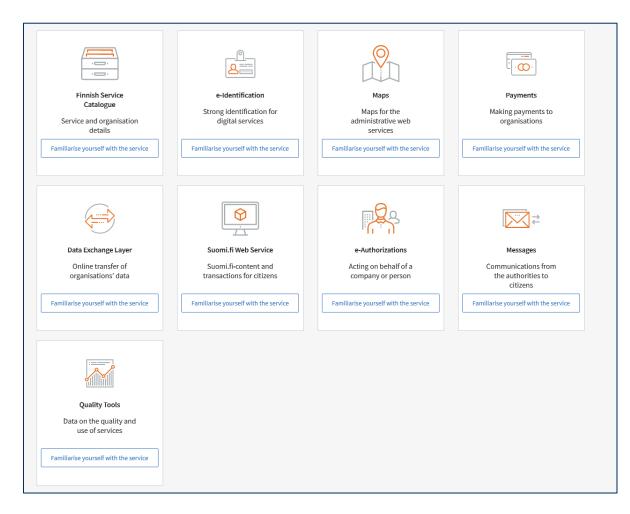
Etusivu	Tyylit	Komponentit	Taustatietoa	Shared desigi system for al		
Komponentit			Komponenttien käyttöohje	services.		
KOMPONE	NTTIEN KÄYT	TÖOHJE				
DIALOGI (M	IODAL)		Suomi.fi Design System tarjoaa kokoelman saavutettavia, uudelleenkä settäviä			
HAKUKENTTÄ (SEARCH INPUT)			ja dokumentoituja käyttöliittymäkomponentteja. Komponentit on soteutettu Suomi.fi-identiteetin mukaisina React-komponentteina.			
HERÄTE (ALERT)			Komponenttikirjasto tarjoaa kaikki komponentit samasta npm-moduulista. Kirjaston tekninen			
IKONI (ICON)			ohjeistus ja käyttöönotto löytyy GitHub-dokumentaatiosta.			
ILMOITUS (NOTIFICATIO	N)	GitHub 🗹			
KIELIVALIKKO (LANGUAGE MENU)		GE MENU)	Komponenttien käyttö			
LAAJENNU	SPANEELI (EX	PANDER)	Example			
LINKKI (LIN	IK)					
LOHKO (BLOCK)			Kirjastosta voi valita käyttöön haluamiaan komponentteja. Komponentit ovat avointa lähdekoodia.			
MONIVALIN	ITA (MULTISEI	LECT)				
	KU (BREADCR	LIMB)	Koodiesimerkki (React)			

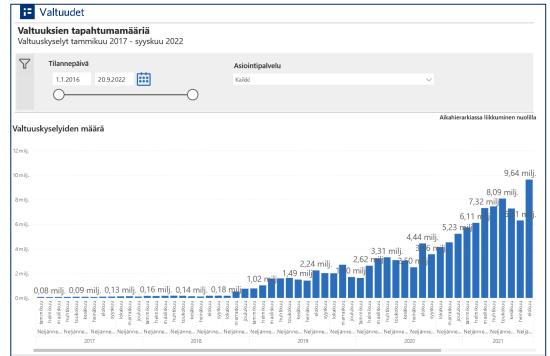
https://designsystem.suomi.fi/

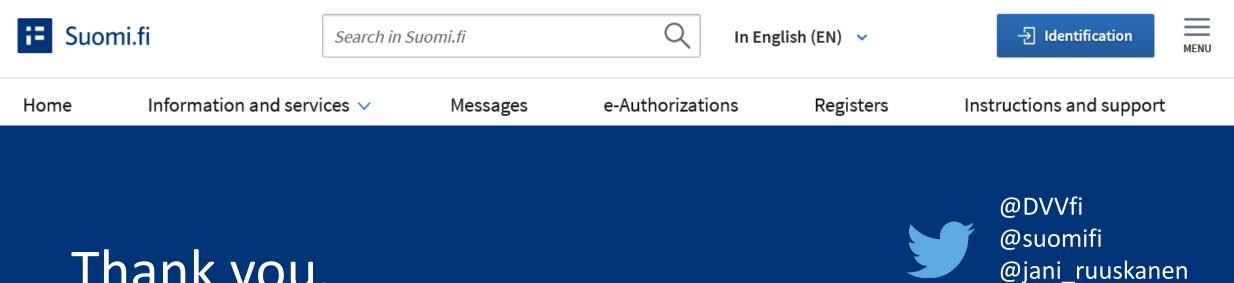
E Semantical interoperability: <u>https://tietomallit.suomi.fi/</u>

Reference Data				LOG IN			
nour wae The Reference Data tool is a technical platform for collecting and sharing cou limits and downloadable to one's own use. Using common code lists enables				te, reliable, browsable to everyone beyond sector			
Search for code lists ()							
Search term							
Filter with information domain ()			Terminologies				
Built environment Culture Education and training Employer services	(13) 5 (93)	Filter results Filter results Filte	FRONT PAGE Terminologies tool is used to collect, maintain and publish publicly available for everyone interested. Search terminologies Search term			and relations. Terms, their definitions and even visualization of relations between the terms are	
General information and administrative services	(128)	Oppijan poissaol	Filter with information domain				
Geospatial data		Academic ses	Built environment	Data Vocabularies		· ·	LOG IN EN V
Health and medical care, nutrition		Vantaan kaupunki					
Housing		Koulutuksen järje Access types	Culture Culture Education and training Culture Education services Culture Culture Culture Culture Culture Culture Cult			and application profiles as linked data models. Core components are data specifications for harmonizing information used jointly by different actors endations for describing semantics of the information structures to support interoperability of information systems.	i.
			General Information and administrative service Geospatial data Relation and medical care, nutrition	Search model Search term Filter with information domain		Q Extend search: Z to content	
			Housing	Built environment	(52) (6) (2)	Filter results All organizations • All model types • All use contexts • All statuses • 227 results	
				Education and training Compose For the services Composed and administrative services	(51) (2) (54)	3Dkunta - koneluettava kaupunkimalli (fi) Ministry of the Environment Built environment 3Dkunta-projektissa (www.3dkunta.fi) on ajanjaksolla 09/2018 - 06/2019 määritelty vakioitu kuntien tuottama kaupunkimallin koneluettava muoto. Määrittely pohjautuu kansainväliseen CityGML-formaattiin. Määrittelyt on siirretty sellaisenaan Yhteentoimivuusalustalle. Työstä on vastannut Nosto Consulting Oy (www.nostoconsulting.fi) ympäristoministerion tilauksesta. (fi)	F Application profile
				Coopatial data	(6) (7)	Agent-based Nordic Business Data Information Exchange Model Finnish Tax Administration General Information and administrative services Private finance and funding	H Application profile

Service management and reporting for organizations: <u>https://palveluhallinta.suomi.fi/en</u>







Thank you. Questions?

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