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# Connecting Europe Facility eTranslation

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January 2017

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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

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## EC Machine Translation: Service Today

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

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## Description

### Special features:

- Source document format/formatting maintained [*not for pdf*]
- Specific output formats for translation: tmx and xliif
- 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.ht](http://ec.europa.eu/dgs/translation/translationresources/machine_translation/index_en.ht)

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## Online services connecting to the MT@EC

IMI

Internal Market Information System – an intranet for more than 7000 public administrations in the EU Member States

Free-text message exchange

SOLVIT

An on-line problem solving network concerning misapplication of Internal Market law by public authorities

Free-text message exchange

nLex

A common gateway to National Law

Translate results of queries

CircaBC

Communication and Information Resource Centre for Administrations, Businesses and Citizens (collaborative spaces)

Translate documents

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## Customisation for online services

Europeana	The digital European Library, common, multilingual access point to digital resources of European heritage.
European Data Portal	The pan-European Open Data Portal for accessing open data infrastructures distributed over a EU and MS data repositories.
EESSI	The Electronic Exchange of Social Security Information, a platform between 32 countries (EU+EFTA).
ODR	Resolution of online contractual disputes between consumers and traders, linking all national Alternative Dispute Resolution (ADR)
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

		eDELIVERY connecting europe	eSIGNATURE connecting europe	eID connecting europe	eTRANSLATION connecting europe	eINVOICING connecting europe
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

 Commitment to reuse

 Reusing

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

 Update since Q2'16

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## CEF eTranslation: work so far

- **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

<b>DSIs</b>	<b>Requirements</b>	<b>Score</b>
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



- 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

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

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# CEF eTranslation: What's next?

## **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**

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Call for tender SMART 2015/1091 – contracts starting soon

**LOT1: "technology monitoring and evaluation mechanism"**

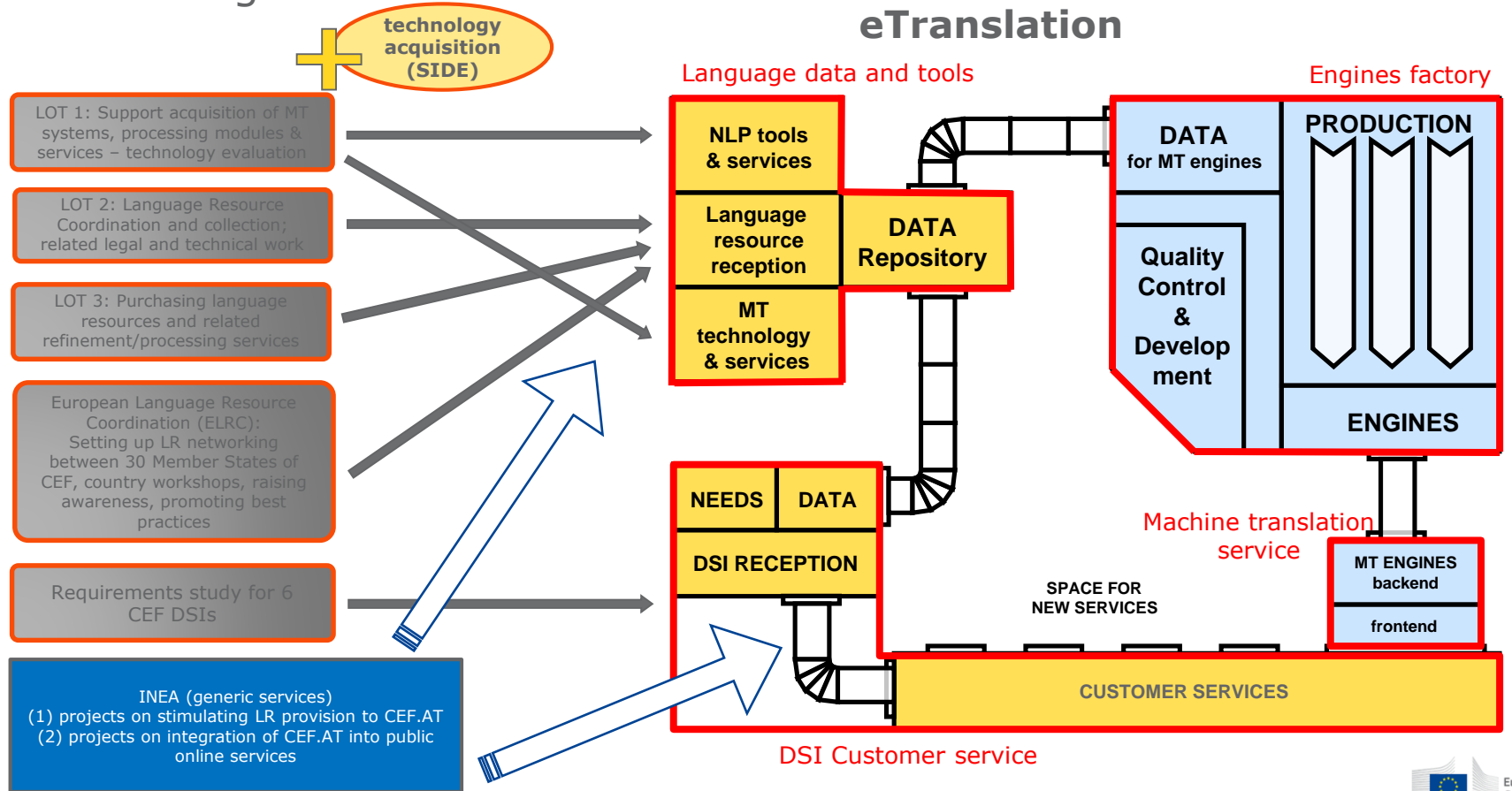
competitive evaluations of language technologies that the EC considers relevant for CEF eTranslation (e.g. MT systems for "difficult" language pairs, language resource processing, terminology, semantic interoperability...)

**LOT2: continuation of Language Resource Coordination effort**

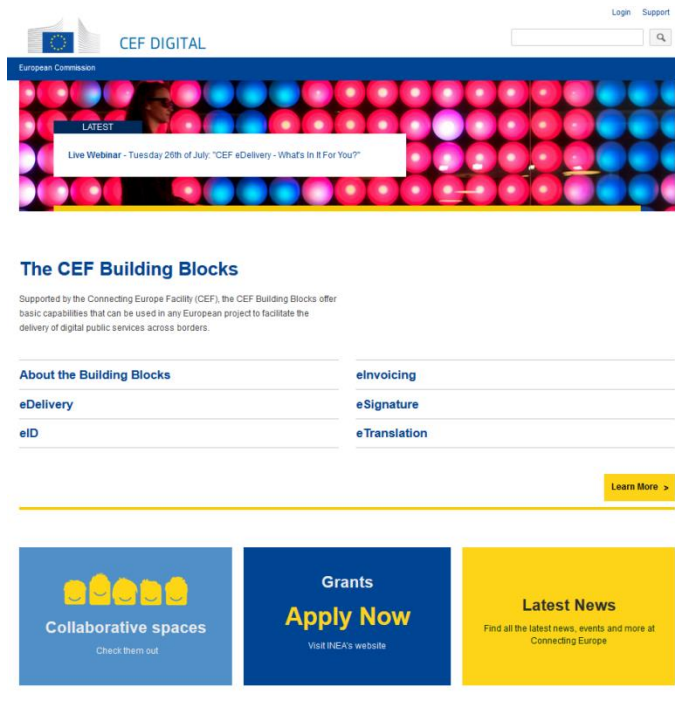
second round of hands-on workshops in Member States, setting up a Language Resource repository, maintaining administrative and legal help desks, supporting governance etc.

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

# CEF.AT "Big Picture"



# Find out more on CEF Digital



The screenshot shows the CEF Digital website homepage. At the top, there is a navigation bar with the European Commission logo, the text "CEF DIGITAL", a search bar, and links for "Login" and "Support". Below the navigation bar is a large banner image of colorful spheres with a "LATEST" overlay that reads "Live Webinar - Tuesday 20th of July: 'CEF eDelivery - Whats in It For You?'". Underneath the banner is the section "The CEF Building Blocks", which includes a brief description of the CEF Building Blocks and a list of services: eInvoicing, eSignature, eID, and eTranslation. A "Learn More >" button is located below the list. At the bottom of the page, there are three promotional boxes: "Collaborative spaces" with a "Check them out" link, "Grants Apply Now" with a "Visit INEA's website" link, and "Latest News" with a "Find all the latest news, events and more at Connecting Europe" link.



[ec.europa.eu/cefdigital](https://ec.europa.eu/cefdigital)

## DIGIT

Directorate-General for Informatics

## DG CONNECT

Directorate-General for Communications  
Networks, Content and Technology

## Contact us



[CEF-BUILDING-BLOCKS@ec.europa.eu](mailto:CEF-BUILDING-BLOCKS@ec.europa.eu)

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