



# **CEF eTranslation**

## **enabling multilingual public online services**

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# What is CEF eTranslation?



- CEF **Automated Translation** = CEF **eTranslation**
- CEF eTranslation is a building block of the Connecting Europe Facility (CEF)
- The main purpose of CEF eTranslation is to **make all Digital Service Infrastructure (DSIs) multilingual**
- eTranslation builds on **existing machine translation service (MT@EC)** but it is not be limited to it (i.e. more MT technologies plus other NLP services based on user needs)

**eTranslation** is used for naming the future system which extends capabilities and meets DSIs requirements not addressed so far with the current MT@EC system

Vision for eTranslation: **multilingualism enabler for public online services**



- First released:** 26 June 2013
- Technology:** statistical machine translation *using the open source software Moses*
- Development:** by DGT between 2010-2013 (co-funded from ISA programme)
- Languages:** all directions between 24 EU languages
- Security:** **hosted in** EC data centre  
**access:** EC Authentication Service (ECAS)  
**transfer:** sTESTA or https
- Delivery:** web user interface and API
- Used by:** *European institutions and bodies, online services funded or supported by the EU, public administrations in the EU countries, Norway and Iceland*

## Special features:

- Source document format/formatting **maintained** *[not for pdf]*
- Specific output **formats for translation:** tmx and xliff
- Indication of **quality** for language pairs

## Especially for the web client:

- **User interface** in 24 languages
- Translation can also be returned by **email**
- Can translate **multiple** documents to **multiple** languages
- **Feedback** mechanism etc.

- More information:

[http://ec.europa.eu/dgs/translation/translationresources/machine\\_translation/index\\_en.htm](http://ec.europa.eu/dgs/translation/translationresources/machine_translation/index_en.htm)

## Online services connecting to the MT@EC (*non-exhaustive list*)

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

# Customisation for online services

*connecting to eTranslation (starting from MT@EC)*

Service	Description/URL/use
Europeana	The digital European Library, common, multilingual access point to digital resources of European heritage.
European Data Portal*	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.
Safer Internet	Services to make Internet a trusted environment for children.

# CEF DSIs using CEF building blocks



European Commission

**eDELIVERY**  
connecting europe

**eSIGNATURE**  
connecting europe

**eID**  
connecting europe

**eTRANSLATION**  
connecting europe

**eINVOICING**  
connecting europe

		eDELIVERY	eSIGNATURE	eID	eTRANSLATION	eINVOICING
Europeana	DG CONNECT					
Safer internet	DG CONNECT					
Public open data	DG CONNECT					
ODR	DG JUST					
eHealth	DG SANTE					
eProcurement	DG GROW					
EESSI	DG EMPL					
e-Justice portal	DG JUST					
BRIS (ECP)	DG JUST					
Cybersecurity	DG CONNECT					
eTranslation	DGT					

Commitment to analyse

Update since Q2'16

Commitment to reuse

Reusing

**Reuse watch:**

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Reuse+watch>



- **In-house development & deployment of the core MT platform**
  - preparatory work for domain adaptation of the MT service
  - *scaling-up the MT@EC service*
  - *preparation for moving to the Cloud environment*
- **Initial DSI user requirements** defined
- **Language resource coordination network (ELRC)** set up [www.lr-coordination.eu](http://www.lr-coordination.eu)
- **Language Resource Board** constituted
- eTranslation section on **CEF Digital** operational



# Initial set of DSI requirements



DSIs	Requirements	Score
EDP, e-justice	Requests to be executed synchronously	Essential
ODR, SI, EDP, e-justice, Europeana	Time to translate for text snippets and for documents	Essential
EDP, Europeana, ODR	Peak workload processing	Essential
ODR, Europeana, EESSI	Provide domain-specific engines with sufficiently high quality	Essential
EDP	Redirect the translation request to the most suitable engine	Essential
Europeana	Replies to translation request in Json format	Essential
Europeana	Recognition of named entities	Essential
Europeana	Improve language auto-detection	Essential
Europeana, ODR, SI	Semantic formats support (such as rdf, owl)	Should have
e-justice	Document translation in a single Web service	Should have
ODR	Preserve the PDF format	Should have
Europeana	New Languages Supported	Nice to have
EDP, e-justice	Transliteration services	Nice to have

# European Language Resources Coordination



<http://www.lr-coordination.eu/>

- Identify and collect data for all EU languages, IS, NO
- Setup a network of LR national "anchor points"
- National workshop in 30 countries
- 2 conferences
- Helpdesk



## further work on the core platform

- evaluation of mature language technologies for CEF DSI use cases
- purchasing "deficient" language resources
- repository of language resources within eTranslation platform
- domain adaptation proof-of-concept for 6 DSIs
- preparatory work on "engines factory"

**extend and deepen the language resource coordination**, moving from training and networking to systematic collection of language resources

further work on **identifying (DSI) user needs** and multilingual **needs of public online services**

# Call for tender SMART 2015/1091 – contracts starting soon

**LOT1: "technology monitoring and evaluation mechanism"**  
*competitive evaluations of language technologies that the EC considers relevant for CEF eTranslation (e.g. MT systems for "difficult" language pairs, language resource processing, terminology, semantic interoperability...)*

**LOT2: continuation of Language Resource Coordination effort**  
*second round of hands-on workshops in Member States, setting up a Language Resource repository, maintaining administrative and legal help desks, supporting governance etc.*

**LOT3: purchase of Language Resources** (*parallel corpora for MT) for topics and language pairs that the EC considers "deficient"*



## CEF-TC-2016-3 Call for proposals

**budget: 6.5 MEUR**

**collaborative projects** under two action lines:

*"resources projects" on stimulating language resource provision to eTranslation*

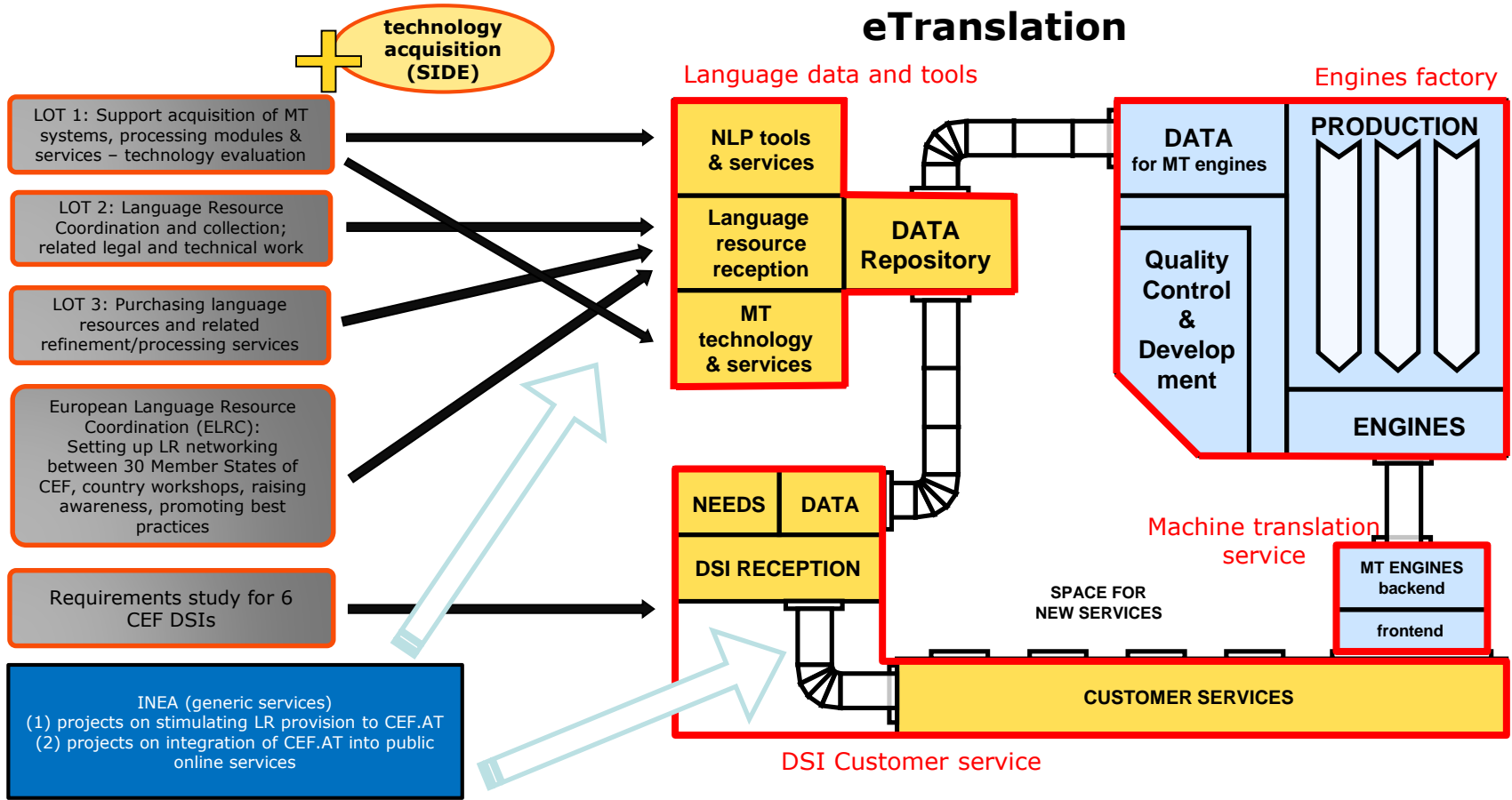
**OR**

*"integration projects" on the integration of eTranslation into (multilingual, cross-border) digital services*

*opened 20/9/2016 - closes 15/12/2016*

Call website: <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/apply-funding/2016-cef-telecom-call-automated-translation-cef-tc-2016-3>

# CEF.AT "Big Picture"





**20 actions identified, you can propose new ones!**

**For Citizens**

Live, study & work

**For Businesses**

Make business

**For Public Administrations**

Be user-friendly

## **Stakeholder engagement platform**

- Call for ideas is constantly open
- Member States and Commission will select actions to be added to the Action Plan
- Transparency on filtering criteria
- Monitoring of the implementation

<https://ec.europa.eu/futurium/en/egovernment4eu>

# Stakeholder engagement platform



<https://ec.europa.eu/futurium/en/egovernment4eu>



FUTURIUM  
Futurium

European Commission > Futurium

## Innovation4EU

Crowdsourcing EU innovation.  
See what is going-on and share your ideas.

## Simplify ESIF

Simplify access to EU structural and investment funds for the beneficiaries. Find here the latest news, share ideas and assess those proposed by others.

## Digital4Science

Innovating science in the digital age. Tell us what you expect from the European research in the field of Excellent Science.

## eGovernment4EU

You want to have access to modern administration anywhere in Europe to interact from anywhere? You want to participate in the decision process, you want transparency?

## eIDAS Observatory

How can we make the cross-border use of eID and trust services in daily transactions a reality? How can we all benefit from digitisation and enjoy seamless, secure and convenient online services?



# Stakeholder engagement platform



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Commission

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## FUTURIUM

### eGovernment4EU

European Commission > Futurium > eGovernment4EU

Home | Needs | Discussions | Library | Polls | Events | Blogs | People

#### Public Administration of the 21st century

Contribute to the eGovernment Action Plan 2016 – 2020: Digital Public Services fit for the future!

This online platform has been set up to gather ideas for new actions and provides a space for all to collaborate and discuss how to improve eGovernment services in the EU.

As a citizen, a business or a public administration what are your needs (which may be expressed by an organisation representing you)?

Let us know, share your ideas and contribute to the efforts to modernise your Public Services (local, regional, national, European).

#### Quick links

[eGovernment Action Plan 2016-2020](#)

[Actions in the eGovernment Action Plan 2016-2020](#)

[Selection Criteria](#)

[Exchange practices and solutions on eGovernment \(Joinup\)](#)

[Data sources](#)

[Contact](#)

The eGovernment Action Plan 2016-2020 will help to modernise public administrations using ICT.

Describe your needs and propose actions as a:

Citizen

Business

Public administration

<https://ec.europa.eu/futurium/en/egovernment4eu>



European  
Commission



Thank you