



### **DATA COLLECTION APPROCHES**



## Language Resource "Types"



- A non-exhaustive list of typical datasets that will be sought by ELRC as provided in the tender specification, includes:
  - translation memories,
  - aligned parallel corpora,
  - comparable corpora,
  - monolingual corpora,
  - terminologies, lexica
  - grammars, etc.



### What counts as Data for MT?



- Anything that contains "words", preferences for "sentences", even for sentences expressed in multiple languages, e.g.
  - Reports,
  - Speeches,
  - Contents on web pages,
  - Brochures, etc.
- Bags of "words", "sentences", multiple bags



### **Contacts**



- The main public entities are those with a mission at the national, regional, local, cross-borders, cross-countries (bi-lateral, multi-lateral) but could be also international organizations with a European basis and mission. These cover:
- Presidents, Kings or Queens head of states offices,
- National or Federal Ministries (inc. inter-ministerial bodies) and their various departments,
- National Public bodies (Parliaments, Senates, Supreme Courts/Attorney General's Office, National Banks and their international branches if any or their representations in foreign countries),
- National representatives outside the country (Embassies, Consulates, Cultural and educational centers e.g. Cervantes, etc.),
- National and official language custodians (e.g. national language institutes, but also language centers in foreign countries e.g.
   Real Academia in Spain but also Cervantes or Goethe-Institut: outside their home country),
- Regional "governmental" bodies and regional assemblies (e.g. Landers, States, Regions, Provinces, departments, districts, and other country's administrative regions and territorial entities as one can identify within each country),
- Local authorities (Municipalities, county/city councils, and other city administrations, e.g. Twin-cities managing bodies, etc.),
- Cross-border political /economic /social bodies (Belgium-Netherlands joint association, Italian-Slovenian, North-South Catalan bodies, etc.) and other bilateral/multilateral public-like organizations,
- Political, social, sports, etc. organizations (political parties, unions and union federations, sports federations, etc.),
- International organizations with European basis (Transparency International, Human-Watch, UNICEF, OCDE, etc.),
- Consumer bodies and Conflict and Dispute resolution bodies,
- Security and emergency services, national and/or municipal police forces, and other law enforcement bodies, Fire services, etc. but also EU and International levels (Interpol),
- National Archives and Public Sector Information Management bodies (Etalab, Data Open Portals, National Libraries),
- Any organization that we will discover with production of "administrative" language material in particular bilingual/multilingual texts,



# What format is needed? Digital textual data







### **Documented Data (Meta-data)**





- On a case by case we can define what is ESSENTIAL:
  - Sources of data (trustability, quality, etc.)
  - Domain specific
  - Languages
  - > Rights if not public

#### **Dublin Core Metadata Element Set**

- Title
- 2. Creator
- 3. Subject
- 4. Description
- 5. Publisher
- 6. Contributor
- 7. Date
- 8. Type
- 9. Format
- 10. Identifier
- 11. Source
- 12. Language
- 13. Relation
- 14. Coverage
- 15. Rights



# **Origins of data**



- 1. Sources coming from Identified partners (URLs)
  - URLs from Public Sector Bodies (".html" style)
- 2. "Raw" Data coming from identified providers
  - Data formatted as .doc, .txt, .....xml
- 3. Language Resources coming from "reliable providers" e.g. .tmx with identified languages, domains etc.



#### Workflow: the three scenarios



### 1. Starting from "LRs" ... RePurposing

Supply of Language Resources

Basic documentation

Processing → LRs

Validation

QC

Storage // delivery

### 2. Starting from "Raw Data"

Identification of Raw data

Basic documentation

Basic documentation

Data

Processing → LRs

Validation

QC

Storage // delivery

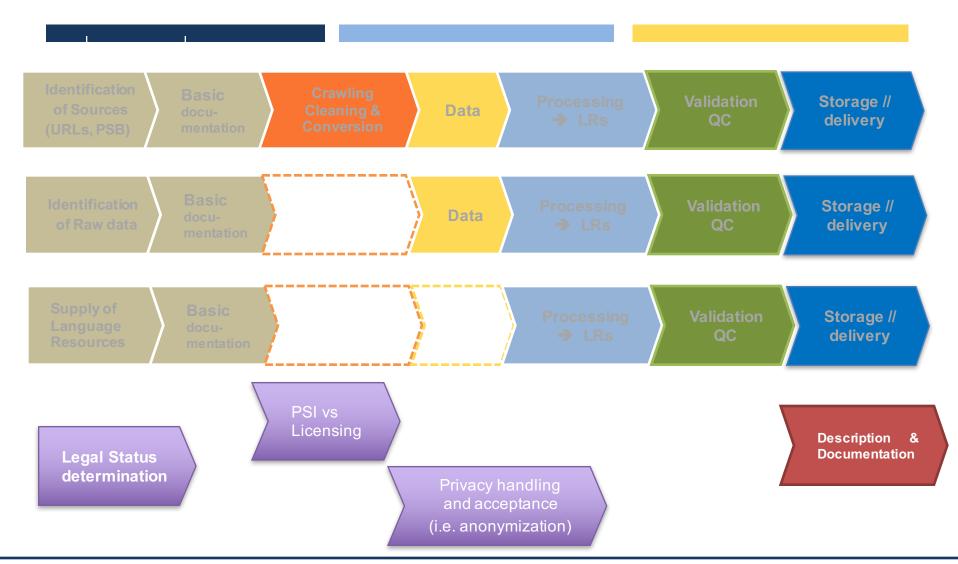
### 3. Starting from "Sources" (e.g. URLs)

Identification Crawling **Basic** Processing → Storage // of Sources Cleaning & Data **Validation** QC docu-LRs delivery Conversion (URLs, PSB) mentation



### workflow







## **Project Plans**

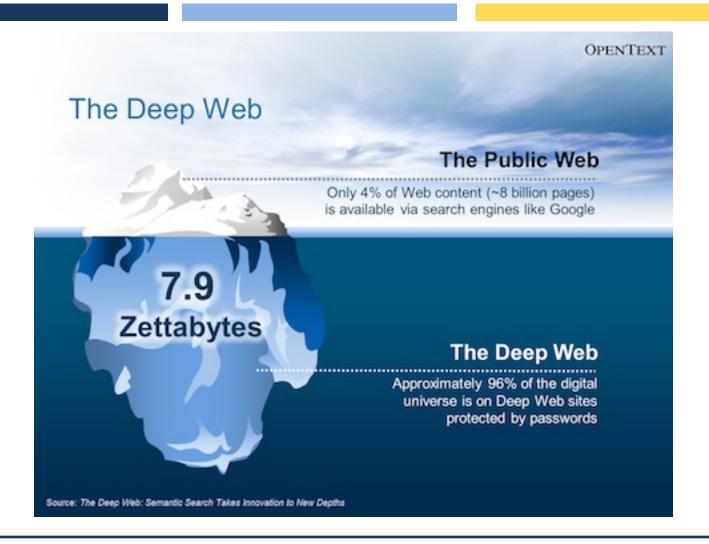


- ➤ Scenario 1: From Language Resources
  - See below; starting at conversion to LRs
- ➤ Scenario 2: From Data-set
  - See below; starting at Data-set step
  - Scenario 3: Select Sources and run the whole procedure:
    - From Sources to Language Resources & Validate all steps (identification, qualification, crawling, cleaning/formatting, conversion to Data-sets, Processing, Validation, QC & assessment, conversion to LRs, depositing within CEF-share)



## Visible data versus existing ones







### Our contributions ... Deep web







# The process workflow as agreed in Frankfurt Scenario 1: Derive Language Resources from Sources



Identification and qualification of sources

To browse the database <a href="http://cef-at-sources.elda.org/">http://cef-at-sources.elda.org/</a>

user name: inventory\_users password: FgOu8woYHUYr

See your login/password sent by email



# Task1: Identification of Data, Sources & LRs



## 1. Task 1: Identification

- Identification of sources (URLs from PBS)
  - See the ELDA CEF Database
- ii. Identification of Raw Data
  - .doc, .pdf, ... identification of providers (URL if any)
- iii. Identification of Language Resources
  - e.g. .tmx (providers, languages, domains, etc.)



# Task 2 : documenting the identified items



- Task 2: Preliminary Documentation
  - i. Identification of sources (URLs from PBS)
    - See the ELDA CEF Database
  - ii. Identification of "donated" Raw Data
    - .doc, .pdf, ... identification of providers (URL if any)
  - iii. Identification of donated Language Resources
    - e.g. .tmx (providers, languages, domains, etc.)



## Task 3: Collecting necessary Items



### Task 3: Collections

- Selection of sources to harvest
  - Define crawling processes, e.g. terms/Domains, "stop" arguments, etc.
  - Crawling /Storage/Cleaning/Alignment if ML
  - See the ELDA Storage site (<a href="https://cef-at.elda.org/LR1">https://cef-at.elda.org/LR1</a>; LR2; etc.
- ii. Selection of "donated" Raw Data for processings
  - Converting .doc, .pdf, ... to usable formats (?.xml)
  - Storage/Cleaning/Alignment if ML
  - See the ELDA Storage site (<a href="https://cef-at.elda.org/LR1">https://cef-at.elda.org/LR1</a>; LR2; etc.
- iii. Storage of donated Language Resources

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# Task 4: "Documenting and metadata"



- Task 4: Metadata & documentation
  - i. Identification of the meta-data elements for Crawled data
    - Filling CEF-SHARE (@ILSP)
  - ii. Identification of the meta-data elements for the processed "donated" Raw Data
    - Filling CEF-SHARE (@ILSP)
  - iii. Identification of the meta-data elements for the donated Language Resources
    - Filling CEF-SHARE (@ILSP)



# Task 5: "Validation & Quality Control"



- Task 5: QC & Validation Criteria\*
  - Validation Criteria Definition
    - As by the EC // Consortium Document
  - Validation of meta-data elements
    - As by the Inception report
  - Validation of Language Resources
  - for Crawled data
  - ii. for the processed "donated" Raw Data
  - iii. for the donated Language Resources



## Task 6: "Data Storage"



- Task 6: Various Storage mechanisms
  - Storage of data-sources (ELDA-dbb)
  - Storage of Language Resources Metadata elements
  - Storage of Raw Data (.doc, .xml, etc.)
  - Storage of final validated LRs
  - What is stored where:
    - CEF-SHARE
    - CEF-Repository
    - DGT-Repository



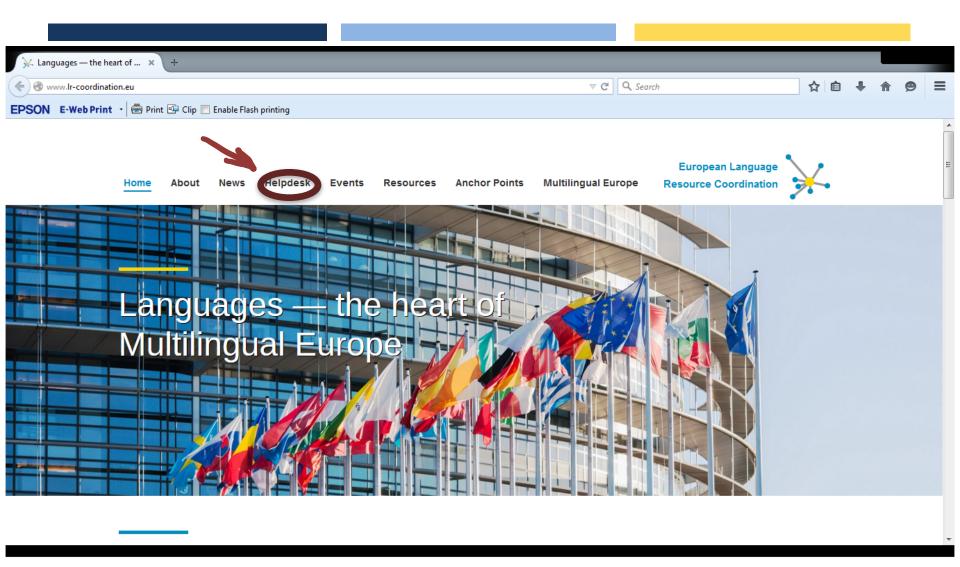


# Helpdesk and Support



# ELRC Portal www.lr-coordination.eu

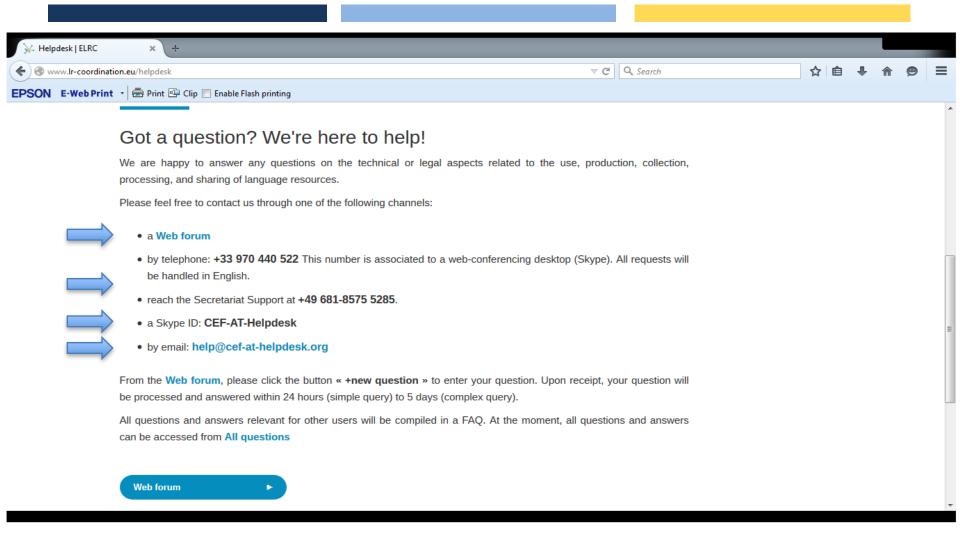






### **ELRC Portal**

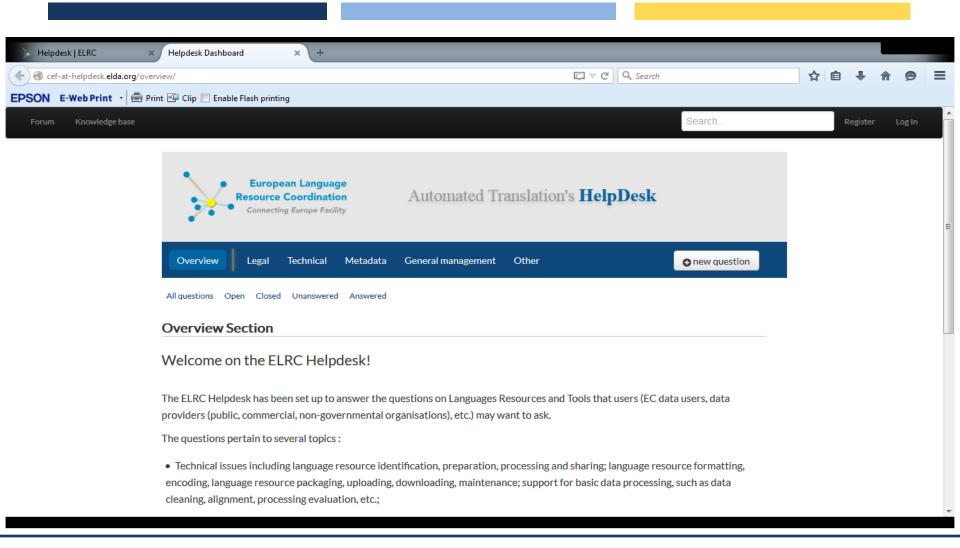






### **ELRC Portal // Forum**

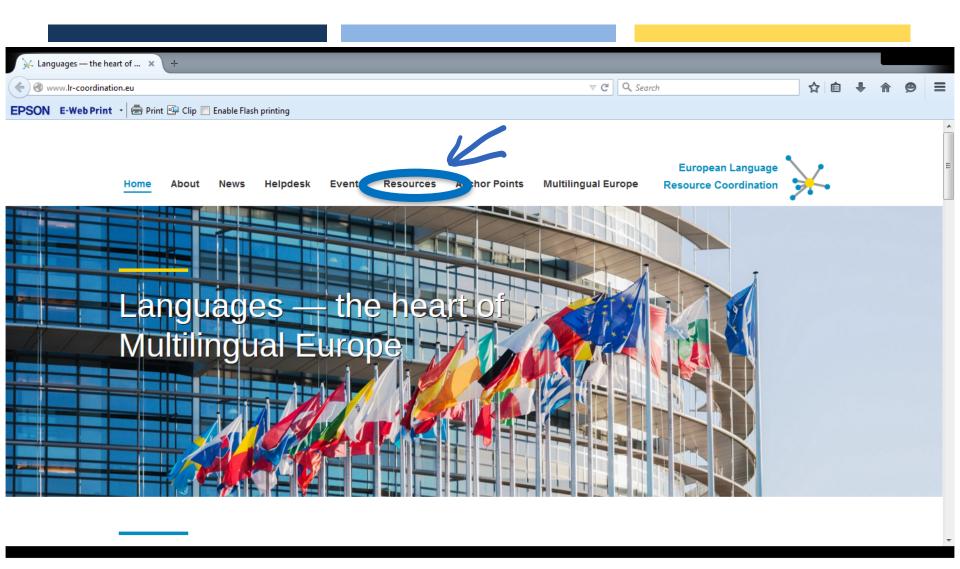






# ELRC Portal ... Resources www.lr-coordination.eu







#### **Automated Translation's**

#### **Addition of Data Sources**

Data Sources are identified websites URLs that could be exploited, through a crawling process, for the preparation of Language Resources within the CEF.AT platform, in particular parallel corpora to be built up from multilingual websites.

Please fill in the form below with any exploitable sources or other information on potential Language Resources.

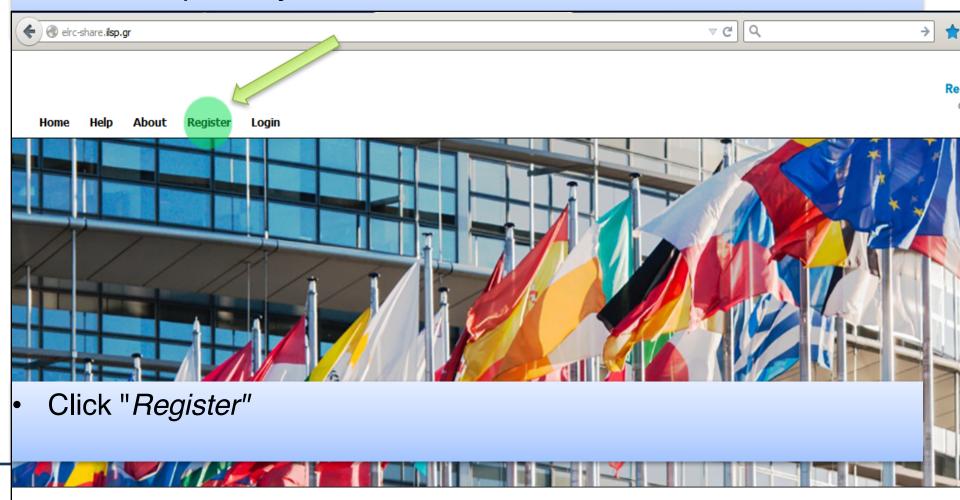
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Contact e-mail	
Submit Source	



# How to contribute LRs (1/7)



# ELRC Repository





### Subscribe to contribute



