



# How can public institutions benefit from automated translation infrastructure?

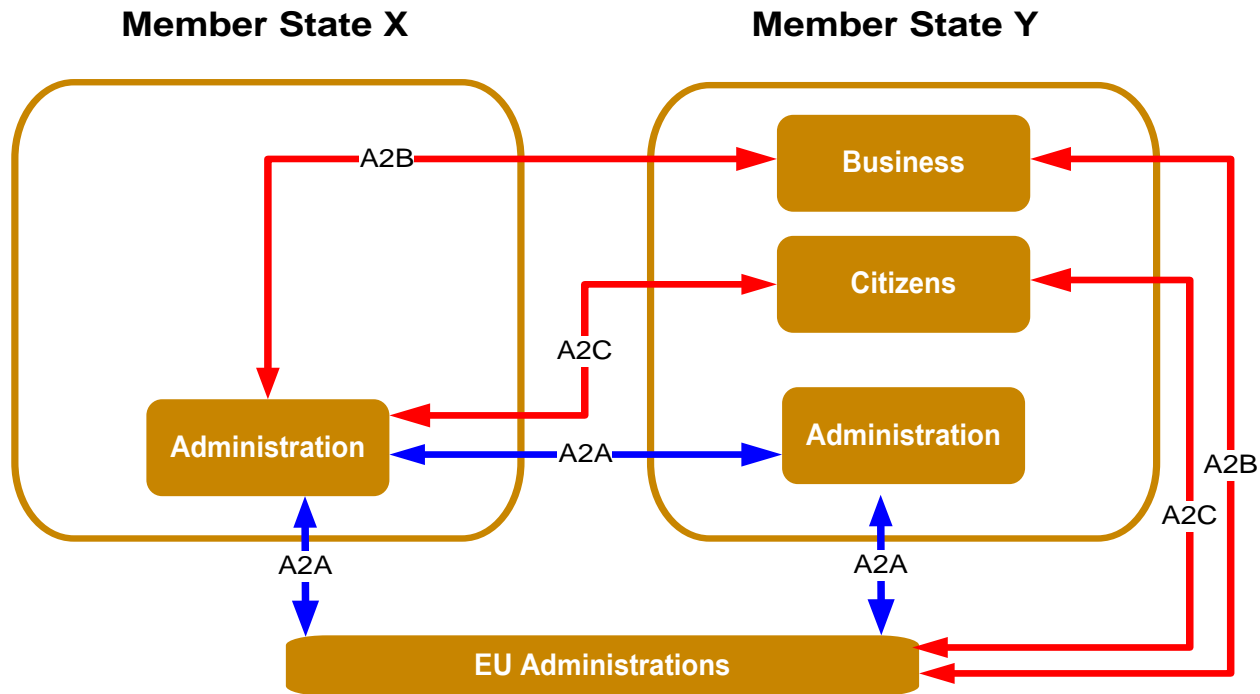
Saila Rinne, European Commission, DG CONNECT.G3

*Riga 6.10.2015*

## Public services and machine translation

- *Enabling multilingualism*
- *The role of machine translation*
- *Now: MT@EC*
- *Next: CEF.AT platform*

# Interactions between actors in the Member States and the EU



- First type
- Second type

# Vision



Wouldn't it be great if I could start *using a public service*  
*in any Member State from any place*  
*and obtain the information in my mother tongue?*



# The role of Machine Translation

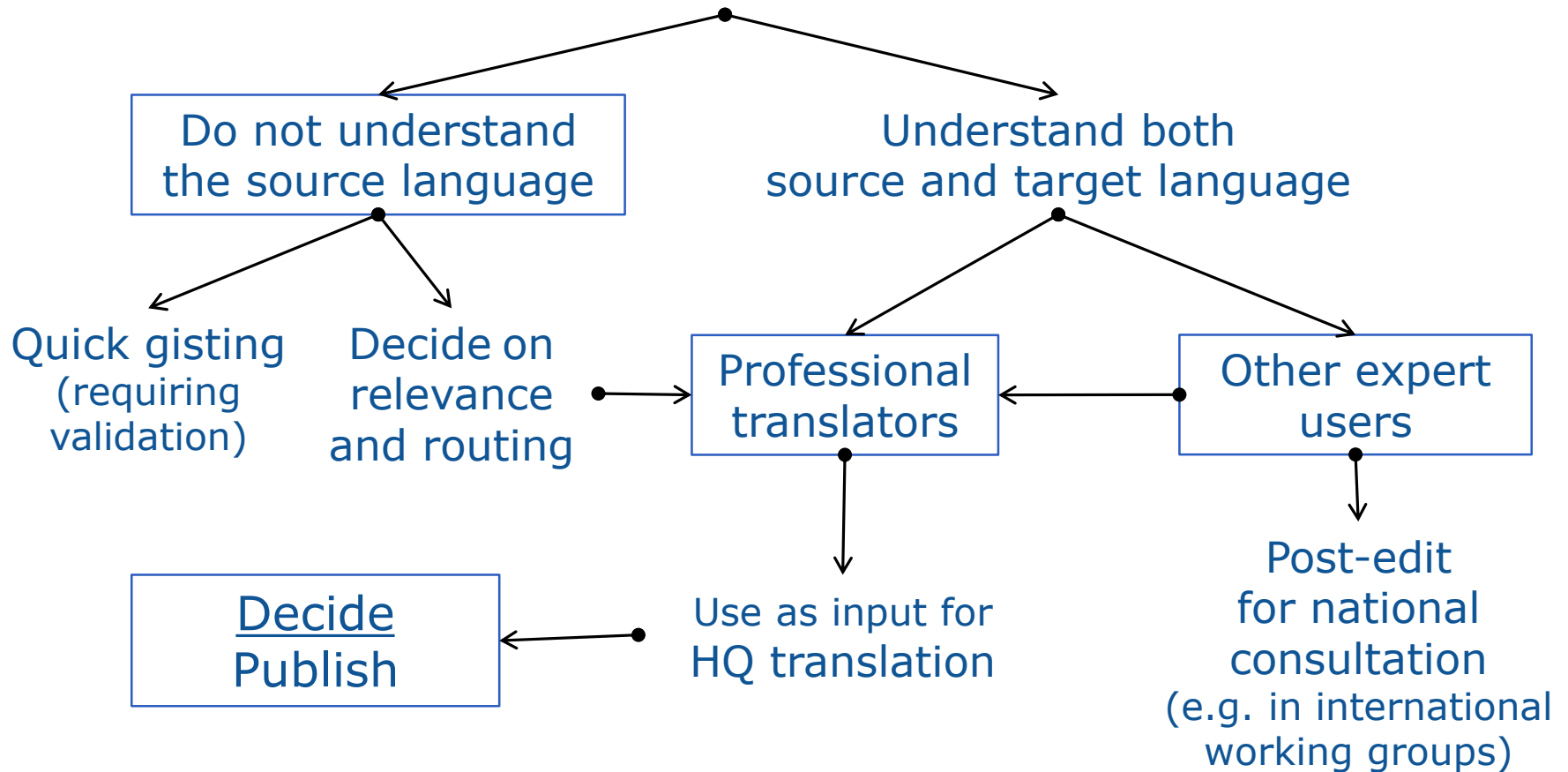
MT is the only viable solution for:

- quick and cheap **access to information** in foreign languages.
- understanding **information received** in a foreign language that otherwise could not be used or would require substantial time and costs to translate.
- making **multilingual use of websites** possible
- facilitating cross-lingual information **search** and **analytics**.

That is why machine translation (MT) is a **critically important** technology for multilingual Europe



# Machine Translation users



# MT@EC: already there for you!

**Released :** 26 June 2013

**Languages:** All directions between  
24 EU official languages

**Technology:** Statistical machine translation  
*using open source software Moses co-funded by  
EU Framework Programmes for research and innovation*

**Development by DGT** between 2010-2013  
*co-funded by the ISA programme (action 2.8)*

[http://ec.europa.eu/isa/actions/02-interoperability-architecture/2-8action\\_en.htm](http://ec.europa.eu/isa/actions/02-interoperability-architecture/2-8action_en.htm)

# MT@EC description

**Delivery:** - web user interface (human to machine)  
- web services (machine to machine)

## Special features:

- **User interface** in 24 languages
- Source document format/formatting **maintained** *[not for pdf]*
- Specific output **formats for translation:** tmx and xliff
- Translation can also be returned by **email**
- Can translate **multiple** documents to **multiple** languages
- Indication of **quality** for language pairs (using BLEU Scores)
- **Feedback** mechanism (using EU Survey)



# MT@EC security

- Secure hosting in the **EC data centre**
- Access through **ECAS** (EC Authentication Service)
- Secure document transfers :
  - over **sTESTA\***, a very secure private network between public administrations in the EU, separate from the internet
  - over the **internet** (through a secure **https** connection)

*\* You can check if your organisation has access to sTESTA on:  
<https://portal.testa.eu/jetspeed/portal/homepage/about.psml>.*



European Commission



# MT@EC - Machine Translation

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Translate documents

Translate text

My translation requests

english  Logout

Select at least one source file :

OR

Translate from...

Translate into...

Output format:

Same as source |  |

E-mail me my translation.

Delete after download.

Selected files

• DG Briefing.docx (34 kb) 100% [Remove](#)



[Translate documents](#)

**[Translate text](#)**

[My translation requests](#)

english  [Logout](#)

### Text to translate :

























Good morning to everyone!

Maximum length : 4000 characters.  
Remaining : 3975 characters.

### Translate from...

EN

### Translate into...

- |                                                                                                                       |                                                                                                                       |                                                                                                              |                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <input type="radio"/> BG             | <input type="radio"/> CS             | <input type="radio"/> DA  | <input type="radio"/> DE  |
| <input type="radio"/> EL             | <input checked="" type="radio"/> ES  | <input type="radio"/> ET  | <input type="radio"/> FI  |
| <input type="radio"/> FR             | <input type="radio"/> GA             | <input type="radio"/> HR  | <input type="radio"/> HU  |
| <input checked="" type="radio"/> IT  | <input type="radio"/> LT             | <input type="radio"/> LV  | <input type="radio"/> MT  |
| <input type="radio"/> NB             | <input type="radio"/> NL             | <input type="radio"/> PL  | <input type="radio"/> PT  |
| <input type="radio"/> RO             | <input type="radio"/> SK             | <input type="radio"/> SL  | <input type="radio"/> SV  |

- E-mail me my translation.  
 Delete after download.

### Translated text :

Buongiorno a tutti!

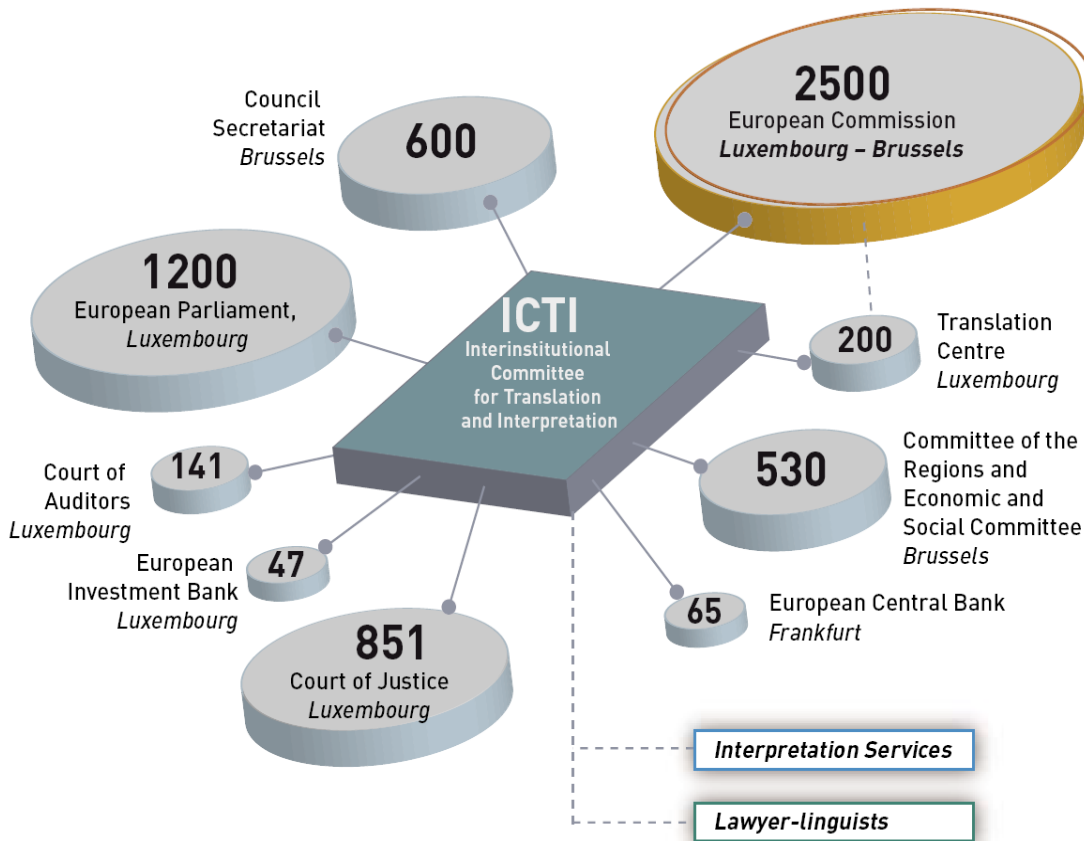
# Who can use MT@EC today ?

## → *European institutions and bodies:*

- |                                                                                                                                                            |                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>▪ Commission</li><li>▪ Parliament</li><li>▪ Council</li><li>▪ Court of Justice</li><li>▪ Court of Auditors</li></ul> | <ul style="list-style-type: none"><li>▪ Economic and Social Committee</li><li>▪ Committee of the Regions</li><li>▪ European Central Bank</li><li>▪ European Investment Bank, etc.</li></ul> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

→ *Online services funded or supported by the EU*

→ *Public administrations in the EU/EEA countries*



**Euramis**  
725 million sentences  
[end 2014]

**Growing at**  
2.6 million per month

All 24 languages  
[different volumes]  
"EU documents"  
[EU subjects and language]

# Free access to **MT@EC** for public administrations staff

- Get an individual **ECAS** user name and password (self-registration) using your work email address.  
*[go to <https://webgate.ec.europa.eu/cas/eim/external/register.cgi> and follow the instructions]*
- Send an **email** to [DGT-MT@ec.europa.eu](mailto:DGT-MT@ec.europa.eu) asking for the activation of access to the service.
- DGT will activate your access and inform you by email.

# Online services **connected to MT@EC**

*(status: July 2015)*

Service	Description/URL/use
IMI	Internal Market Information System – an intranet for more than 7000 public administrations in the EU Member States <a href="http://ec.europa.eu/internal_market/imi-net/index_en.html">http://ec.europa.eu/internal_market/imi-net/index_en.html</a> → free-text message exchange
SOLVIT	An on-line problem solving network concerning misapplication of Internal Market law by public authorities. <a href="http://ec.europa.eu/solvit/">http://ec.europa.eu/solvit/</a> → free-text message exchange
nLex	A common gateway to National Law <a href="http://eur-lex.europa.eu/n-lex/">http://eur-lex.europa.eu/n-lex/</a> → translate results of queries
CircaBC	Communication and Information Resource Centre for Administrations, Businesses and Citizens (collaborative spaces) <a href="https://circabc.europa.eu/">https://circabc.europa.eu/</a> → Translate documents

## What next?

# from MT@EC... to the CEF Automated Translation platform

### CEF.AT will:

- build on the **existing** MT@EC service - but not be limited to it
- put emphasis on **secure, quality, customisable** MT for pan-European online services - but not be limited to them
- be a **multilingualism enabler** – not only MT



# Customisation for online services

*connecting to the CEF.AT platform (starting from MT@EC)*

Service	Description/URL/use
Europeana	The digital European Library, common, multilingual access point to digital resources of European heritage.
ODP	The pan-European <b>O</b> pen <b>D</b> ata <b>P</b> ortal for accessing open data infrastructures distributed over a EU and MS data repositories.
EESSI	The <b>E</b> lectronic <b>E</b> xchange of <b>S</b> ocial <b>S</b> ecurity <b>I</b> nformation, a platform between 32 countries (EU+EFTA).
ODR	The <b>O</b> nline <b>D</b> ispute <b>R</b> esolution platform for resolution of online contractual disputes between consumers and traders, linking all national Alternative Dispute Resolution (ADR) entities.
e-justice	A portal which is a single point of access to law, enabling EU judicial cooperation.
SaferInternet	Services to make Internet a trusted environment for children.

# What would CEF.AT bring to users?

- *Faster and more secure translation*
  - *More pan-European public online services offering machine translation and other multilingualism possibilities, adapted to the needs of their users*
- and**
- *Better quality translation in general*
  - *Translation for specific domains*  
*(starting with the domains relevant for the DSIs)*
- **More and better data** *are needed for all languages and for more domains.*

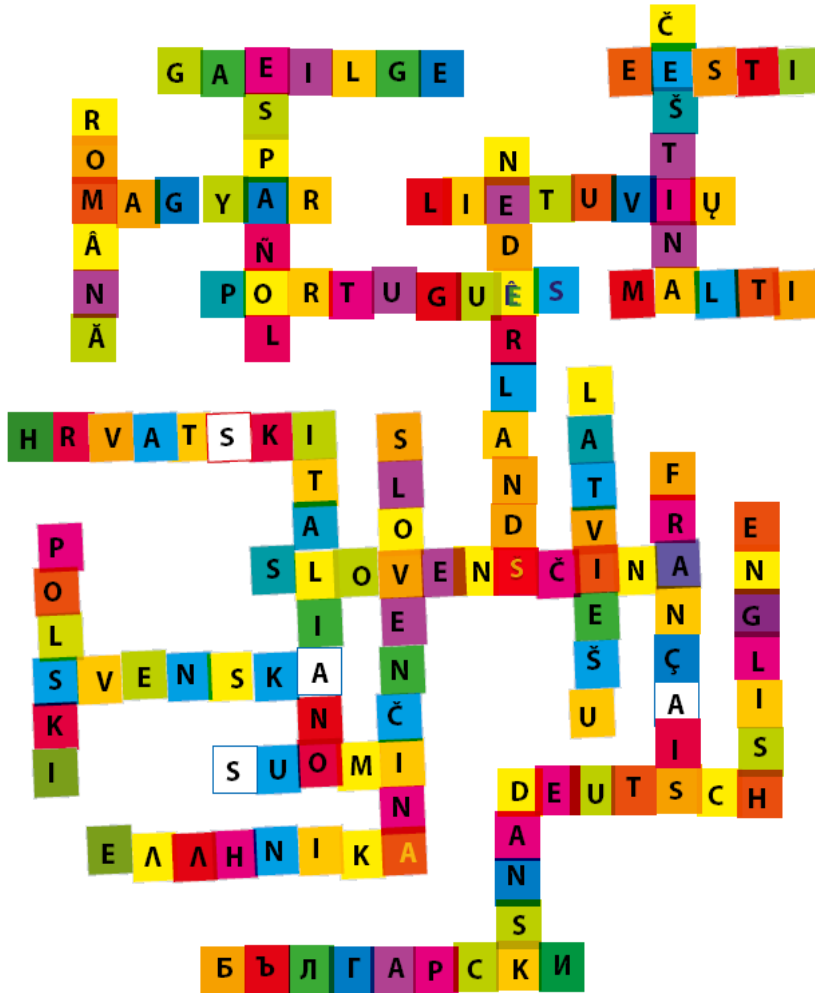


## Currently: Generic "EU" engines

- *MT@EC built on "EU translations" (Euramis)*
- *Euramis covers all 24 languages **but** with different volumes. (ranging from 97 million segments in EN, 58 M in FR to 2.8 M in Croatian and Irish (the rest between 22 and 38 M))*
- *Euramis (and MT@EC) covers EU policies, subjects and language **but** limited everyday language*
- *MT@EC covers many domains **but** there is currently no possibility to focus on any one of them. More "in domain" data are also needed.*



European  
Commission



Questions  
on MT@EC?  
[dgt-mt@ec.europa.eu](mailto:dgt-mt@ec.europa.eu)