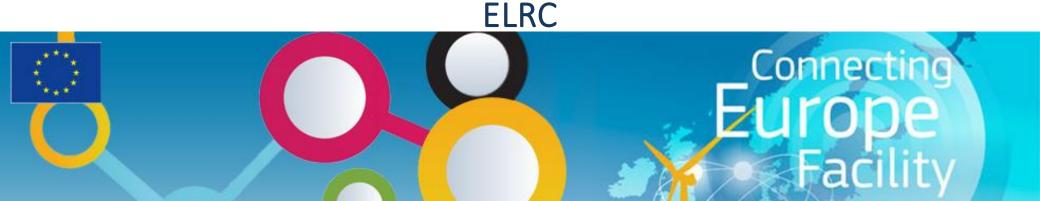




Preparing and sharing data with the ELRC repository and what happens next

Maria Giagkou Institute for Language and Speech Processing / Athena R.C.





The notion of data







The notion of data

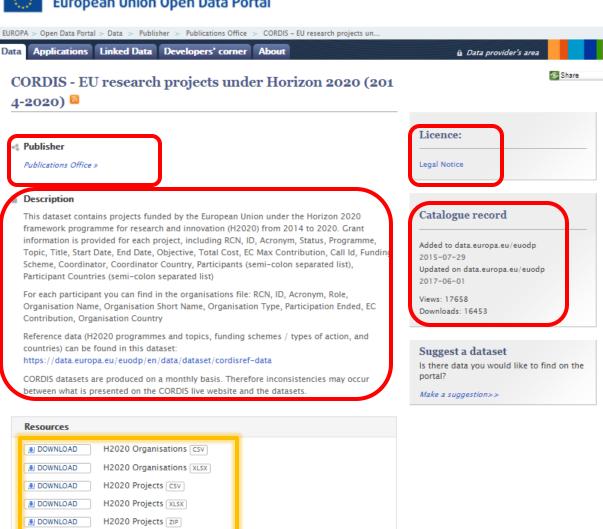
http://cordis.europa.eu/projects/

Under Development





European Union Open Data Portal



Basic concepts:

- Data: any piece of electronically stored content
- Dataset (or resource): the collection of one or many data files **grouped** according to certain **criteria**
- **Metadata:** data about the data, i.e. description of a dataset with properties (e.g. title, publisher, description of the content and URL)



The notion of language data



Data

 any piece of electronically stored content

(Textual) Language Data

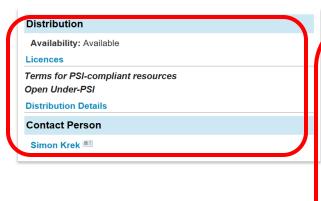
 any piece of electronically stored text

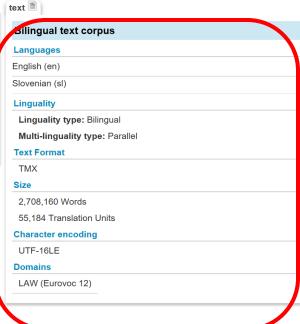


The notion of data in the context of eTranslation







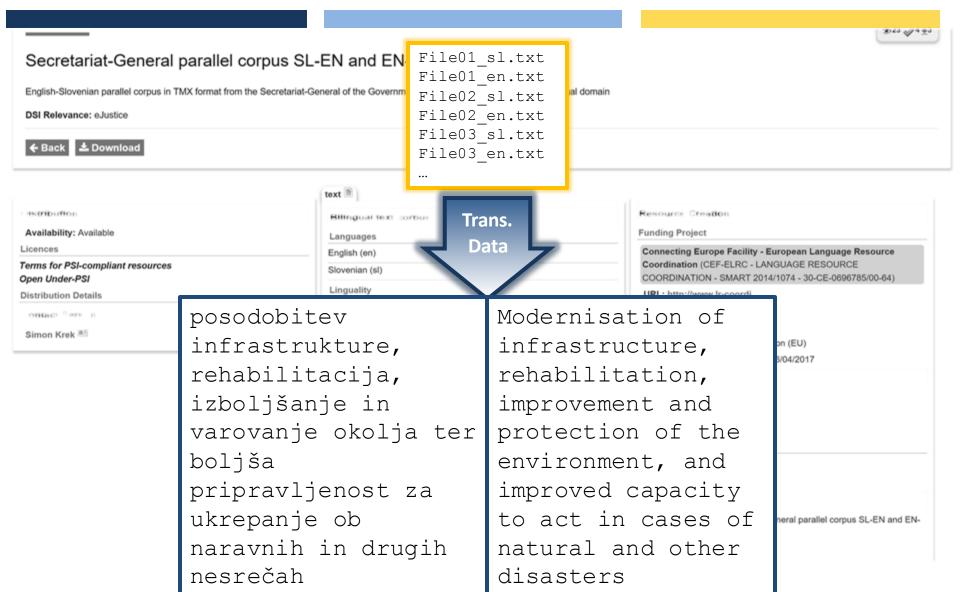






The notion of data in the context of eTranslation

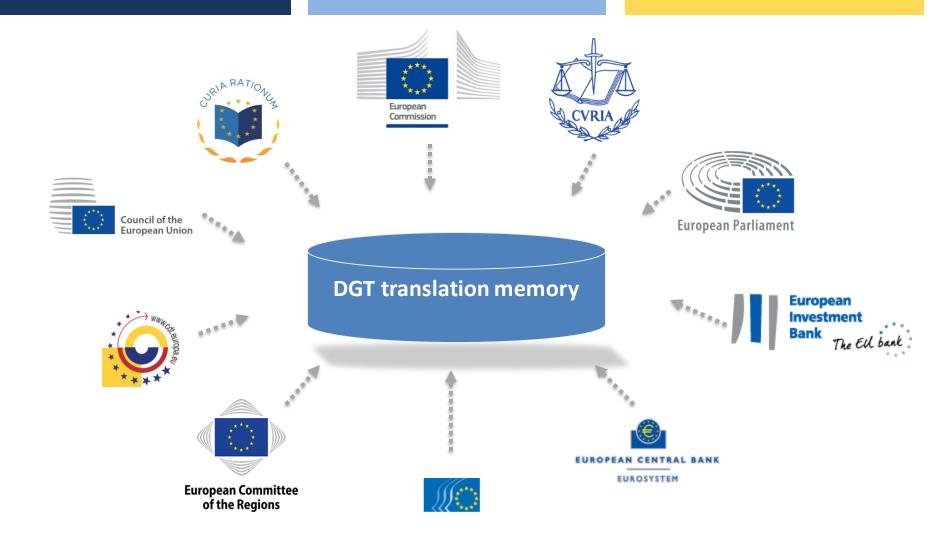






Data used by eTranslation









Such data are already available BUT they are not enough...



What does eTranslation need?



- Data residing in local public organisations, produced inhouse or outsourced, e.g.
 - Reports
 - Communication
 - News
 - Web Content that is managed for several languages
 - Policies
 - Terminologies
 - Archives
 - Forms
 - FAQs



What data are useful for eTranslation as per type | 1



- In principle, any
 electronically stored
 text in any of the EU
 languages, plus
 Norwegian and
 Icelandic (i.e. the CEF
 languages)
- Ideally, texts and their translations in one or more of the CEF languages (i.e. parallel bilingual or multilingual)

Slovenian text

Pobudo za izvedbo konkretnega programa ali projekta da skupni odbor iz 6. člena tega sporazuma ali posamezni nosilci in izvajalci konkretne dejavnosti ali projekta razvojnega sodelovanja. Projekti in dejavnosti, ki se financirajo v okviru programa razvojne pomoči, so skladni s politiko Evropske unije, vključno s politiko o varovanju okolja, enakosti med spoloma, prometu, čezevropskih omrežjih (TREN), konkurenci in javnih naročilih. Skupni odbor sestavlja največ pet članov iz vsake pogodbenice.

Translation in English

The initiative for the execution of a specific programme or project shall be given either by the Joint Committee referred to in Article 6 hereof or by individual holders or contractors of a specific development cooperation activity or project.

Projects and activities financed under the development assistance programme shall comply with European Union policies, including those concerning environmental protection, gender equality, transport, Trans European Networks (TREN), competition, as well as public procurement.

The Joint Committee shall be composed of no more than five members from each Party.



What data are useful for eTranslation as per type | 2



Can also be a list of terms and their translations, i.e. a terminology

English	Polish
aircraft commander	dowódca statku powietrznego
aircraft configuration	konfiguracja statku powietrznego
aircraft flight manual	instrukcja użytkowania w locie statku powietrznego
aircraft hangar	hangar dla statków powietrznych
airframe	płatowiec
airworthiness certificate	świadectwo zdatności do lotu
automatic flight control system	automatyczny układ sterowania lotem
European Technical Standard Order	Europejska Norma Techniczna



What data are useful for eTranslation as per format | 1





- In principle, any text in machine readable format
- But, some formats are more "MT-ready" than others, i.e. they require less manual or automatic processing
- More processing introduces more errors in the final output, making it less useful for eTranslation



File formats for parallel texts



1480

ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ (ΤΕΥΧΟΣ ΠΡΩΤΟ)

United Nations Convention against Corruption

Preamble

The States Parties to this Convention.

Concerned about the seriousness of problems and threats posed by corruption to the stability and security of societies, undermining the institutions and values of democracy, ethical values and justice and jeopardizing sustainable development and the rule of law.

Concerned also about the links between corruption and other forms of crime, in particular organized crime and economic crime, including money-laundering,

Concerned further about cases of corruption that involve vast quantities of assets, which may constitute a substantial proportion of the resources of States, and that threaten the political stability and sustainable development of those States,

Convinced that corruption is no longer a local matter but a transnational phenomenon that affects all societies and economies, making international cooperation to prevent and control it essential,

Convinced also that a comprehensive and multidisciplinary approach is



What data are useful for eTranslation as per format | 2



- The following formats are particularly useful (in descending order):
 - For parallel texts
 - 1. Translation memories (.tmx)
 - 2. XML translation files (.xliff)
 - 3. Plain text (.txt, .csv)
 - 4. Spreadsheets (e.g. xlsx)
 - For terminologies
 - 1. TermBase eXchange (.tbx)
 - 2. Plain text (.txt, .csv)
 - 3. Spreadsheets (e.g. xlsx)
 - For monolingual texts
 - 1. Plain text (.txt, .csv)





File formats of parallel texts and their manipulation



is a paragraph in English. This is a paragraph in English.





This is a paragraph in English. This

 $3 \cdot + \cdot 2 \cdot + \cdot 1 \cdot + \cdot 2 \cdot + \cdot 3 \cdot + \cdot 2 \cdot + \cdot 3 \cdot + \cdot 4 \cdot + \cdot 5 \cdot + \cdot 6 \cdot + \cdot 7 \cdot + \cdot 8 \cdot + \cdot 9 \cdot + \cdot 10 \cdot + \cdot 11 \cdot + \cdot 12 \cdot + \cdot 13 \cdot + \cdot 14 \cdot + \cdot 15 \cdot + \cdot 16 \cdot + \cdot 17 \cdot + \cdot 12 \cdot + \cdot 13 \cdot + \cdot 14 \cdot + \cdot 12 \cdot + \cdot 16 \cdot + \cdot 17 \cdot + \cdot 12 \cdot + \cdot 12 \cdot + \cdot 13 \cdot + \cdot 14 \cdot + \cdot 12 \cdot + \cdot 16 \cdot + \cdot 17 \cdot + \cdot 12 \cdot + \cdot 12 \cdot + \cdot 13 \cdot + \cdot 14 \cdot + \cdot 12 \cdot$

To jest polskie tłumaczenie poprzedniego akapitu. To jest polskie tłumaczenie poprzedniego akapitu.

A second paragraph in English. A second paragraph in English.

To jest polskie tłumaczenie drugiego akapitu. To jest polskie tłumaczenie drugiego akapitu. To jest polskie tłumaczenie drugiego akapitu. To jest polskie tłumaczenie drugiego akapitu.







This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·This·is·a·paragraph·in·English.·¶

1

1

9

A·second·paragraph·in·English.·A· second·paragraph·in·English.·A· second·paragraph·in·English.·A· second·paragraph·in·English.·A· second·paragraph·in·English.¶

1

To-jest-polskie-tłumaczeniepoprzedniego-akapitu.·To-jest-polskietłumaczenie-poprzedniego-akapitu.· To-jest-polskie-tłumaczeniepoprzedniego-akapitu.·To-jest-polskietłumaczenie-poprzedniego-akapitu.· To-jest-polskie-tłumaczeniepoprzedniego-akapitu.·To-jest-polskietłumaczenie-poprzedniego-akapitu.· To-jest-polskie-tłumaczeniepoprzedniego-akapitu.¶

¶

To·jest·polskie·tłumaczenie· drugiego·akapitu.·To·jest·polskie· tłumaczenie·drugiego·akapitu.·To·jest· polskie·tłumaczenie·drugiego· akapitu.·To·jest·polskie·tłumaczenie· drugiego·akapitu.¶



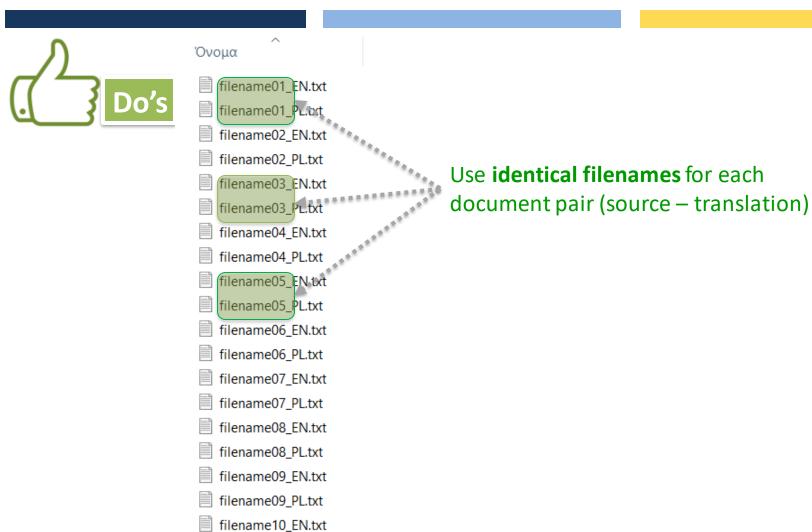




English	Polskie
This is a paragraph in English. This is	To jest polskie tłumaczenie
a paragraph in English. This is a	poprzedniego akapitu. To jest polskie
paragraph in English. This is a	tłumaczenie poprzedniego akapitu. To
paragraph in English. This is a	jest polskie tłumaczenie poprzedniego
paragraph in English. This is a	akapitu. To jest polskie tłumaczenie
paragraph in English. This is a	poprzedniego akapitu. To jest polskie
paragraph in English. This is a	tłumaczenie poprzedniego akapitu. To
paragraph in English.	jest polskie tłumaczenie poprzedniego
	akapitu. To jest polskie tłumaczenie
	poprzedniego akapitu.
A second paragraph in English. A	To jest polskie tłumaczenie
second paragraph in English. A second	drugiego akapitu. To jest polskie
paragraph in English. A second	tłumaczenie drugiego akapitu. To jest
paragraph in English. A second	polskie tłumaczenie drugiego akapitu.
paragraph in English.	To jest polskie tłumaczenie drugiego
	akapitu.





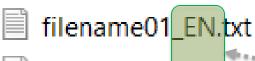


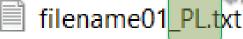
filename10_PL.txt

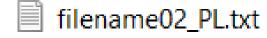


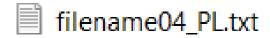












Include language identifiers in the filename



Criteria for grouping your data



- Remember: a dataset is a collection of data grouped according to certain criteria
- For the purpose of enhancing and adapting CEF eTranslation, two criteria are critical:
 - Language(s): each collection is defined by the language or language pairs of its data, e.g.
 - Collection of texts in English German
 - Documents in English Norwegian Finnish
 - Domain: each collection ideally belongs to a single domain,
 e.g.
 - Collection of texts in English German in the culture domain
 - Social security documents in English Norwegian Finnish



Preferred domains



- Administrative/regulatory domain and
- Topics relevant to the CEF DSIs

CEF DSI	Domain
Online Dispute Resolution	Consumers' rights
Electronic Exchange of Social Security Information	Social security, insurance
eProcurement	Public procurement, contractual agreements
European e-Justice Portal	Justice, Law
eHealth	Health, Medicine
Business Registers Interconnection System	Business, market
Safer Internet	
Cybersecurity	
Public Open Data	
Europeana	Culture





How to contribute your data to CEF eTranslation A step-by-step guide



To ELRC-SHARE



 At the ELRC portal click on the "Language resource submission" button

Or

Type in the url address:

elrc-share.eu

What are Language Resources?

The term language resources refers to sets of language data and descriptions in machine readable form, including written and spoken corpora, grammars, and terminology databases. Language resources can be used to build, improve, or evaluate natural language systems such as machine translation engines.

To develop the automated translation systems for the CEF Automated Translation platform, the ELRC initiative aims to gather language resources in all official languages of EU. The initiative seeks large general-domain corpora, whether monolingual (e.g. official corpora of national languages) or multilingual, as well as domain-specific language resources in the fields of consumer rights, culture, legal domain, social security, health, public procurement, etc.

Read more about what language resources are needed

How to contribute?

Any contributor may submit Language Resources to us at any exploitation stage: simple internet links to websites (Sources), raw data, or fully-packaged data (Language Resources).

Click below if you can indicate a potential source fo relevant data

Click below if you are a language resource owner and are willing to share it for the purposes of CEF.AT

Data sources submission

Language resource submission



ELRC-SHARE repository







Type in your keywords, please...

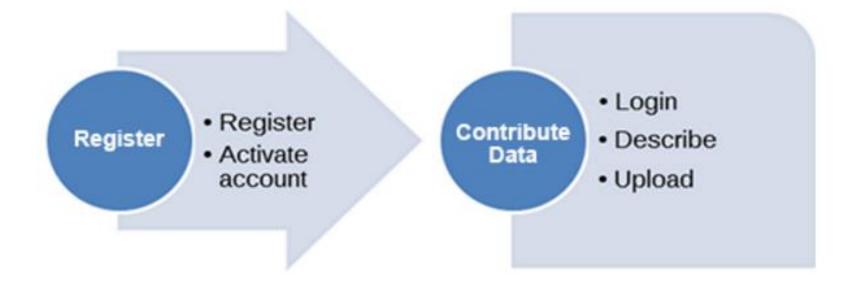
Q

Welcome to the ELRC-SHARE repository!



How to Contribute Data

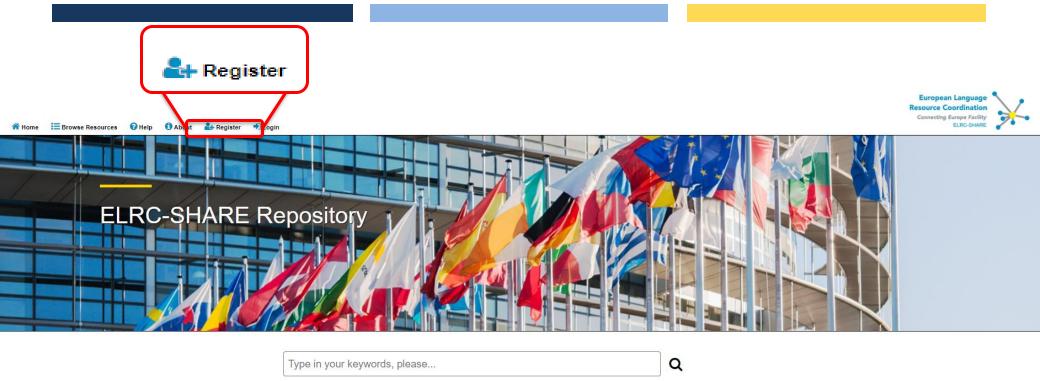






How to Register (1/2)





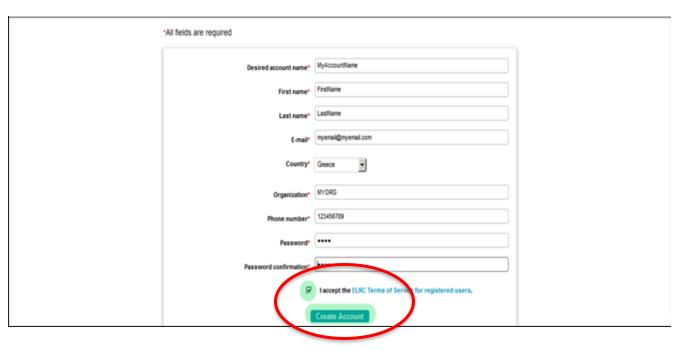
Welcome to the ELRC-SHARE repository!



How to Register (2/2)



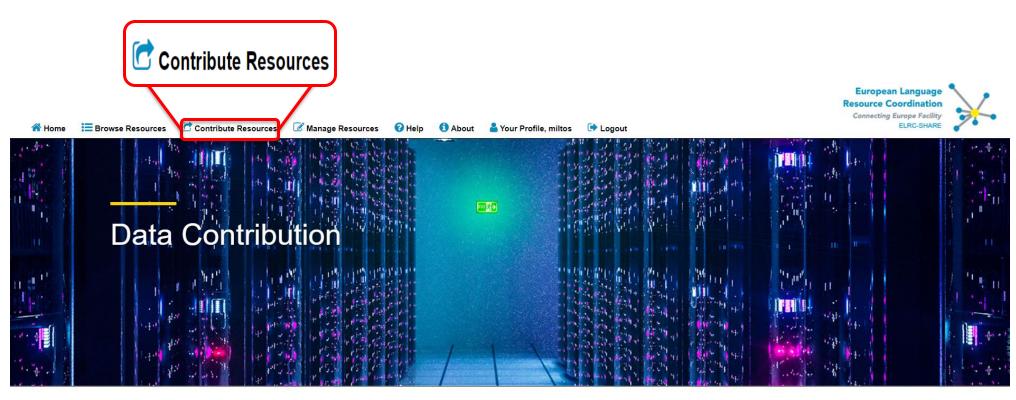
- Fill in the required info
- Read the *Terms of* Service and click
 Accept, if you agree
- Click the Create
 Account button
- Activate your account according to the guidelines emailed to you





How to Contribute Data (1/6)





New Resource

Resource Title*

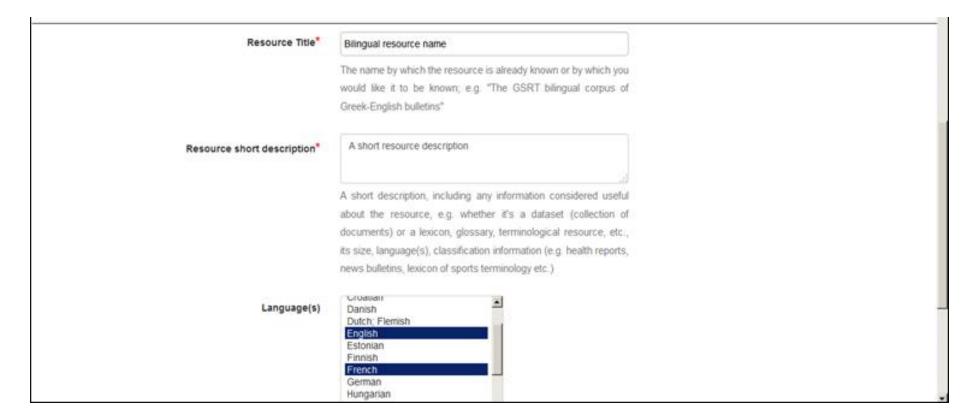
The name by which the resource is already known or by which you would like it to be known; e.g. "The GSRT bilingual corpus of Greek-English bulletins"



How to Contribute Data (2/6)



Fill in the details of the dataset





How to Contribute Data (3/6)



Two modes for contributing your data

Ontribution Mode

O Upload ZIP archive
O Provide URL of resources
Please select the way you wish to contribute your data. Uploading a ZIP archive is recommended.

Choose File No file chosen
Please upload a .zip file up to 100MB.
In case the .zip file file you wish to upload is larger than 100MB, please contact elrc-share@ilsp.gr



How to create a .zip file



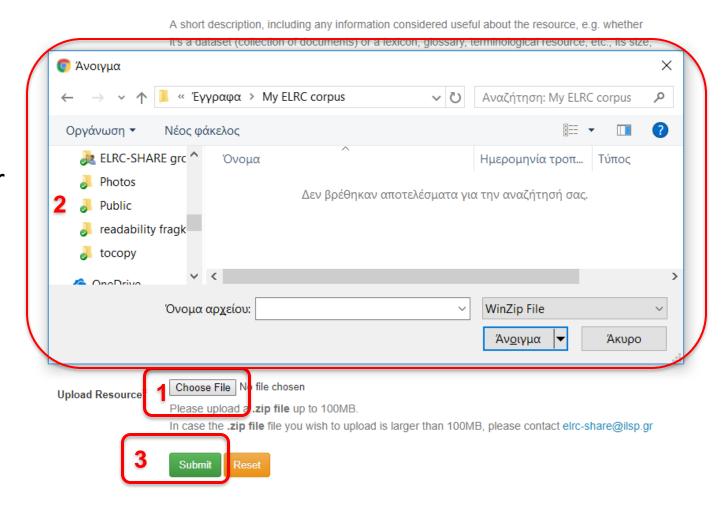
- Free file compression tools (indicative):
 - 7zip
 - PeaZip
 - Hamster Free Zip Archiver
 - Universal Extractor
 - ZipltFree
- Windows embedded compression functionality



How to Contribute Data (4/6)



- 1. Click on Choose file
- Locate your resource in your hard disk
- 3. Click on Submit

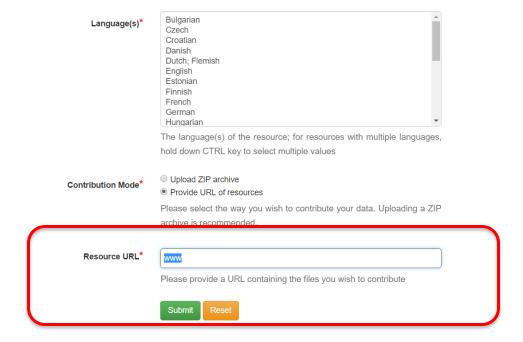




How to Contribute Data (5/6)



Alternatively indicate a url (directory listing)



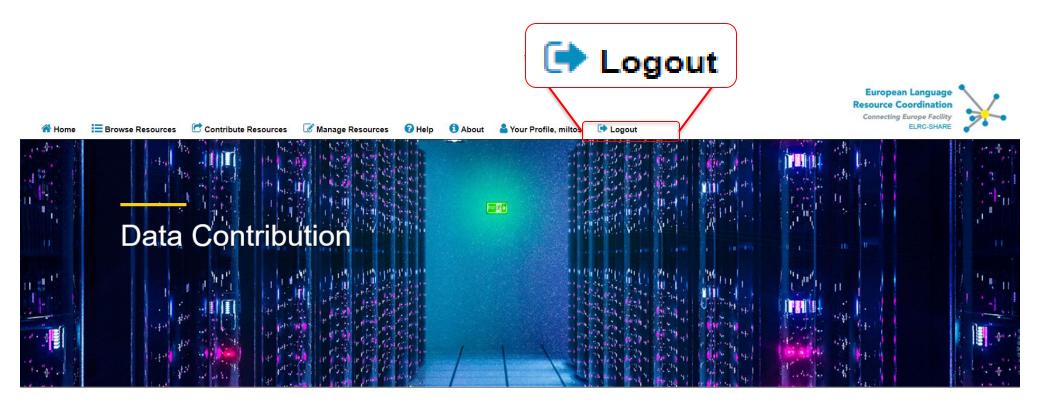
•Additional functionality for securely transferring sensitive data based on a deployment of the eDelivery CEF building block coming soon in the next version of ELRC-SHARE



How to Contribute Data (6/6)



Repeat the process if you want to contribute another resource, or log out





Guidelines for contributors







Help

Documentation on the ELRC-SHARE editor

The following guidelines provide detailed information on how to use the editing facility for documenting and uploading LRs:

- Walkthrough for contributors
- Walkthrough for editors

ELRC-SHARE schema

- ELRC-SHARE schema XSD (based on the META-SHARE Schema)
- · Documentation about the schema



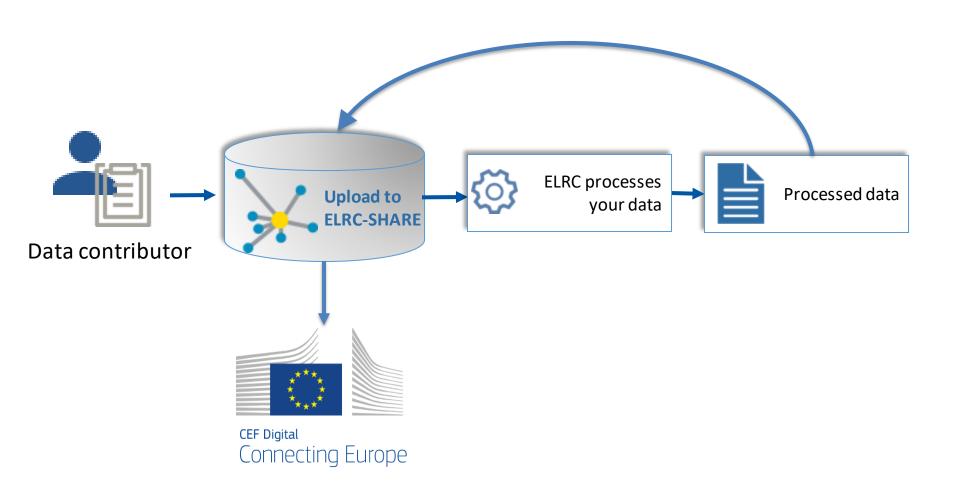


What happens next?



What happens to your data?







Data processing before delivery to EC



- All datasets are processed to result in tmx/tbx/txt files
- Data will indicatively undergo the following processing:
 - cleaning
 - format conversion
 - sentence alignment
 - metadata completion





All these services can also be offered <u>on-site</u> to all data contributors <u>free of charge</u>









Our team of experts will travel directly to assist you at your own offices





Assistance will be provided in close cooperation with a broad network of language experts







We will fix your data issues and return the processed data directly to you. We can also help to improve your data management processes.

Just ask!



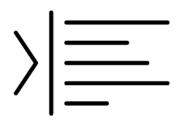
Language processing services on-site











Data extraction

If your data is trapped in archives and databases, we can help extract it

Anonymisation

Does your data contain private info? We can help to anonymise

Cleaning

If your data is messy (i.e., lots of noise), we will clean it up

Re-formatting

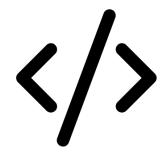
Need to re-format DOCX to XML, or PDF to WORD? Let us do it for you!



Language processing services











Data conversion

If your data isn't converted to the proper formats, we can help convert it

Tag removal

Does your data contain unneeded tags? We can assist in removing them!

Alignment

Translations aren't aligned? We'll do it for you with our tools!

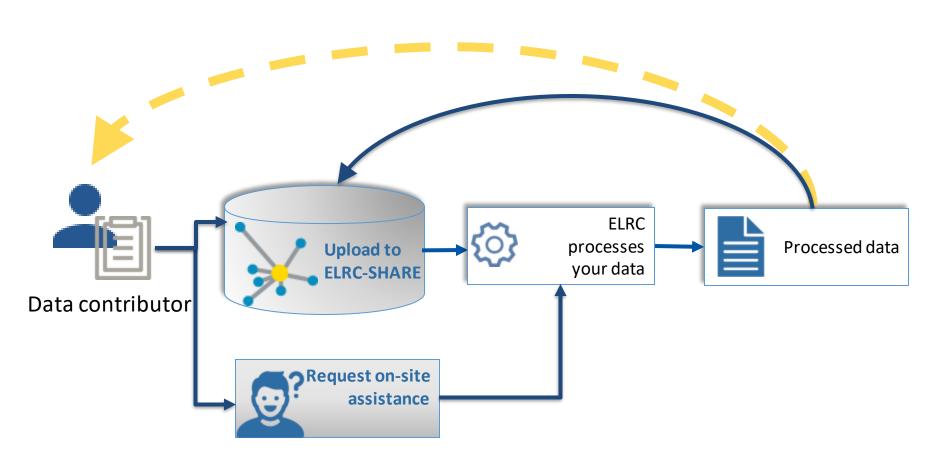
Metadata

Metadata are crucial! We can organise and validate metadata for your team



What happens to your data?









How to request services and help



ELRC onsite assistance



Submit a request for on-site assistance by filling out the form below. See a list of services here. First name * Last name * Ir-coordination.eu/request-Institution * onsite-assistance Country * Email * Types of assistance required * Legal assistance Data processing Anonymisation Other Description of assistance required Submit



ELRC Helpdesk





Helpdesk for Language Resources

We are happy to answer any questions on the technical or legal aspects related to the use, production, collection, processing, and sharing of language resources.

Please feel free to contact us through one of the following channels:

Telephone*	+33 970 440 522
Secretariat Support	+49 681 857 7552 85
Skype	ELRC Helpdesk
E-mail	help@lr-cooridantion.eu

Ir-coordination.eu/helpdesk



ELRC consortium - come talk to us!

















Thank you for your attention!





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Case studies (2015-2016)



Spain



Problem: Data provider didn't store translations as <u>related documents</u>, therefore source/target translation weren't paired

Solution: ELRC helped crawl a local system to find, related, and pair source/target translations





Spain



Problem: In some Spanish governmental departments, archives were only available in PDF Solution: ELRC helped provide good converters to get usable documents





Germany



Problem: Data owner needed help with anonymization, as databases contained personal info. Another need: cleaning up 'junk' data (URLs, numbers, fragments)

Solution: ELRC helped provide anonymization services and data cleaning



Estonia



Problem: Data donor found that legal acts in EN, ET, RU couldn't be <u>aligned on a document level</u> (no common machine-readable cross-language ID)

Solution: ELRC helped provide alignment services for documents