DEVELOPING NATIONAL LANGUAGE TECHNOLOGY PLATFORMS IN THE EU MEMBER STATES

TILDE

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Business Development Director

Meet Tilde

AI-powered solutions
Tilde is one of the leading language technology companies in Europe

Market leading products and technologies
Tilde Machine Translation, Tilde Term, Tilde Virtual Assistants, Tilde Speech Solutions

Award-winning MT
1st place at the global Machine Translation competition WMT for four consecutive years

Offices in 3 Baltic capitals
150+ employees

500+ business clients worldwide
Including the European Commission, Finland's Prime Minister Office, Estonian Government, SAP, Microsoft, IBM, Oracle and many others

Excellence in research & innovation
11 PhDs, 220+ scientific publications. Cooperation with 30+ universities

Trusted technology partner for EU institutions
Tilde has supported 8 Presidencies of the Council of the European Union by providing custom machine translation solutions

OUR KEY LANGUAGE TECHNOLOGIES

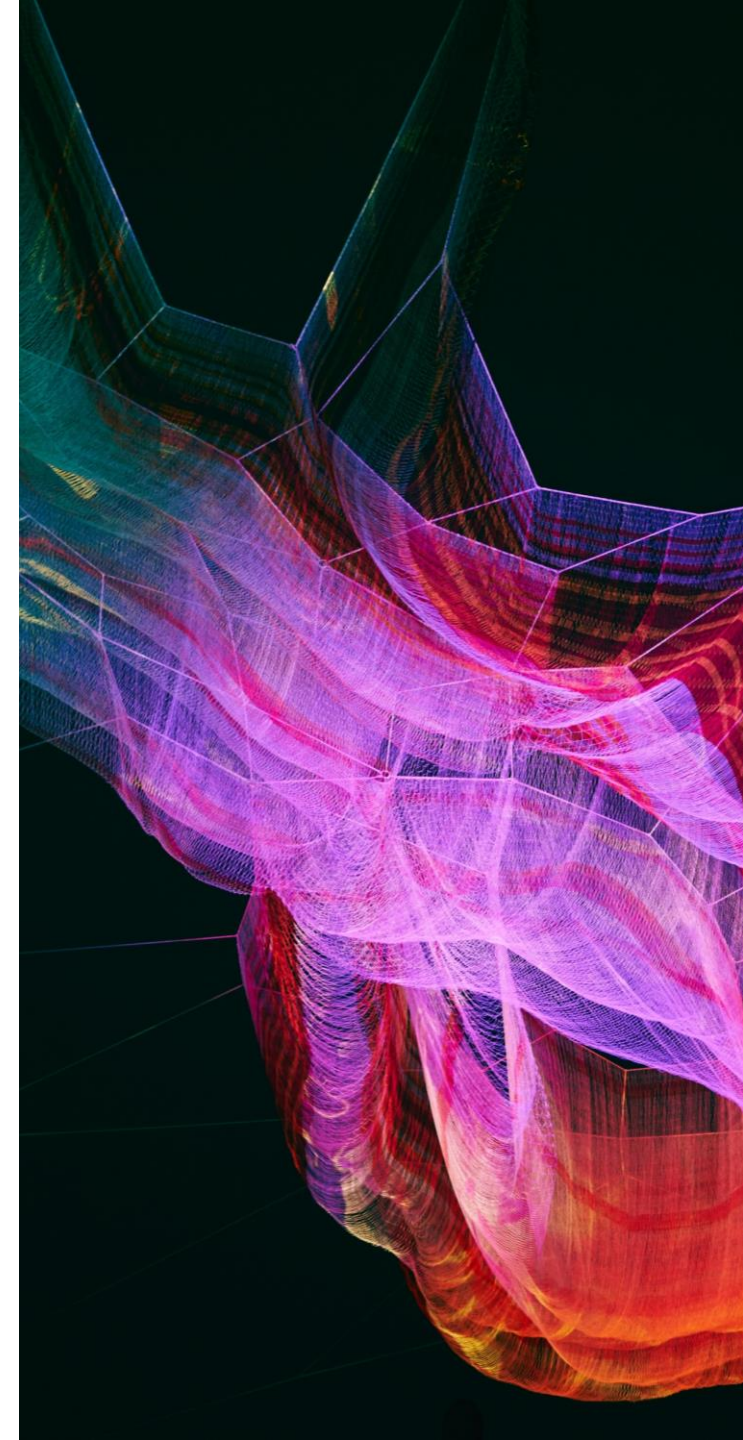**CUSTOM NEURAL MACHINE TRANSLATION**

CONVERSATIONAL AI

NATURAL LANGUAGE UNDERSTANDING/ PROCESSING

AUTOMATED SPEECH RECOGNITION AND SYNTHESIS

TILDE

Our mission is to provide
Language equality in the digital age

Language diversity
leads to language challenges

24
Official EU languages

80
Languages widely spoken

21
Languages in danger of digital extinction

Source: META-NET

English is <u>not</u> an answer

62%

of Europeans don't speak English well enough to hold a conversation

59%

of Europe's internet users only use their native language when communicating on the Web

42%

of Europeans never purchase products or services in a language other than their own

European Parliament resolution on
language equality in the digital age

September 11, 2018

European Parliament

Language equality in the digital age
European Parliament resolution

- European languages are in the danger of digital extiction

- Calls on the Commission and the Member States to develop strategies and policy action to facilitate multilingualism

- Supports the development of multilingual public e-services in European, national [..] administrations with innovative, inclusive and assistive LTs, which will reduce inequalities among languages and language communities, promote equal access to services, stimulate the mobility of businesses, citizens and workers in Europe and ensure the achievement of an inclusive multilingual Digital Single Market

# WE STARTED ADDRESSING THE MULTIPLE LANGUAGE RELATED **CHALLENGES**.

Smaller languages are in a long-term **risk of digital extinction** – threatened with disappearance from the online universe. These languages must develop technologies that can empower and help them flourish and maintain a strong voice in the grand conversation of Information Society.

Public communication ecosystem must be **multilingual** to provide access to information and services for diverse groups of population.

An increasing amount of content needs to be translated in the public domain. Human translation is **too expensive** and **too slow**, and it is not applicable for real-time services.
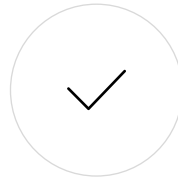
We must address inclusivity challenges and improve access to public information and services for people with special needs (e.g. visual or hearing impairments, dyslexia etc.)

There is a need to **open data** as well as to ensure correct and **consistent use of** local language **terminology** across different institutions and domains.
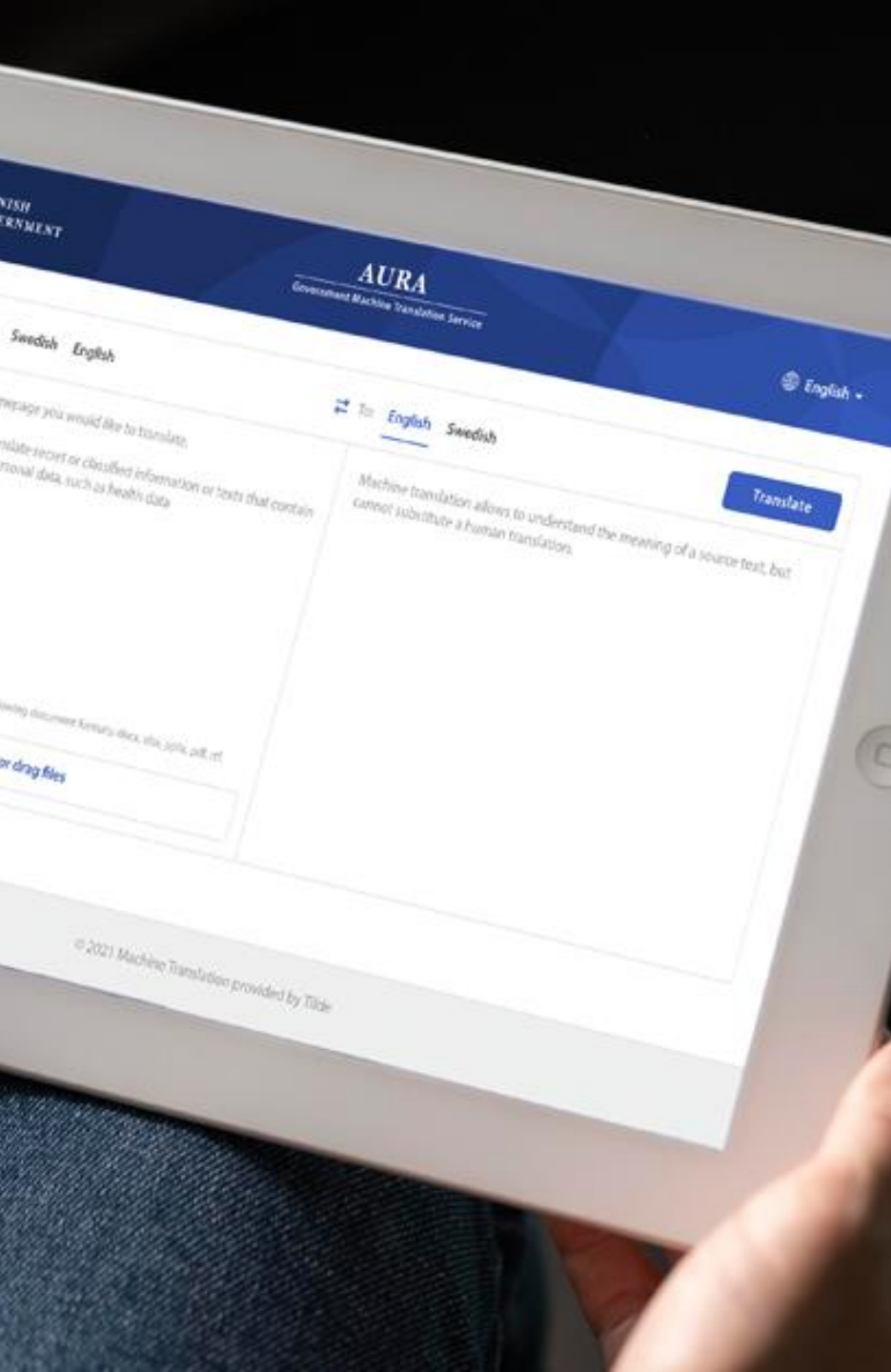
People are using **modern communication** channels and means, and their **user expectations** are growing.

EU Council
Presidency Translator

✓ High quality automated translation tool (text, documents, websites)

✓ Supports all 24 EU languages

✓ Secure translation infrastructure

✓ Customized and adapted for each country

✓ Trados CAT tool plug-in, Web site translation

Finnish Prime Minister Office
## Government wide machine translation

Solutions:

- State-of-the-art cloud-based machine translation platform AURA

    - Government users for documents and texts translation

    - Professional translators via Trados plug-in

- Secure translations

- Dynamic terminology integration

- Supports 70 in-house translators and terminologists

- Available to all government officials (more than 2,500)

The German EU Council
Presidency Translator

✓ Text, document and website translation

✓ SDL Trados integration

✓ Data security and confidentiality

150+ **MILLION WORDS**
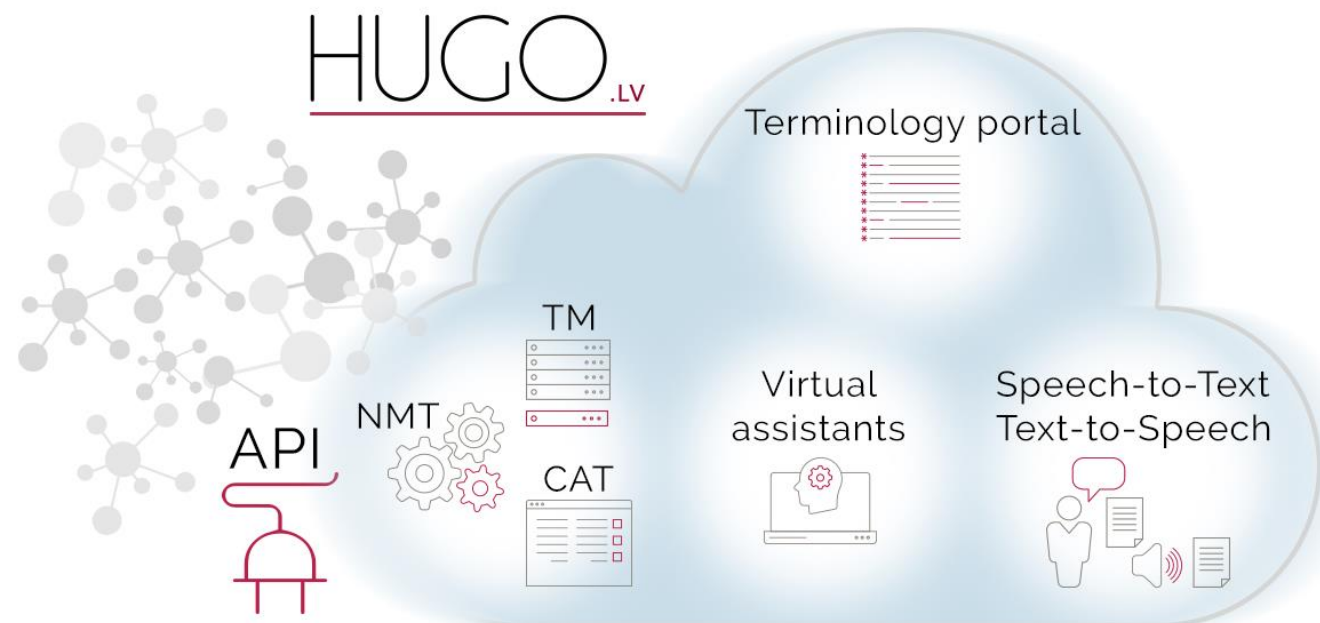TRANSLATED

139 **COUNTRIES**
USED TRANSLATOR
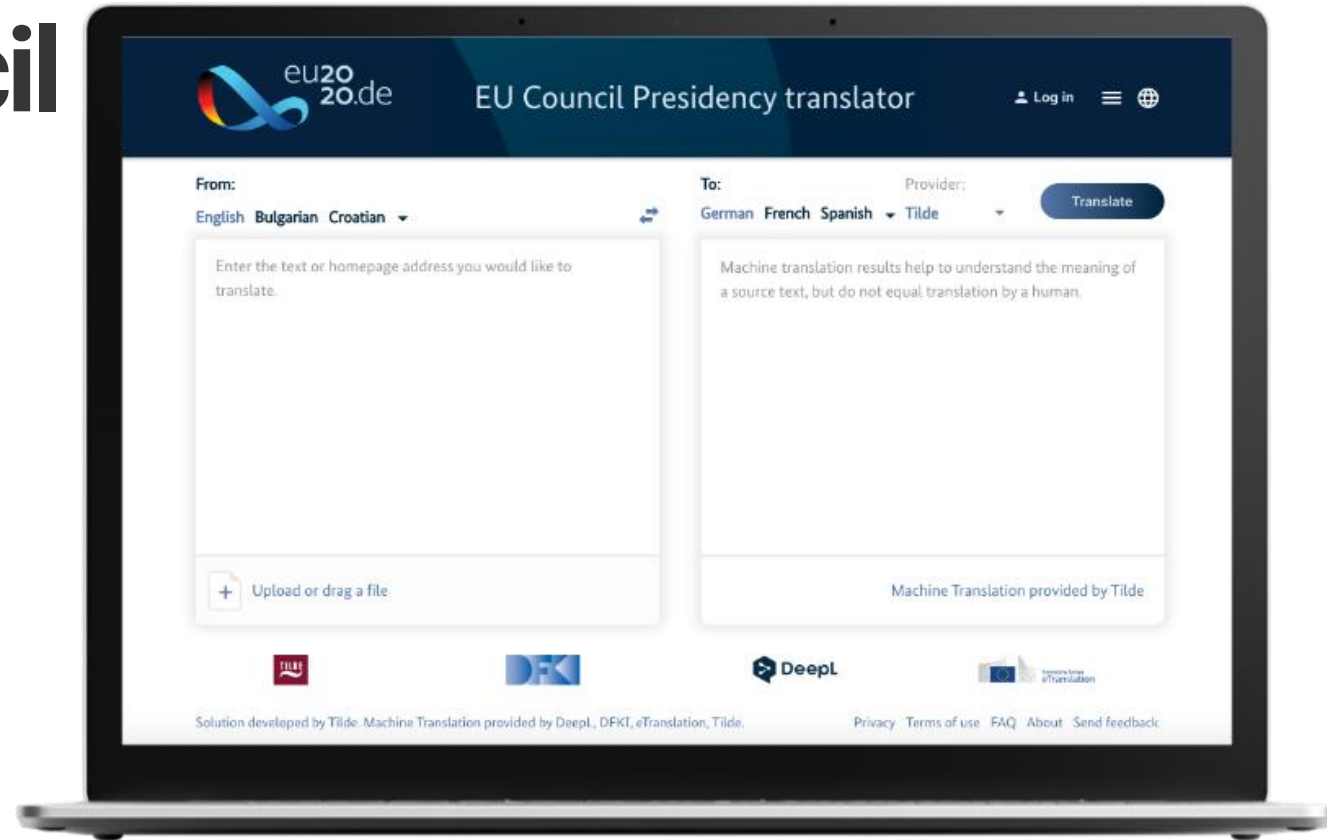
HUGO.LV – LANGUAGE TECHNOLOGY PORTAL FOR LATVIAN E-GOV

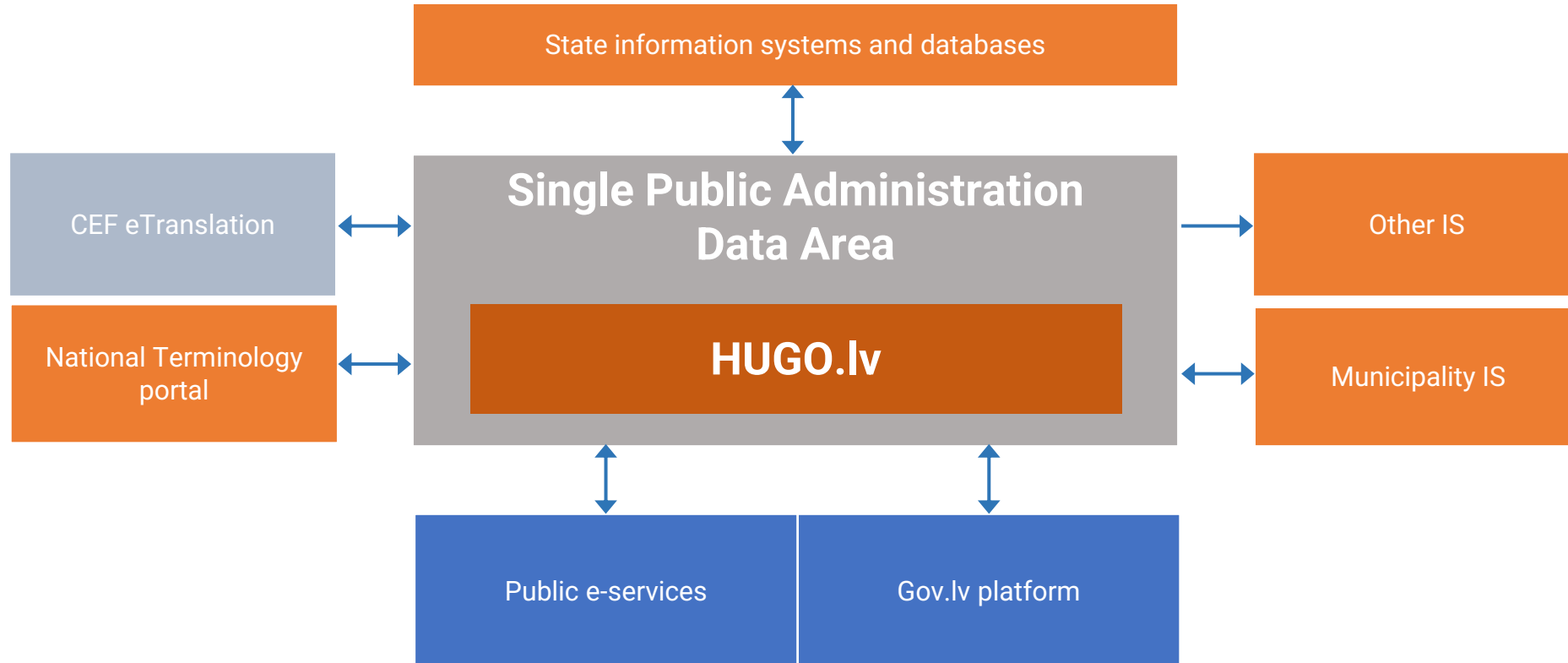Culture Information Systems Centre Republic of Latvia

- ✓ National language technology platform available to all citizens for free

- ✓ Instant text, document and website translation, Speech recognition and synthesis, virtual assistants, language tools, etc

- ✓ Fosters information inclusivity and service accessibility

- ✓ Hugo.lv In 2021 translated more than **430 M** words

HUGO.LV

Terminology portal

TM

NMT

API

CAT

Virtual assistants

Speech-to-Text Text-to-Speech

TILDE

HUGO.LV IN E-GOV ECOSYSTEM

Culture Information
Systems Centre
Republic of Latvia

State information systems and databases

CEF eTranslation

National Terminology portal

Single Public Administration Data Area

HUGO.lv

Other IS

Municipality IS

Public e-services

Gov.lv platform

TILDE

NLTP Gains Popularity

The need for universal language technologies grows

- **Baltic Countries demonstrate clear benefits of language technologies**

- Successful adoption motivates **interest** from **other EU Member states**

- An idea of a **universal language technology solution for eGovernment systems** across Europe develops further

www.hugo.lv

www.vertimas.vu.lt

The Parliament of the Republic of Lithuania

✓ Works with extremely large amounts of multilingual information and documents.

✓ Due to sensitive data (legislative texts), translations can only be done in-house which requires a lot of time

➤ Tilde developed a **custom machine translation** engines for Seimas so translators can process larger quantities of translations in less time working in Trados

NLTP Consortium
Key to language equality and information inclusivity

Consortium consists of industry representatives, academia, public sector as well as research leaders from **Latvia**, **Estonia**, **Croatia**, **Iceland** and **Malta**

Sustainable open platform
of key language technology services

NLTP
National Language Technology Platform

Strengthening national languages in the digital age

Providing instant e-Gov information and service accessibility

Safeguarding data security and confidentiality

Facilitating internal and external multilingual collaboration
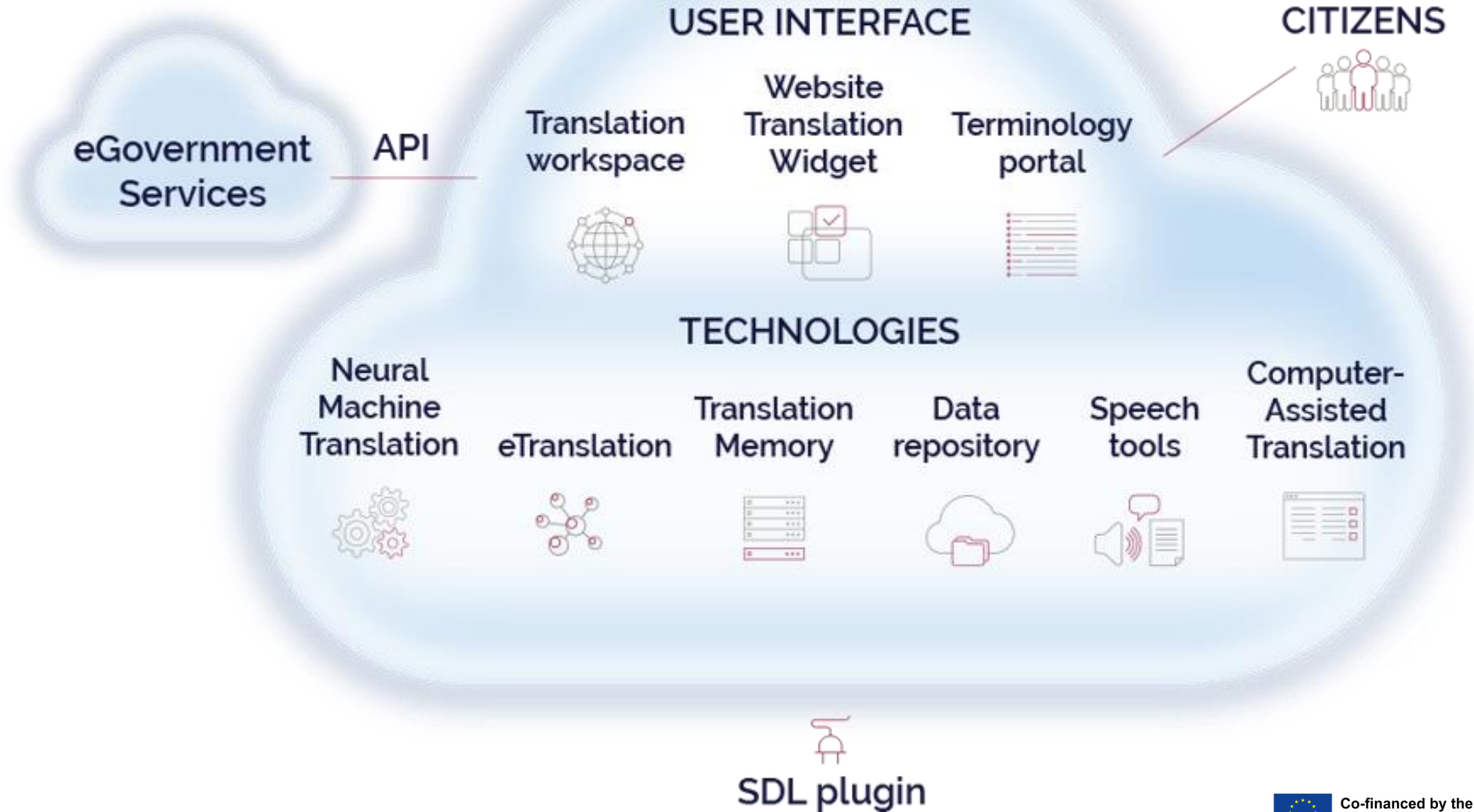
Enabling multilingual websites

Increasing speed and decreasing costs of translation

NLTP
National Language Technology Platform

- ✓ Combines all the latest AI-driven language technology solutions
- ✓ Removes the language barriers
- ✓ Facilitates multilingual information access & exchange
- ✓ Ensures information inclusivity
- ✓ Provides multilingual access to online services, websites, documents and information
- ✓ Can be customized for specific needs

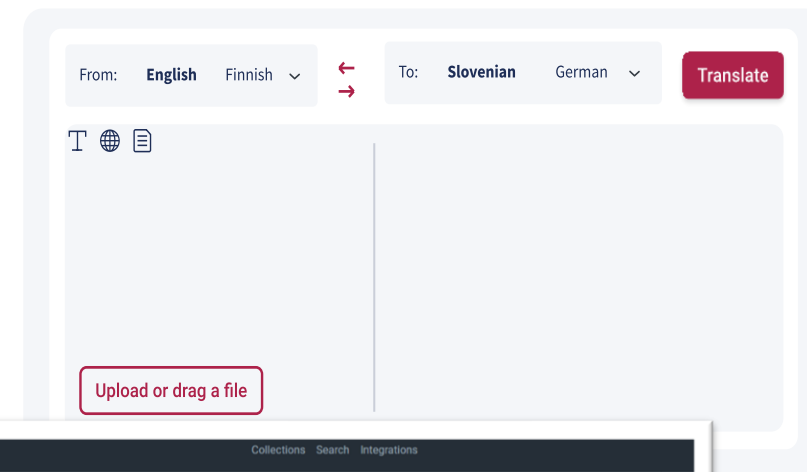Co-financed by the Connecting Europe
Facility of the European Union

Features and Technologies

NLTP

✓ **Online Translation workspace -** Translate text, documents, and website using the eTranslation connection and synchronous translation functionality
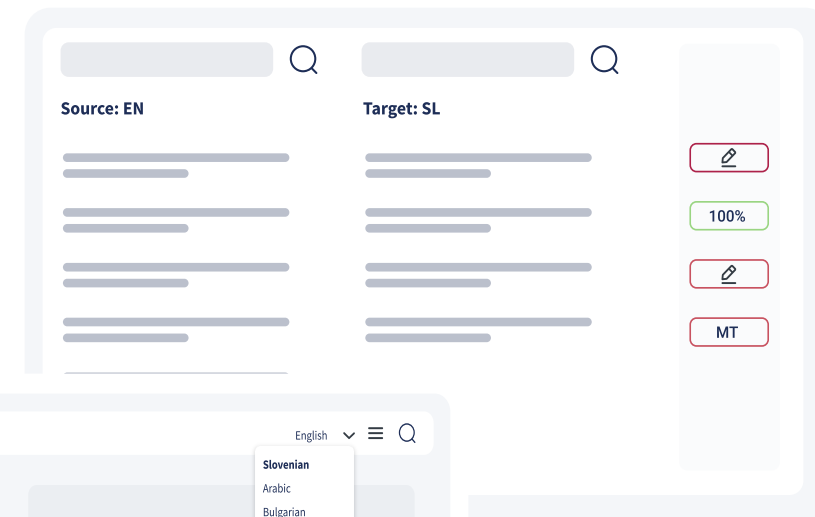
✓ **Terminology Portal –** an effective solution to search, import, export and manage terminology and manage its use in Neural Machine Translation
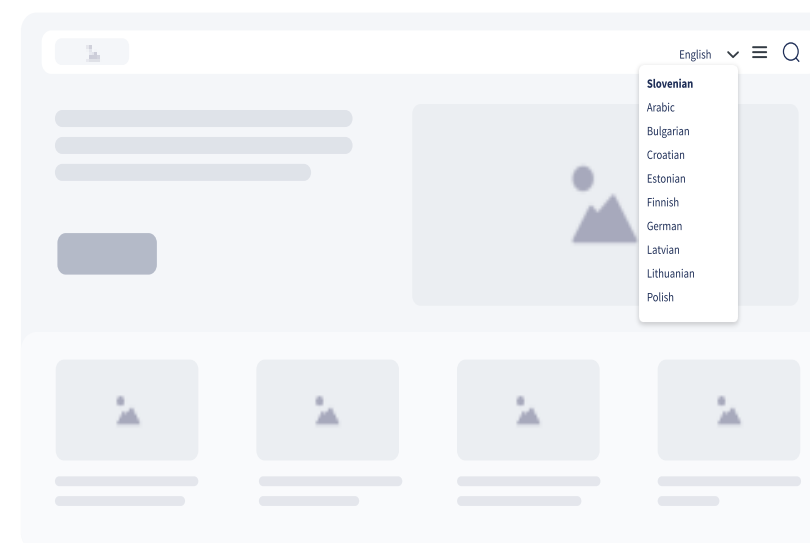
Features and Technologies

NLTP
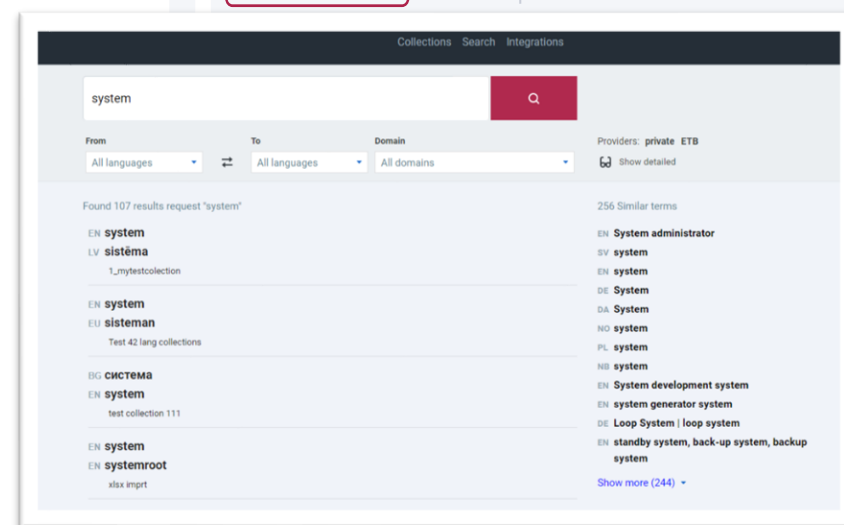
Online Computer Assisted Translation tool – manage, share and view task progress. Uses Machine Translation suggestions, Integration with translation memories and terminology portal.

Website Translator – instant website content translation, possibilities of review, easy set-up and seamless user experience

Thank you!

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