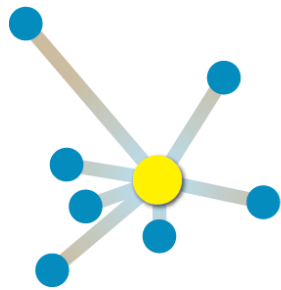


European Language Resource Coordination (ELRC) is a service contract operating under the EU's Connecting Europe Facility SMART 2015/1091 programme.



**European Language
Resource Coordination**
Connecting Europe Facility

Deliverable D3.2.13

Task 8

ELRC Workshop Report for Estonia



Dissemination Level:	Public
Version No.:	V1.0
Date:	2018-11-30



Contents

1	Executive Summary	3
2	Workshop Agenda	4
3	Summary of Content of Sessions	6
3.1	Translation at DGT	6
3.2	Overview of the European Language Resource Coordination action	6
3.3	Multilinguality Challenges in Estonia: Riigi Teataja case study	7
3.4	National initiatives for language technologies in Estonia – Panel session	10
3.5	Legal aspects of sharing language resources	12
3.6	Translation Procurements in Estonian Public Sector	13
3.7	The CEF eTranslation platform @ work	13
4	Synthesis of Workshop Discussions	15
5	Workshop Participants	16
6	Appendix	18
6.1	Localised invitation letter	18
6.2	Localised agenda	19
6.3	Localised press release	21

1 Executive Summary

The Estonia ELRC Workshop took place in Tallinn, on the 3rd of October 2018, at the office of the European Commission Representation in Estonia.

The workshop was co-organized by the ELRC Consortium member Tilde, Estonian Language Resource Centre and Office of the European Commission Representation in Estonia. In general, the participants appreciated the workshop very much, finding a well-organised arrangement, a pleasant atmosphere and interesting presentations.

An event-dedicated web page in Estonian was set up at the ELRC website before the event, at <http://www.lr-coordination.eu/l2estonia>. The page was populated with the agenda (http://www.lr-coordination.eu/l2estonia_agenda) and the online registration form.

Invitations to the participants were sent out a couple of weeks before the event. The invitation text was a localized version of the respective template. The invitation was followed by a personal e-mail and calls to the persons to whom invitations were sent.

The event attracted 49 participants. All feedback forms that were handed in showed a positive experience.

2 Workshop Agenda

The workshop agenda was based on a “master” agenda, the agenda was adopted for the local needs.

http://www.lr-coordination.eu/l2estonia_agenda

09:00	Registration and coffee
09:30 – 9:40	Welcome by the local organisers <i>Pekka Myllylä, (Tilde EE)</i>
09:40 – 10:10	Translation at DGT <i>Merit-Ene Ilja, (DG Translation)</i> Presentation
10:10 – 10:35	Connecting public services across Europe: ambition and results so far. Video presentation by representative from <i>DGCONNECT</i>
10:35 – 11:00	Overview of the European Language Resource Coordination action <i>Andrejs Vasiljevs (ELRC, Tilde)</i>
11:00 – 11:30	Coffee Break
11:30 – 11:50	Multilinguality Challenges in Estonia: Riigi Teataja case study <i>Jüri Heinla (Ministry of Justice)</i> Presentation
11:50 – 12:30	National initiatives for language technologies in Estonia <i>Kadri Vider, Kadri Vare, Keaty Siivelt</i> <i>(Estonian Language Resources Center, Ministry of Education)</i> Presentation I Presentation II
12:30 – 12:50	Legal aspects of sharing language resources <i>Aleksei Kelli (University of Tartu)</i> Presentation
12:50 – 13:50	Lunch
13:50 – 14:15	Translation Procurements in Estonian Public Sector <i>Inge Rätsep (ETBL, Interlex)</i> Presentation

14:15 – 14:40 **The CEF eTranslation platform @ work**
Ingrid Sibul (EC), Kelly Lilles (EKI)
[Presentation I](#) [Presentation II](#)

14:40 – 14:50 **Wrap-up**

3 Summary of Content of Sessions

3.1 Translation at DGT

Merit-Ene Ilja, the Director of the DGT, opened the event by welcoming the audience.



Image 1 Merit-Ene Ilja presenting Translation at DGT

Ilja introduced to the audience the European Commission's translation activities, organization of DGT, translation volumes, translation outsourcing and translation tools used.

The annual cost of DG Translation is around €325 million and the latest figure for DG Interpretation is €119,5 million. In the EU total budget, translation costs are part of the administrative costs. They have been $\pm 6\%$ of the total budget for a long time. Translation in all EU institutions costs €1.7 per citizen per year

She also described the role of the eTranslation and outlined objectives and challenges for future, notably: continuous development of information technology (eTranslation, CAT and other tools), streamlining and, where feasible, automation of workflows, and optimisation of quality assessment, optimisation of translation management.

She discussed how DGT follows the evolution of AI, including NMT, and how the world is changing – translation is ubiquitous, hidden component of services and products and not a luxury good any more.

3.2 Overview of the European Language Resource Coordination action

Andrejs Vasiljevs, the ELRC representative, welcomed the audience on behalf of the consortium.



Image 2 Andrejs Vasiljevs presenting Overview of the European Language Resource Coordination action

He described the crucial role that language technology development has for smaller languages for them to survive in the digital era and the importance of cooperation in collecting language resources for building automated translation systems. He also gave an overview of the ELRC consortium's activities and concrete activities and services offered to data providers and donors.

3.3 Multilinguality Challenges in Estonia: Riigi Teataja case study

Jüri Heinla from the Ministry of Justice introduced Estonia's information system for legal acts – Riigi Teataja (RT) where visitor can look up consolidated texts of English translations of Estonian legislation.



Image 3 Jüri Heinla presenting Multilinguality Challenges in Estonia: Riigi Teataja case study

Upon launching the English website of Riigi Teataja, the translations of nearly 260 Estonian laws (acts of Parliament) became available. Translations are kept up-to-date so that current Estonian legislation is always available in English. This means that whenever an act is amended, a translation of the new consolidated text containing the recent amendments are published usually no later than by the date of entry into force of the amendment.

Heinla also described the users of the legislation and their multilingual preferences and how these are met by translating all of the legislation into English. Each year, it costs EUR 63 000 to translate laws.

Translation of legal acts into English by numbers:

- A total of 3000 different translation versions have been published;
- A total of 566 translations are currently valid;
- 300 000 users per year representing 263 countries
<https://www.riigiteataja.ee/en/statistics/bycountry;>

Table 1 Top 10 countries of visitors

#	Country	Visitors
1	Estonia	683063
2	Latvia	37585
3	India	33795
4	United Kingdom	30854
5	United States	29704
6	Finland	28326
7	Germany	25919
8	Lithuania	22111
9	Russia	22075
10	Ukraine	17364

One of the unique services provided by RT is “Time machine” – a feature to serve up-to-date acts at any given point of time, including past acts and acts that will take force in future.

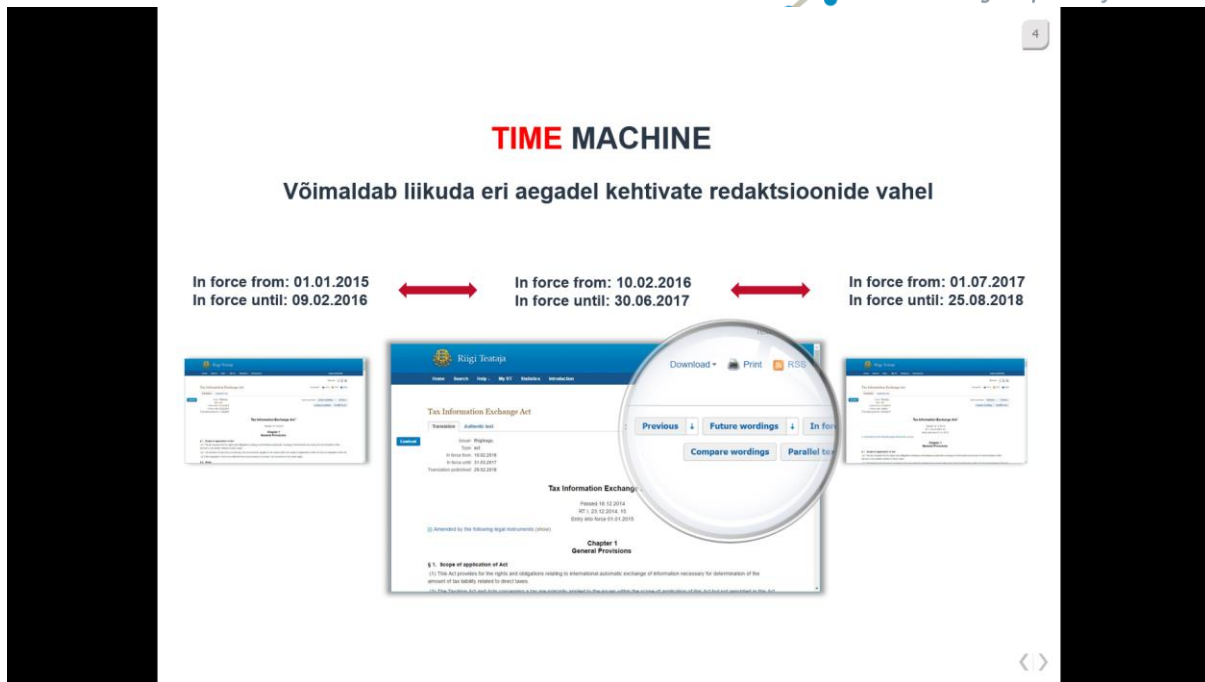


Image 4 Illustration on the Time Machine principle of the Riigi Teataja

The goals of translating Estonian legal acts are to introduce the Estonian legal framework to Estonian partners in Europe and worldwide, and to make Estonian legal acts accessible for foreign investors.

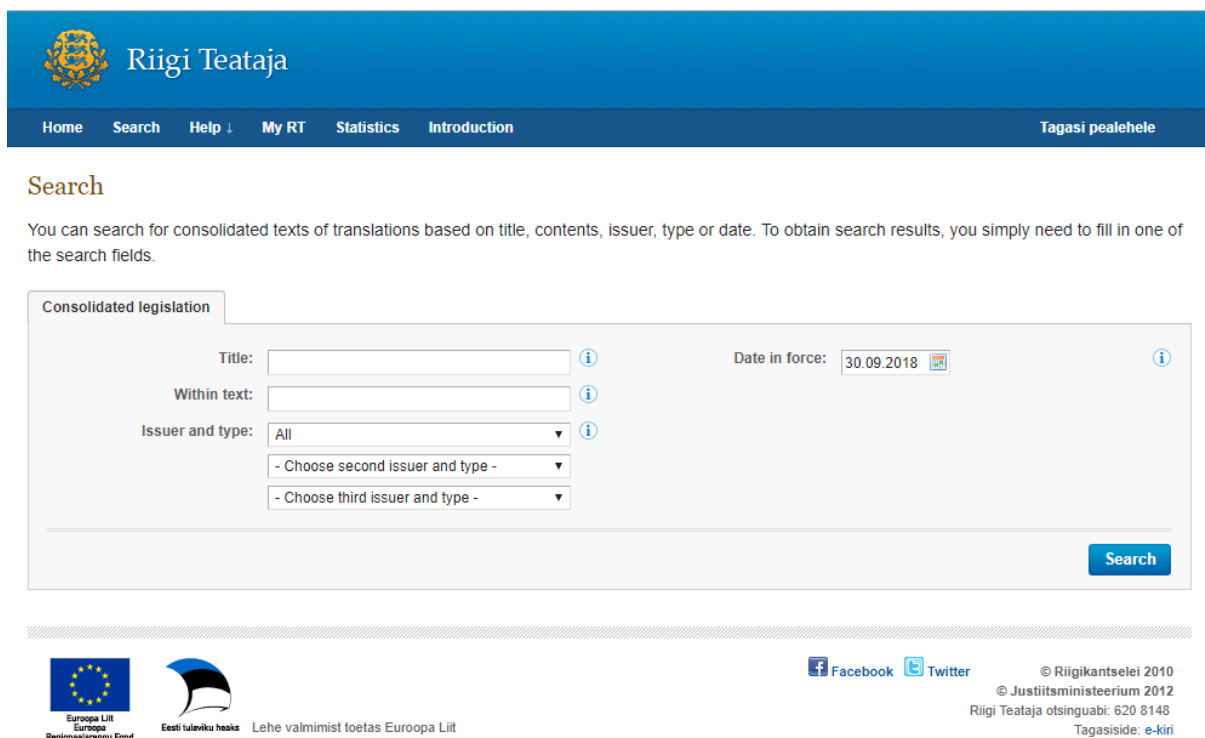


Image 5 Riigi Teataja search feature

Heinla also described translation policies and supporting tools (XML Vexpro), and the possibility to use custom machine translation with post-editing carried out by legal experts. But before applying MT the process of translating legal acts must be re-engineered: terminology work, translation methodology, and inclusion of editors.

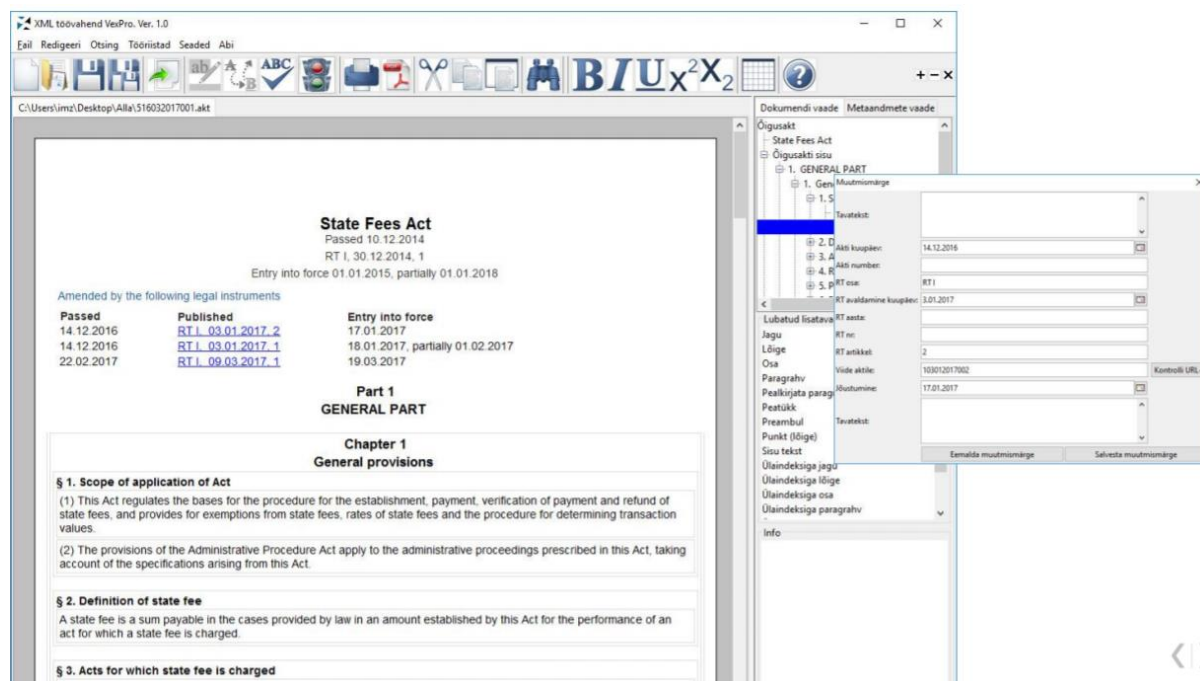


Image 6 XML Vexpro

3.4 National initiatives for language technologies in Estonia – Panel session

Kadri Vare from the Ministry of Education introduced the Estonian Language Technology Programme (cf <https://www.keeletehnoloogia.ee/en>) and its outcomes, namely: speech recognition, machine translation, speech synthesizes, text analytics.

In the field of machine translation the Estonian LT Programme has funded several projects, including Estonian Open Parallel Corpora (Tilde) for collecting Estonian-English/Latvian/Finnish/ parallel corpora, general domain machine translation systems by University of Tartu and Tilde, and speech technology projects by Tallinn Technical University.



Image 7 Introduction of the Estonian Speech Recognition Project

The results of the projects financed under this programme are freely available by default to everyone.



TTÜ keeletehnoloogia labori veebiteenused [Kontakt](#)

[Kõnesalvestuste brauser](#) [Veebipõhine kõnetuvastus](#) [Dikteerimine](#) [Korpused](#) [Autosegmenteerija](#) [Androidi rakendused](#) [Tarkvara](#)

Keeletehnoloogia labori veebiteenused on osa [Eesti Keeleressursside Keskuse \(EKRK\)](#) ja üle-euroopalise keeleressursside võrgustiku [CLARIN ERIC](#) taristust. Teenuste kasutamine mitte-äriistel eesmärkidel on tasuta. EKRK, TTÜ ja teenuste autor(id) ei vastuta mistahes kahjude eest, mis võivad tuleneda veebiteenuste kasutamisest. Teenuste eesmärgiks on demonstreerida eestikeelse kõnetuvastuse võimalusi ja soodustada keeletehnoloogiliste rakenduste loomist, mis võimaldavad eesti keele kasutamist tänapäeva infotehnoloogilises maailmas. Teenustes kasutatav tarkvara ja keeleressurssid on loodud riiklike programmide "Eesti keele keeletehnoloogiline tugi (2006-2010)" ja "Eesti keeletehnoloogia 2011-2017" raames.

Image 8 Speech recognition results <http://bark.phon.ioc.ee/>

Kadri Vider, the head of the Center of Estonian Language Resources, welcomed the audience on behalf of her organization, one of the co-organizers of the event. She explained to the audience what a language resource is, presented the Estonian language resource repository based on META-SHARE, talked about the metadata for LRs, term bases, and Estonian wordnet.

The current status of Estonian resources at ELRC at the time of reporting is 10 language resources. An up to date status could be followed at the <https://www.elrc-share.eu/> site.

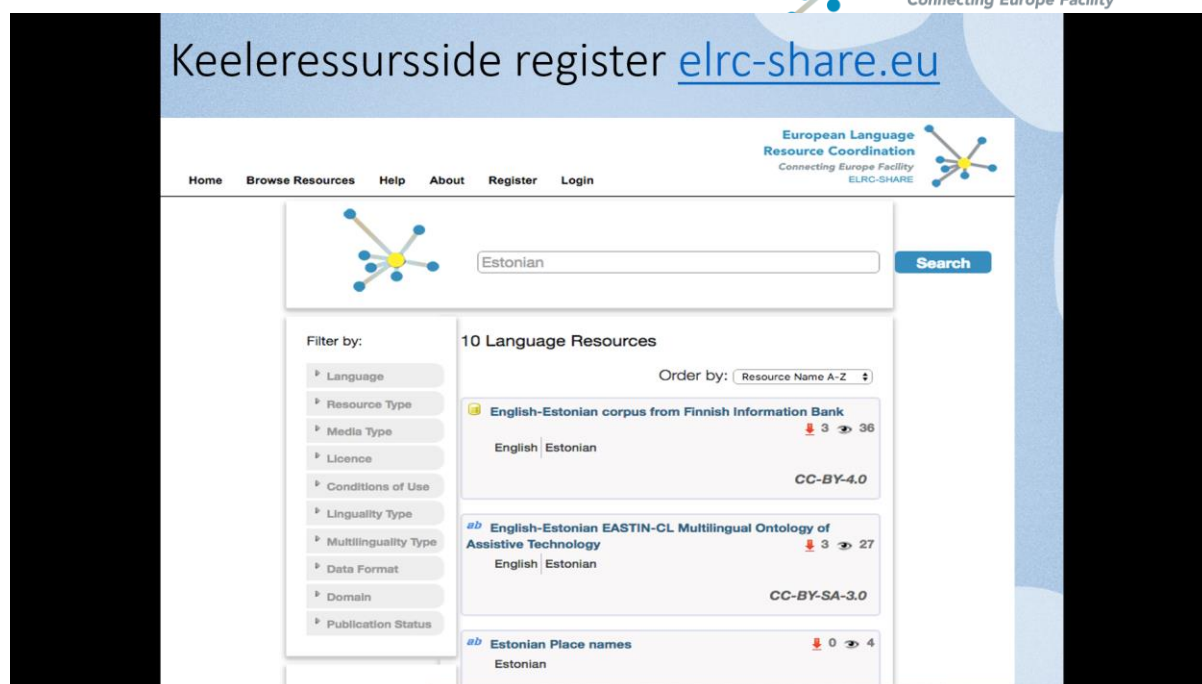


Image 9 <https://www.elrc-share.eu/> site showing some of the Estonian resources

3.5 Legal aspects of sharing language resources

Aleksei Kelli from the University of Tartu discussed the legal frameworks and their implications on language resource creation, re-use and modifications. He also discussed personal data protection including GDPR and its implications on language resource creation and sharing.



Image 10 Aleksei Kelli presenting Legal aspects of sharing language resources

The grounding principle being *Nemo plus iuris transfere (ad alium) potest quam ipse habet (Ulpianus)* -- a Latin phrase meaning 'no one can transfer a greater right than he himself has'. He described the exceptions for re-using LRs, also private data in LRs.

3.6 Translation Procurements in Estonian Public Sector

Inge Rätsep discussed the as-is practices of translation procurements in public sector and gave suggestions how to improve it. She emphasized the role of TMs re-use, technical tools that support it, cat-grid.

She suggested to use the following questionnaire while preparing a translation tender document

- The goal of translating?
- Language pairs, source and target languages?
- Volumes?
- Who will be managing translation memories?
- Who is the owner of translation memories?
- How long is the contractual period?

She also discussed the benefits of language technologies in translation procurements.

For future public sector translation procurements, she suggested to:

1. Consolidate related (per domain) procurements;
2. Create domain-specific TMs and terminology repositories and manages these resources together;
3. In addition to considering word price consider the total cost of the whole contracting period.

3.7 The CEF eTranslation platform @ work

Ingrid Sibul outlined the features of eTranslate, its user types and usage scenarios, evolution from MT@EC, security aspects of the system. She compared the statistical and NN based approached to MT. The presentation was concluded with a roadmap ahead.

Sibul described how eTranslation is used in N-Lex portal and the possibilities to carry out searches over several languages.

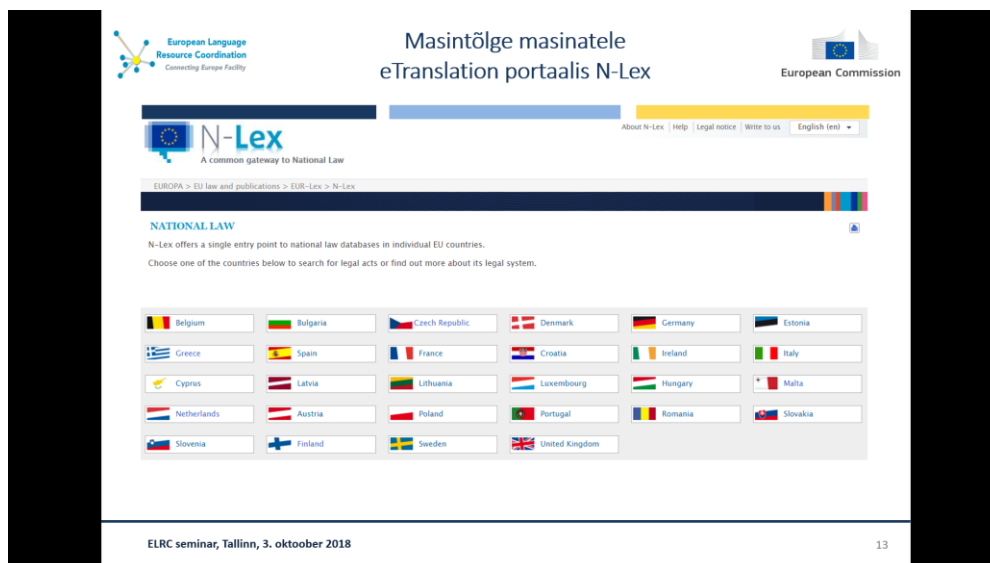


Image 11 eTranslation for N-Lex portal

Kelly Lilles from the Institute of Estonian Language introduced eTranslation Termbank project. The project is financed by CEF and Estonian Ministry of Education.

The goals of the project in Estonia is to collect and provide for eTranslation Estonian terminology resources in various domains with a focus on health, business legislation and consumer protection.



ELi digiteenused ja sõnavara

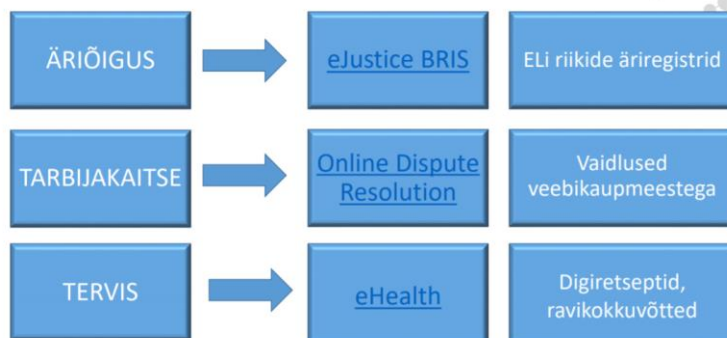


Image 12 Termbases for the project focus domains

So far the Institute of Estonian Language has collected over 53 termbases containing more than 18 000 entries, the majority of these are available with CC-BY license type.



Kogutud ressursside litsentsid



Image 13 license representation for 53 term collections

Project dedicated web part in Estonian language has been set up under Institute of the Estonian Language main Web page and can be accessed through following link: <http://portaal.eki.ee/tegevusvaldkonnad/2192-etranslation.html>. This page describes consortium and major objectives of the project.

4 Synthesis of Workshop Discussions

Highlight:

- The automated translation for English-Estonian has gone through a tremendous quality leap due to Neural Machine Translation.
- The public sector translation procurements have evolved compared to the previous ELRC workshop, the benefits of re-using TMs have been recognized by the state authorities.
- National programme on developing Estonian language technologies among other activities supports creation of language resources that may be of use for eTranslation.

5 Workshop Participants

The Estonian ELRC workshop received 73 registrations spanning a wide range of ministries and public organizations, and from LSPs and academia. Before the workshop the cold calling activities were organized in this way organizers were able to make sure that important public administration institutions were represented.

The workshop was well-attended – there were 49 participants. Table 1 illustrate distribution of participants per sectors.

Table 2 Distribution of participants per category

Sector	Number of participants	%
Public service administration	21	43%
Participants from LSPs	7	14%
Participants from technology eco-system	17	35%
Organizers	3	6%
EC	1	2%
TOTAL	49	

The full participants list can be viewed in the Appendix.



Image 14 Video welcoming



Image 15 Workshop participants

6 Appendix

6.1 Localised invitation letter

Lugupeetud kaasamõtteleja

Kutsume Teid osalema Euroopa keeleressursside koordineerimise (ELRC) Eesti seminaril, mis toimub 3. oktoobril Tallinnas Euroopa Liidu Maja infokeskuses, Rävala 4 (sissepääs Laikmaa tänavalt)..

ELRC on Euroopa Komisjoni Euroopa ühendamise rahastu (CEF) algatus. CEF pakub korduskasutatavaid ja digitaalseid alusteenuseid, mis on Euroopa ühendamiseks hädavajalikud. Kogu Euroopa avalike teenuste ühendatuse ja koostalitlusvõime kindlustamine võib käegakatsutavalt mõjutada Euroopa avalikke teenuseid, ettevõtteid ja kodanike igapäevaelu.

CEFi teenuste hulka kuuluv eTranslation-süsteem aitab ületada keelebarjääre, mis on tänapäeval nii Euroopa kui ka kohaliku tasandi avalikus halduses ühed peamised teabevahetust takistavad murekohad. Seetõttu on ELRC eesmärk tuvastada ja koguda riikliku avaliku halduse ja riiklike teenuste seisukohast olulisi keeleressursse, mille abil saaks eTranslation-süsteemi kohandada riiklike haldusasutuste vajadustega ning muuta avalikud digitaalteenused mitmekeelseks.

ELRC seminaril soovime koos Euroopa Komisjoni valdkonnaspetsialistidega, Eesti avaliku halduse ja valitsuse kõrgetasemeliste esindajatega, keeletehnoloogidega ning keeleteenuste osutajatega pidada lahendustele orienteeritud arutelu, mille käigus saaksime üksteisega jagada tänapäevase mitmekeelse avaliku halduse kogemusi ja vajadusi.

Samuti loodame ühiselt välja selgitada asjakohased mitmekeelsed keeleressursid, mis hõlbustaksid CEFi eTranslation-süsteemi kohandamist Eesti riigi avalike teenustega, ning käsitleda automaattõlke jaoks andmete kasutamise seostuvaid võimalikke tehnilisi ja õiguslikke murekohti.

Üksikasjaliku päevakorra leiate http://www.lr-coordination.eu/et/l2estonia_agenda.

Teie tagasiside ja osavõtt aitavad CEFi eTranslation-süsteemi Eesti avalikes teenustes sujuvamalt ja edukamalt kasutusele võtta. ELRC seminaril osalemine on tasuta, kuid üritusel osalemiseks on vaja ennast registreerida veebilehel <http://www.lr-coordination.eu/l2estonia>.

Vastame meelsasti teie küsimustele ning loodame teist peagi kuulda.

Lugupidamisega,

Pekka Myllylä

Tilde Eesti tegevjuht

pekka.myllyla@tilde.com

Tel. +372 533 37108

6.2 Localised agenda

09:00	Registreerimine ja hommikukohv
09:30 – 9:40	Sissejuhatus päeva <i>Pekka Myllylä, (Tilde EE)</i>
09:40 – 10:10	Tõlkimine DGT-s <i>Merit-Ene Ilja, (DG Translation)</i> Esitlus
10:10 – 10:35	Avalike teenuste piiriülesus, eesmärgid ja senised tulemused (video on inglise keeles) <i>DGCONNECT</i>
10:35 – 11:00	Ülevaade ELRC tegevustest (ettekanne on inglise keeles) <i>Andrejs Vasiljevs (ELRC, Tilde)</i>
11:00 – 11:30	<i>Coffe Break</i>
11:30 – 11:50	Mitmekeelsusega seotud väljakutsed Riigi Teataja näitel <i>Jüri Heinla (Ministry of Justice)</i> Esitlus
11:50 – 12:30	Eesti Keeletehnoloogia Programm ja selle rakendatavad tulemused <i>Kadri Vider, Kadri Vare, Keaty Siivelt (Estonian Language Resources Center, Ministry of Education)</i> Esitlus I Esitlus II
12:30 – 12:50	Keeleressursside korduvkasutuse õiguslikud aspektid <i>Aleksei Kelli (University of Tartu)</i> Esitlus

12:50 – 13:50

Lunch

Tõlkehanked avalikus sektoris

13:50 – 14:15

Inge Rätsep (ETBL, Interlex)

[Esitlus](#)

eTranslation automaattõlkeplatvormi rakendamine

14:15 – 14:40

Ingrid Sibul (EC), Kelly Lilles (EKI)

[Esitlus I](#), [Esitlus II](#)

14:40 – 14:50

Kokkuvõte

6.3 Localised press release

Euroopa ühendamine üle keelebarjääride:

Eesti positsioon Euroopa digitaalteenuste maastikul

Teine Euroopa keeleressursside koordineerimise Eesti seminar

Euroopa Liidu Maja, Rävåla pst. 4.

3. oktoober 2018

Korraldajad:

Euroopa Komisjoni kirjaliku tõlke peadirektoraat

Euroopa keeleressursside koordineerimise konsortsium

Tilde Eesti

2014. aastal asutas Euroopa Komisjon Euroopa Ühendamise Rahastu (CEF), mille eesmärk on toetada üleeuroopalise transpordi-, telekommunikatsiooni- ja energeetikavõrgustiku ning -taristu arendamist, mis võimaldaks välja kujundada 28 Euroopa Liidu liikmesriigi, Islandi ja Norra digitaalse ühisturu. CEFi üks peamisi sihte on töötada välja ja pidada käigus mitmesuguseid digitaalteenuste taristuid (DSI), mis muudaksid sujuvamaks piiriülese suhtluse riigiasutuste, ettevõtete ja tavakodanike vahel. Need digitaalteenuste taristud on korduskasutatavad digitaalsed alusteenused, mis loovad vajalikud tingimused Euroopa ühendamiseks muuhulgas tarbijaõiguste, tervishoiu, avalike hangete, sotsiaalkindlustuse ja kultuuri vallas.

CEFi teenuste hulka kuuluv eTranslation-süsteem aitab ületada keelebarjääre, mis on tänapäeval nii Euroopa kui ka kohaliku tasandi avalikus halduses ühed peamised teabevahetust takistavad murekohad. Seetõttu on Euroopa keeleressursside koordineerimise (ELRC) eesmärk tuvastada ja koguda riikliku avaliku halduse ja riiklike teenuste seisukohast olulisi keeleressursse, mille abil saaks eTranslation-süsteemi kohandada riiklike haldusasutuste vajadustega ning muuta avalikud digitaalteenused mitmekeelseks.

Eesti on Euroopa keeleressursside koordineerimise tegevuses osalenud alates 2015. aastast ning toetab algatuse nägemust ja sihte täielikult. Kuid Eesti ja eesti keele positsiooni tugevdamiseks digitaalsel ühisturul nii saab kui ka tuleb veel palju ära teha.

Just seetõttu korraldabki ELRC nüüd – kaks aastat pärast esimest, edukat ja 30 eri riigis aset leidnud seminarivooru – Euroopa Komisjoni nimel Eestis järgmise seminari, mis toimub 3. oktoobril Tallinnas Euroopa Liidu Majas. Seminaril arutatakse Eesti positsiooni ja väljavaateid digitaalselt ühendatud mitmekeelses Euroopas. Lisaks käsitletakse e-riigiga, mitmekeelsusega ja avaandmetega seotud asjakohaseid riiklike strateegia- ja tegevuskavasid, mille toel saab Eesti tõhustada Euroopa Komisjoni algatuste mõju. Soovime Euroopa Komisjoni valdkonnaspetsialistidega, Eesti avaliku halduse ja valitsuse kõrgetasemeliste esindajatega, keeletehnoloogidega ning keeleteenuste osutajatega pidada lahendustele orienteeritud arutelu, mille käigus jagame üksteisega tänapäevase mitmekeelse avaliku halduse kogemusi ja vajadusi. Samuti selgitame välja asjakohased mitmekeelsete andmete allikad, mis aitavad kohandada CEFi eTranslation-süsteemi Eesti riigi avalike teenustega, ning käsitleme automaattõlke jaoks andmete kasutamise seostuvaid võimalikke tehnilisi ja õiguslikke murekohti.

Seminari sihtrühma kuuluvad avalike digitaalteenuste osutajad, riigiasutuste juhid, ametnikud ja partnerid, tõlkijad ning mitmekeelsete dokumentide ja andmete haldamisega tegelevad inimesed.

Seminar on osalejatele tasuta, kuid üritusest osavõtmiseks tuleb ennast registreerida veebilehel http://www.lr-coordination.eu/et/l2estonia_registration.

Lisateave

ELRC	www.lr-coordination.eu
ELRC Eesti seminar	www.lr-coordination.eu/et/l2estonia
Registreerimine	http://www.lr-coordination.eu/et/l2estonia_registration