# Deliverable Task 6

# ELRC Workshop Report for Estonia

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# Contents

# 1    ELRC Workshop in Estonia

The Estonia ELRC Workshop took place in Tallinn, on the 11th of February 2016, at the office of the European Commission Representation in Estonia. The workshop was co-organized by the ELRC Representative in Estonia – Tilde, Estonian Language Resource Centre and Office of the European Commission Representation in Estonia.

An event-dedicated web part in Estonian was set up at the ELRC website before the event, at http://lr-coordination.eu/et/avaleht. The page was populated with the agenda (http://lr-coordination.eu/estonia_agenda) and the online registration form (http://lr-coordination.eu/et/estonia_registration).

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, signed by the EC (Saila Rinne, signed by hand) and countersigned by all co-organizers (Hannes Rumm, Kadri Vider, Margit Kurm; all digitally signed), cf. Appendix 6.1. The personalized invitations were sent through the account tallinn@lr-coordination.eu which was created for this event communication purposes. The list of persons invited to the event is provided in Appendix **Error! Reference source not found.**. The invitation was followed by a personal e-mail and calls to the persons to whom invitations were sent. A reminder and updated information was sent out to all registered participants a couple of days before event.

The event was voice recorded and videos (slides synchronized with the voice recordings, both in original, Estonian and English) are available on Workshop dedicated Web.

## 2  Workshop Agenda

The workshop agenda was based on a "master" agenda agreed with the EC, the agenda was adopted for the local needs.

**Agenda for CEF.AT - ELRC Training Workshop**
**(European Language Resource Coordination)**
**Office of the European Commission Representation in Estonia**
**Rävala pst 4, Tallinn**

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|---|---|
| 9:00 – 9:30 | **Registration and coffee** |
| 9:30 – 9:55 | **Opening and welcome** |
| | **Saila Rinne**, EC DG CONNECT |
| | **Jana Laurend**, European Commission Representation in Estonia |
| | **Kadri Vider**, Center of Estonian Language Resources |
| | **Andrejs Vasiljevs**, ELRC/Tilde |
| 9:55 – 10:30 | **Multilingualism in Europe** |
| | **Saila Rinne**, EC DG CONNECT |
| 10:30 – 11:00 | **The Estonian Language in the Digital Age** |
| | **Kadri Vider**, Center of Estonian Language Resources |
| 11:00 – 11:35 | **Panel: Multilingual Public Services in Estonia** |
| | **Katrin Ringo**, State Information System Authority, state portal eesti.ee |
| | **Remo Tiigirand**, Enterpise Estonia, e-Residency project |
| | **Aleksandr Beloussov**, Centre of Registers and Information Systems |
| 11:35 – 12:05 | **Coffee break** |
| 12:05 – 12:30 | **Future of Translation** |
| | **Rihards Kalniņš**, ELRC/Tilde |
| 12:30 – 12:50 | **Automated translation: How does it work? Use cases** |
| | **Mark Fishel**, Tartu University |
| | **Martin Luts**, ELRC/Tilde |
| 12:50 – 13:25 | **Panel: Bilingual Data in the Information Systems of Institutions** |
| | **Kaja Kell**, Bank of Estonia |
| | **Helve Trumann**, Chancellery of the Riigikogu |
| | **Kadri Vider**, Center of Estonian Language Resources |
| | **Margit Kurm**, ELRC/Tilde |

| 13:25 – 13:45 | **Legal Framework**<br>**Viljar Peep**, Estonian Data Protection Inspectorate |
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| 13:45 – 14:45 | **Lunch** |
| 14:45 – 15:15 | **How Can Public Institutions Benefit from CEF .AT?**<br>**Saila Rinne**, EC DG CONNECT |
| 15:15 – 15:30 | **How to Prepare the Data of Institutions for Automated Translation?**<br>**Andrejs Vasiļjevs**, ELRC/Tilde |
| 15:30 – 16:15 | **Teamwork and coffee** |
| 16:15 – 16:30 | **Wrap-up** |

# 3 Workshop Participants

The Estonian ELRC workshop received 74 registrations spanning a wide range of ministries and public organizations. The workshop was well-attended – there were 66 participants. Before the workshop we organized cold calling activities, as a result we got more contacts and suggestions who would be better candidates considering the theme of the workshop. Furthermore, in this way we were able to make sure that important public administration institutions were represented.

The full participants list can be viewed in the Appendix **Error! Reference source not found.**.

# 4 Summary of the Content of Sessions

## 4.1 Session 1: Opening addresses

Jana Laurend, the language specialist of the EC Representation in Estonia, opened the event by welcoming the audience and introducing the key persons in conceiving and organizing the event, namely the ELRC consortium and the EC/DGT representatives. She also remembered from her work experience as an EU translator how machine translation helped translators of other languages, but unfortunately not yet for the Estonian language.

Saila Rinne, programme officer for EU Policies, DG Connect, introduced to the audience the European Commission's project for building CEF.AT and the role of language resources. She expressed her thanks to the local organizers for helping to organize the workshop.

Andrejs Vasiļjevs, the local ELRC representative, welcomed the audience on behalf of the consortium. He described the crucial role that language technology development has for smaller languages in order for them to survive in the digital era and the importance of cooperation in collecting language resources for building CEF.AT. He also gave an overview of the ELRC consortium's activities and expressed his thanks for seeing so many participants.

Kadri Vider, the head of the Center of Estonian Language Resources, also welcomed the audience on behalf of her organization, being one of the co-organizers of the event.

## 4.2 Session 2: "Multilingualism in Europe"

Saila Rinne, programme officer for EU Policies, DG Connect, began the first session following the opening addresses: "Multilingualism in Europe." Ms. Rinne described the importance of linguistic diversity at the EU, home to 24 official EU languages and a total of about 60 major "regional/minority" languages. She stressed that the equality of the EU official languages is enshrined in the European legal basis, therefore the EU is committed to supporting multilingualism.

This was also the basis for the EU's strong initiative to support language technologies, such as machine translation. This support is exemplified in the creation of the MT@EC system for public administrations, as well as in the deployment of mature language technologies through the Connecting Europe Facility (CEF) programme.

Rinne went on to describe the EU's Digital Single Market strategy and the ways in which language barriers affect public and private services. According to Rinne, pan-European public services currently face a multilingual challenge. There is no lingua franca among public administrations in Europe and 90% of EU web users prefer to use their own language for online services. The traditional method used to counter this – human translation – is too expensive and too slow with the intended text volumes. Therefore, human translation is not a solution in all use scenarios.

The EU's solution to the challenge is to build a pan-European automated translation platform, CEF.AT, which will make European public online services multilingual by deploying mature language technologies (such as MT@EC) in a secure platform. The goals are to make public digital services equally usable by all EU users, irrespective of their working language and language skills, as well as to facilitate cross-border information exchange in public administration.

Rinne concluded by detailing the role of member states in the creation of CEF.AT, namely, the sharing of language resources as part of the ELRC project. Rinne said that by contributing resources, member states could help improve the quality of the CEF.AT systems and then enjoy the benefits of automated translation: the reduction of language barriers in Europe.

## 4.3 Session 3: "The Estonian Language in the Digital Age"

This session featured one speaker: Kadri Vider, head of the Center of Estonian Language Resources.

This session discussion focused on the Estonian language in the digital age – examining the status of "digital extinction" for Estonian and the measures that are available to support the language today.

In her presentation, Kadri Vider gave an overview about language technology and what has been done for the Estonian language so far. She mentioned that Estonia is very fortunate as we have the Estonian law and language development program (which also contains a language technology support development measure). And in order to fulfill the objectives, we have the National Language Program and the results of its projects are free for everybody. She described different ongoing projects. Also, she introduced the work of the Center of Estonian Language Resources – CLARIN and METANORD networks partner. She described how the Center is collecting language resources and what resources they already have and called for cooperation in sharing and donating language resources.

## 4.4 Discussion 1: "Multilingual Public e-Services in Estonia"

The panelists were: Katrin Ringo, State Information System Authority, state portal eesti.ee; Remo Tiigirand, Enterprise Estonia, e-Residency project; Aleksander Beloussov, Centre of Registers and Information Systems.

Mr. Beloussov kicked off the session by introducing the wide range of registers managed by the Centre of Registers and Information Systems. These registers include: e-Business Register, e-Notary, e-Land Register, Court Information System, Criminal Records Database, e-File, electronic State Gazette. He pointed out which e-services are available for the end-users not only in Estonian but also in English. He outlined the obstacles for (automated) multilingual services.

Mr. Tiigirand continued the session by speaking about his organization's effort regarding the e-Residency program: project timeline, number of applicants etc. He elaborated on the variety of motivators for applying for an e-Residency in Estonia, the two major ones being setting up a business in Estonia and investing here. He discussed the language barriers for these activities encountered by the e-Residents.

Finally, Ms. Ringo presented her work with the state portal eesti.ee, focusing on multilingual public e-services: a mixture of information sharing, requests, e-forms, e-signature etc. She described shortly the end-users of the portal: citizens, businesses, officials. The short descriptions of the services are human-translated into English and Russian, only one service is fully multilingual (e-prescriptions, trilingual). E-forms are only available in Estonian. Translation practice and the future scenarios were discussed shortly.

## 4.5 Session 4. "Future of Translation"

This session featured one speaker: Rihards Kalniņš, ELRC/Tilde.

Mr Kalniņš started by talking about the role of machine translation in the European and world context, giving examples about e-services and e-commerce from all over the world and also about translating user feedback. He then moved on from the business sphere to the sphere of governance. He described the approach of automated translation that is used in Latvia and was used during Latvia's presidency of the Council of the EU, giving examples of use situations: information to journalists, guests and tourists. Mr Kalniņš then delved into depths of the corresponding machine translation system, describing the data needed for creating such a system. He outlined the channels through which the service can be used. He raised the following question: how prepared is Estonia for fulfilling its role of presidency and offering bilingual information and services?

## 4.6 Session 5: "Automated Translation: How does it work and what is it used for? Use cases"

This session featured two speakers: Martin Luts, ELRC/Tilde and Mark Fishel, Tartu University.

Mr Luts introduced a study conducted among Estonian public officials about their translation practices.

Dr. Fishel gave a brief overview of the technical basics of automated translation. He introduced modern statistical machine translation, giving examples of statistical systems and how they are used in the decoding process. He showed some examples and counter-examples of good machine translation outputs, discussing the root causes. He outlined the use cases where using MT is beneficial (postediting among others). He talked about how sentence and word alignment functions, giving some interesting examples to help explain the complex points. Mr Fishel also introduced the MOSES core.

In conclusion, Dr. Fishel stressed the importance of language resources – monolingual data, bilingual data, glossaries, etc. – in building high-quality MT engines. He explained how much data was necessary for building systems, as well as the clear benefits of training domain-based MT systems. Also, segregation of duties (MT trainer and client) were proposed.

## 4.7 Discussion 2: "Bilingual Data in the Information Systems of Institutions"

This session featured four speakers: Kaja Kell, Bank of Estonia; Helve Trumann, Chancellery of the Riigikogu (Parliament); Kadri Vider, Center of Estonian Language Resources; Margit Kurm ELRC/Tilde.

Margit Kurm from ELRC/Tilde reminded that a good source of bilingual data is translation procurements, each year there are 15-23 different tenders from different state institutions and it is good to ask back bilingual files. She also talked about the usage of translation memories.

Helve Truman from the Chancellery of the Parliament talked how translation is organized in their office, what tools they use and what they are translating.

Kaja Kell from Bank of Estonia shared their experience and mentioned how important it is to review old translations and terminology among other state classificators as it affects terminology and understanding on such a large scale.

Kadri Vider called the participants to think what resources they may have to improve MT and donate them to the Language Resources Center. All material is good for teaching a MT system. She also gave several samples.

## 4.8 Session 6: "Legal Framework"

In his presentation at the session on "Legal Framework," Viljar Peep (the director of the Estonian Data Protection Inspectorate) concentrated on the legal aspects of reusing data in automated translation. First he gave an overview about the legal framework, e.g. Personal Data Protection Act, Public Information Act. He didn't concentrate on copyright law or license law. He demonstrated how personal data can be made impersonal and showed other legal means for promoting the reuse of data.

## 4.9 Session 7: "How Can Public Institutions Benefit from Automated Translation Infrastructure?"

In this session, a representative of the European Commission, Saila Rinne, of DG Connect detailed how public institutions can benefit from automated translation infrastructure.

Ms. Rinne discussed the importance of enabling multilingualism; the role of machine translation in doing so; the European Commission's current MT service MT@EC; and future plans to build the CEF.AT platform. ELRC is working toward building CEF.AT. Rinne talked about the current interaction between actors in the member states and the EU.

Rinne then discussed MT, which as she explained, is the only viable solution for the following: quick and cheap access to information in foreign languages; understanding information received in a foreign language that otherwise could not be used or would require substantial time and costs to translate; making multilingual use of websites possible; and facilitating cross-lingual information search and analytics.

According to Rinne, these benefits are apparent in the EC's current MT service, MT@EC, launched in 2013. MT@EC is a SMT system based on Moses. The system can be used to translate multiple documents in multiple languages and is currently used by EU institutions and bodies.

In the future, Rinne said, MT@EC will evolve into CEF.AT. CEF.AT will build on the existing MT@EC service but not be limited to it; put emphasis on secure, high-quality, customizable MT for pan-European online services but not be limited to them; and be a multilingualism enabler – not only MT.

### 4.10 Session 8: "How to Prepare Data for Automated Translation"

In this final session, Andrejs Vasiļjevs of ELRC/Tilde began by illustrating how the volume of data impacts machine translation quality. Then, he listed various data sources in organizations – from dictionaries to bulky publications, from archives and intranet to translation companies and open data. He went on to describe the process of managing the life cycle of data, enriching it with metadata, aligning data and also talked about the terminology service TaaS and machine translation platforms. Finally, he encouraged users to share data and recommended the first steps on that road, including the ELRC helpdesk service.

### 4.11 Session 9: "Closing remarks"

The closing session consisted of brief closing remarks from the main organizers of the event: Andrejs Vasiļjevs of ELRC/Tilde and Saila Rinne of DG Connect.

The speakers once again stressed the need for collaboration not only between EU member states but also by individual institutions within each country. Only by collaborating and sharing resources can the vision of CEF.AT finally be realized, reducing language barriers in Europe.

# 5   Workshop Presentation Materials

Presentations of the workshop can divided into two categories – based on master slides (adopted for local auditory) and presentations prepared by panel discussion participants. All presentations are provided on the ELRC Tallinn Workshop website (http://lr-coordination.eu/estonia_agenda). This website contains all presentations in .pdf format that are supplemented with video recordings of presentations. Two types of video are provided – in original language and voice over translations into English for presentations originally in Estonian and voice over translations into Estonian for presentations in English. In addition .pdf format presentations are stored in the respective Dropbox folder: Dropbox\ELRC European Commission\T6 Workshops\Trial Workshop Estonia.

To provide more information about the workshop's topic, a dedicated ELRC Tallinn Workshop brochure was prepared. The brochure was adjusted to the style of the ELRC web page. The brochure provides information about multilingualism, CEF.AT and CEF activities, ELRC (activities and consortium), important resources. In addition, there is information about activities in Estonia regarding the automated translation solution for public administration. The brochure is provided in Appendix 6.3.



**Picture 1 Snapshot of Workshop Web page**

# 6 Appendix

## 6.1 Invitation Letter (in Estonian)

Following invitation letter was sent out to list of 112 invites. The invitations were sent through the account Tallinn@lr-coordination.eu which was created for this event communication purposes.

Hea kolleeg

Kutsume teid Eesti avaliku sektori automaattõlkeseminarile, mis toimub 11. veebruaril 2016 Euroopa Komisjoni Eesti esinduses aadressil Rävala 4, Tallinn.

Keeltel ja keelelisel mitmekesisusel on Euroopa kultuuris, ettevõtluses ja koostöös keskne roll. Selleks et hõlbustada nii Euroopa Komisjoni ja Euroopa riigiasutuste vahelist kui ka Euroopa riigiasutuste omavahelist mitmekeelset suhtlust ning dokumendivahetust, on Euroopa Komisjon loonud programmi „Connecting Europe Facility" (CEF, Euroopa ühendamise rahastu) raames automaattõlkeplatvormi CEF AT. Avaliku sektori asutused saavad seda kasutada tasuta. Platvorm põhineb MT@EC masintõlkesüsteemil, mille on välja töötanud Euroopa Komisjoni kirjaliku tõlke peadirektoraat ja mis on nüüd antud liikmesriikide riigiasutuste käsutusse. CEF-i programmi raames rakendamine avardab tõlkesüsteemi kasutusala, parendab selle kvaliteeti ning valmistab süsteemi ette selleks, et seda saaks edaspidi kasutada üleeuroopalistes avaliku sektori veebiteenustes.

Soovime seminaril osalejad kaasata aktiivselt aruteludesse ja loodame, et nad aitavad meil paremini mõista mitmekeelses töökeskkonnas töötavate inimeste vajadusi. Meie eesmärk on viia eestikeelne automaattõlge nende vajadustega vastavusse. Täpse ajakava leiate kirja manusest. Seminari viivad läbi Euroopa Komisjoni selle ala eksperdid, keeletehnoloogid ja keeleteenuste pakkujad. Soovime saada selgust selles, mida ootate automaattõlkelt, ning ühtlasi välja selgitada, millised on teie asutuse mitmekeelsed keeleressursid. Koos Andmekaitse Inspektsiooni esindajaga arutame ka automaattõlgetega seotud tehnilisi ja õiguslikke küsimusi. Seetõttu on teie osalemine väga oluline – tänu teie tagasisidele saame automaattõlke kujundada just teie vajadustele vastavaks.

Kui olete huvitatud automaattõlke kasutamisest oma asutuses või soovite olla kursis selle praeguste võimalustega ja viimase aja edusammudega, olete oodatud osalema. Registreeruge aadressil http://www.lr-coordination.eu/events/eesti_registration/. Küsimuste korral võtke palun ühendust seminari kohaliku koordinaatoriga: tallinn@lr-coordination.eu. Täpsemat infot seminaride sarja ja antud seminari kohta vaadake veebilehelt http://www.lr-coordination.eu/events/. Jääme ootama teie vastust.

Lugupidamisega

Saila Rinne, European Commission, DG CONNECT

Hannes Rumm, Euroopa Komisjoni esindus Eestis

Kadri Vider, Eesti Keeleressursside Keskus

Margit Kurm, Tilde

### 6.2 Agenda (in Estonian)

Workshop agenda was based on "master" agenda agreed with EC, agenda was adopted for the local needs.

**Agenda for CEF.AT - ELRC Training Workshop**
**(European Language Resource Coordination)**
**Office of the European Commission Representation in Estonia**
**Rävala pst 4, Tallinn**

| | |
|---|---|
| 9:00 – 9:30 | **Registreerimine ja kohv** |
| 9:30 – 9:55 | **Avamine ja tervitussõnad**<br>**Saila Rinne**, EC DG CONNECT<br>**Jana Laurend**, Euroopa Komisjoni esindus Eestis<br>**Kadri Vider**, Eesti Keeleressursside Keskus<br>**Andrejs Vasiljevs**, ELRC/Tilde |
| 9:55 – 10:30 | **Mitmekeelsus Euroopas**<br>**Saila Rinne**, EC DG CONNECT |
| 10:30 – 11:00 | **Eesti keel digiajastul**<br>**Kadri Vider**, Eesti Keeleressursside Keskus |
| 11:00 – 11:35 | **Arutelu: mitmekeelsed avalikud teenused Eestis**<br>**Katrin Ringo**, RIA riigiportaal eesti.ee<br>**Remo Tiigirand**, EAS, e-residentsuse projekt<br>**Aleksandr Beloussov**, RIK |
| 11:35 – 12:05 | **Kohvipaus** |
| 12:05 – 12:30 | **Tõlkimise tulevik**<br>**Rihards Kalniņš**, ELRC/Tilde |
| 12:30 – 12:50 | **Automaattõlge: kuidas see toimub? Kasutusstsenaariumid**<br>**Mark Fishel**, Tartu Ülikool<br>**Martin Luts**, ELRC/Tilde |
| 12:50 – 13:25 | **Arutelu: kakskeelsed andmed asutuste infosüsteemides**<br>**Kaja Kell**, Eesti Pank<br>**Helve Trumann**, Riigikogu Kantselei<br>**Kadri Vider**, Eesti Keeleressursside Keskus<br>**Margit Kurm**, ELRC/Tilde |

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|---|---|
| 13:25 – 13:45 | **Õigusraamistik**<br>**Viljar Peep**, Andmekaitse Inspektsioon |
| 13:45 – 14:45 | **Lõuna** |
| 14:45 – 15:15 | **Kuidas saab automaattõlkeplatvorm CEF AT riigiasutustele kasulik olla?**<br>**Saila Rinne**, EC DG CONNECT |
| 15:15 – 15:30 | **Kuidas asutuse andmeid automaattõlkeks ette valmistada?**<br>**Andrejs Vasiljevs**, ELRC/Tilde |
| 15:30 – 16:15 | **Rühmatöö ja kohv** |
| 16:15 – 16:30 | **Kokkuvõte** |

## 6.3 ELRC Workshop Brochure (in Estonian)



**Keelte mitmekesisus –
Euroopa nurgakivi**

Euroopa keeleressursside koordineerimise seminar

Tallinn, Eesti
11. veebruar 2016

**Figure 1 Front cover of Brochure**

**Picture 2 Page 1 and page about multilingualism in Europe**

**Picture 3 CEF.AT and ELRC activities**

**Picture 4 Language resources and ELRC consortium**

**Picture 5 Agenda**

Korraldajad

European Commission

European Language Resource Coordination
Connecting Europe Facility

Eesti Keeleressursside Keskus

Eesti koordinaator

TILDE

Veebisait: www.lr-coordination.eu/
E-post: tallinn@lr-coordination.eu

**Picture 6 Back cover**