



The CEF eTranslation platform @ work

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ELRC Workshop, Malta, 1 November 2019



eTranslation platform at a glance



eTranslation

MT@EC

- Legalese
- Statistical machine translation (Moses)

Domain adaptation

- Improved web interface
- Integration with online public services
- Cloud based
- Neural engines

CEF.AT

- More NLP tools (transliteration, named entity recognition etc.)
- Generic services

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eTranslation platform at a glance

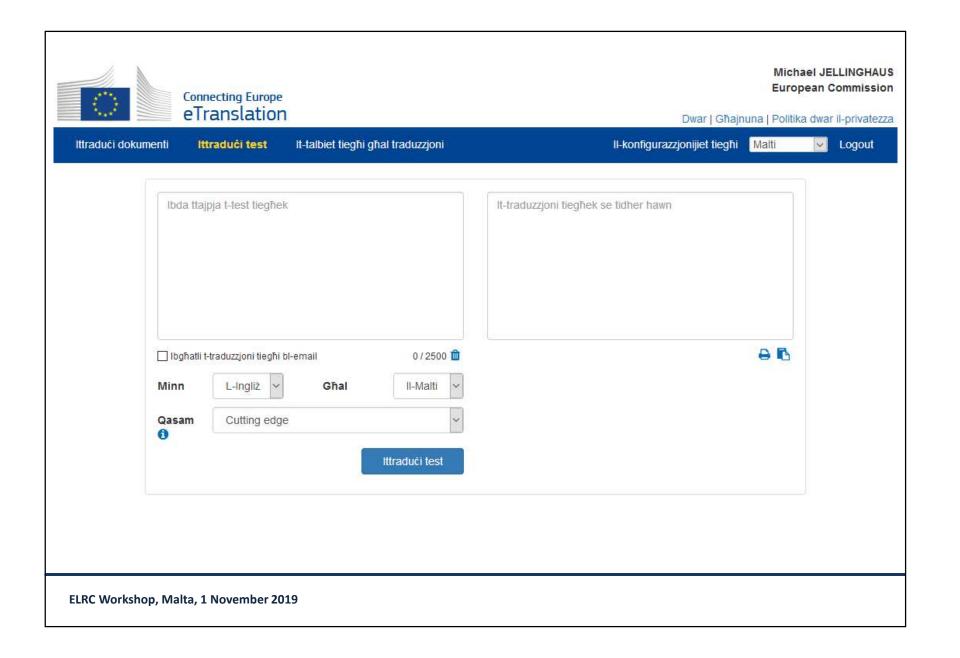


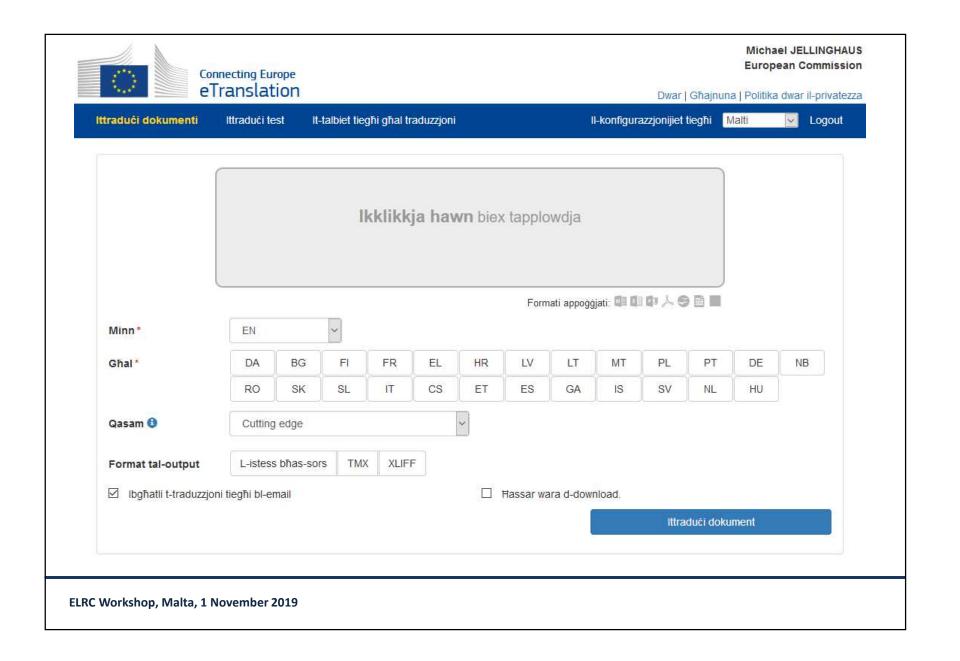
Available for:

- individuals (submit documents / text snippets through a web page)
- machine-to-machine use

Users:

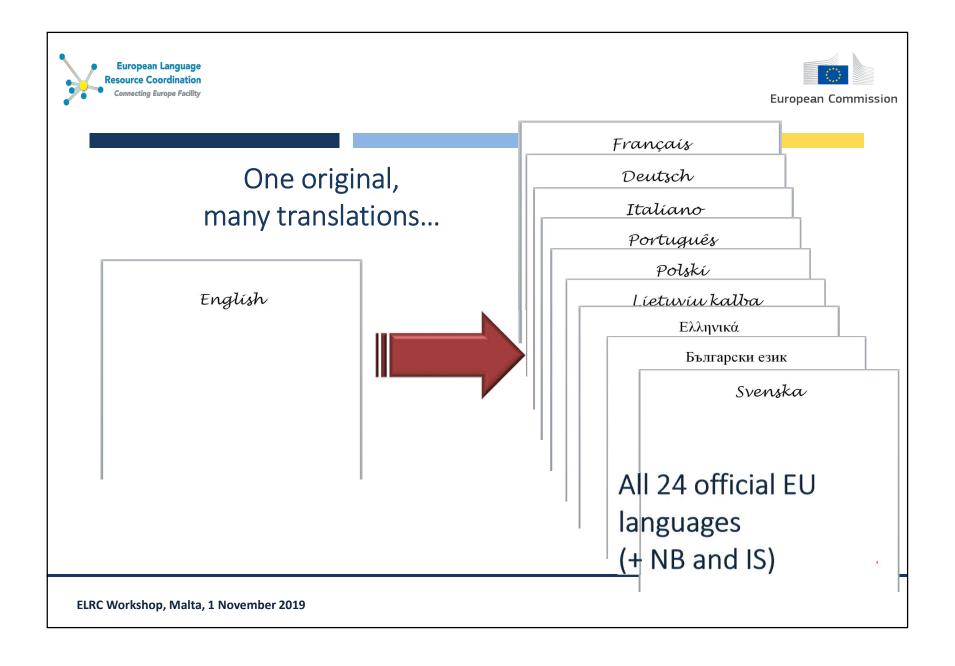
- EU institutions (translators and other staff)
- Digital Service Infrastructures (EESSI, ODR, Open Data Portal, e-Justice Portal etc.)
- System suppliers (EURLex, N-Lex, Internal Market Information system etc.)
- Individuals in public administrations

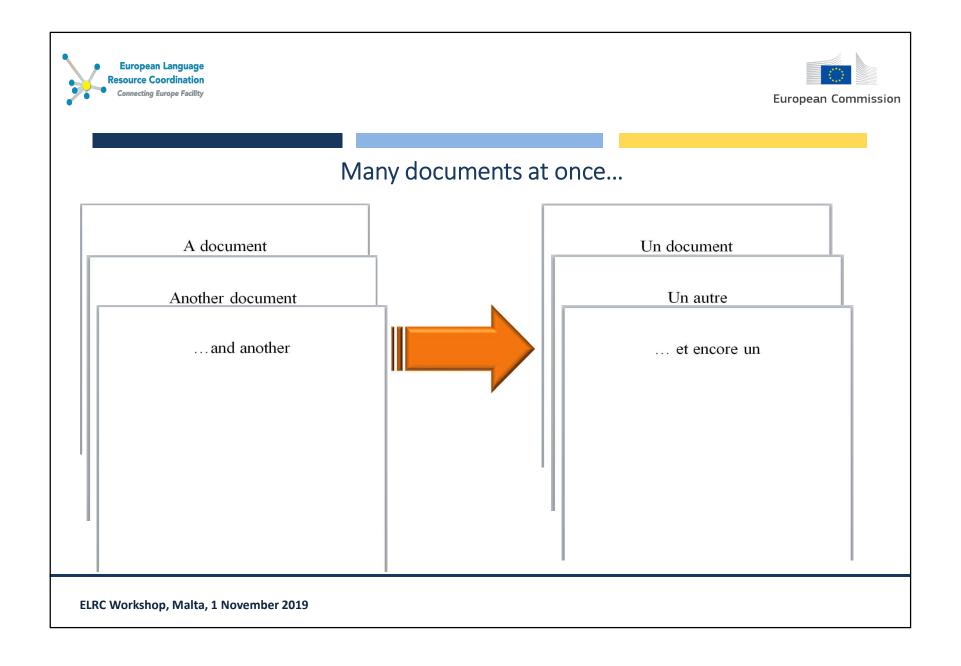
















eTranslation protects your privacy

- All documents deleted after 24 hours or after delivery (on demand)
- Intellectual property rights transferred (Your translation belongs to YOU!)

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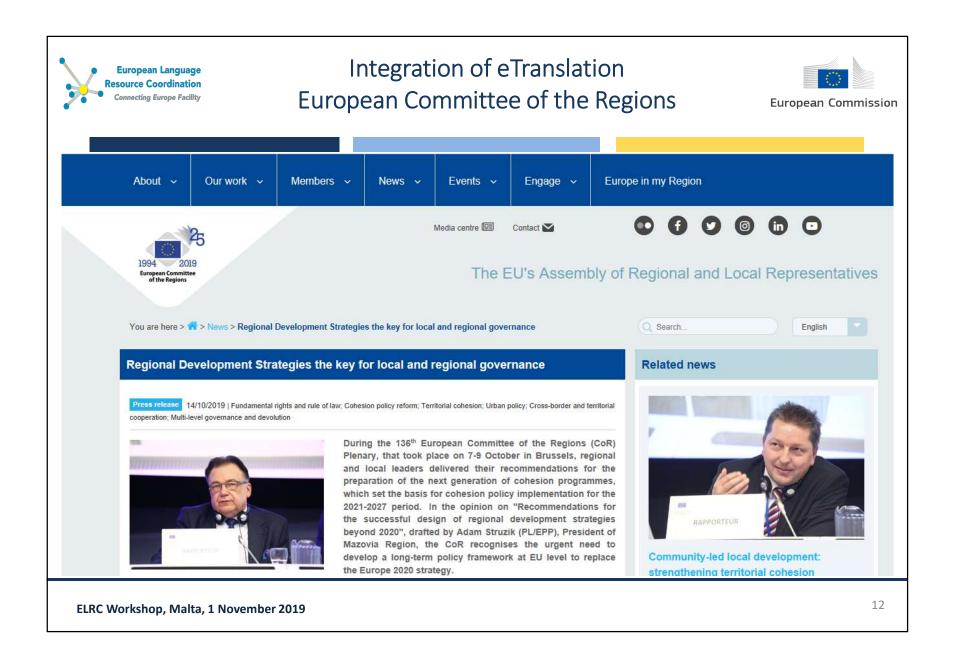


No one

looking

at your translations!

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Regional Development Strategies the key for local and regional governance

Traduzzjoni awtomatika

?

Press release 14/10/2019 | Fundamental rights and rule of law; Cohesion policy reform; Territorial cohesion; Urban policy; Cross-border and territorial cooperation; Multi-level governance and devolution



During the 136th European Committee of the Regions (CoR) Plenary, that took place on 7-9 October in Brussels, regional and local leaders delivered their recommendations for the preparation of the next generation of cohesion programmes, which set the basis for cohesion policy implementation for the 2021-2027 period. In the opinion on "Recommendations for the successful design of regional development strategies beyond 2020", drafted by Adam Struzik (PL/EPP), President of Mazovia Region, the CoR recognises the urgent need to develop a long-term policy framework at EU level to replace the Europe 2020 strategy.

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136th European Traduzzjoni awtomatika pprovduta mist took place on servizz eTranslation tal-Kummissjoni eaders delivere

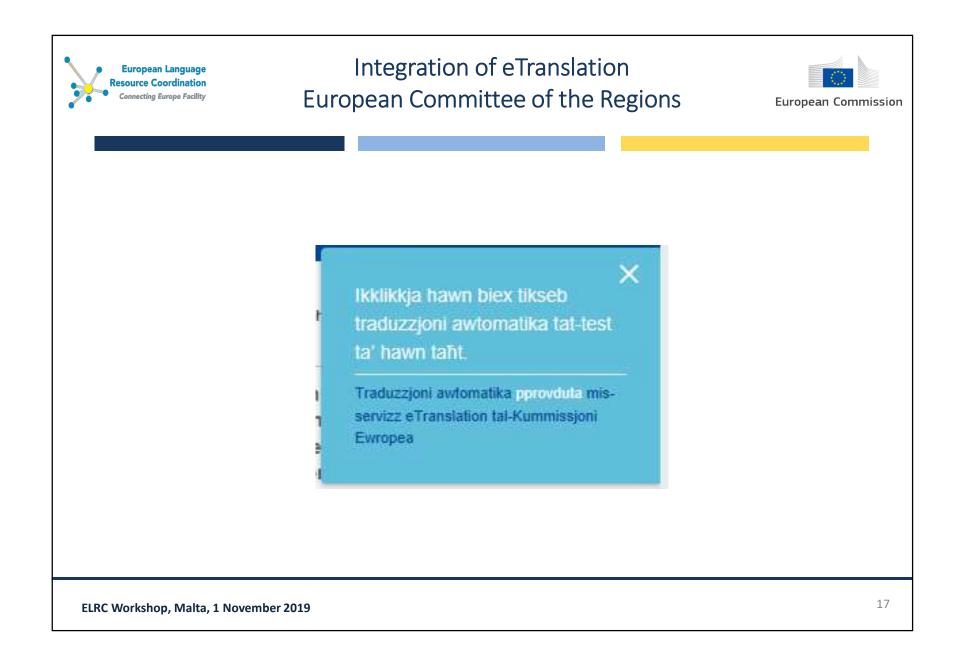
ta' hawn tant.

Ikklikkja hawn biex tikseb

traduzzjoni awtomatika tat-test

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Strateģiji ta' Żvilupp Reģjonali ewlenija għall-governanza lokali u reģjonali

Ara t-test originali

?

Stqarrija ghall-istampa 14/10/2019 Drittijiet fundamentali u stat tad-dritt; Ir-riforma tal-politika ta' koežjoni; Il-koežjoni territorjali; Il-politika urbana; Il-kooperazzjoni transkonfinali u territorjali; Il-governanza f'diversi livelli u d-devoluzzjoni



Matul is-136 Plenarja tal-Kumitat Ewropew tar-Reģjuni (KtR), li saret fit-7-9 ta' Ottubru fi Brussell, il-mexxejja reģjonali u lokali taw ir-rakkomandazzjonijiet taghhom ghat-thejjija tal-ģenerazzjoni li jmiss ta' programmi ta' koeżjoni, li stabbilixxew il-bażi ghall-implimentazzjoni tal-politika ta' koeżjoni ghall-perjodu 2021–2027. fl-opinjoni dwar "Rakkomandazzjonijiet ghat-tfassil b'suċċess ta' strateģiji ta' żvilupp reģjonali lil hinn mill-2020", abbozzat minn Adam Struzik (PL/PPE), President tar-Reģjun ta' Mazovia, il-KtR jirrikonoxxi l-htieģa urģenti li jiģi żviluppat qafas ta' politika fit-tul fil-livell tal-UE biex tiģi sostitwita l-istrateģija Ewropa 2020.

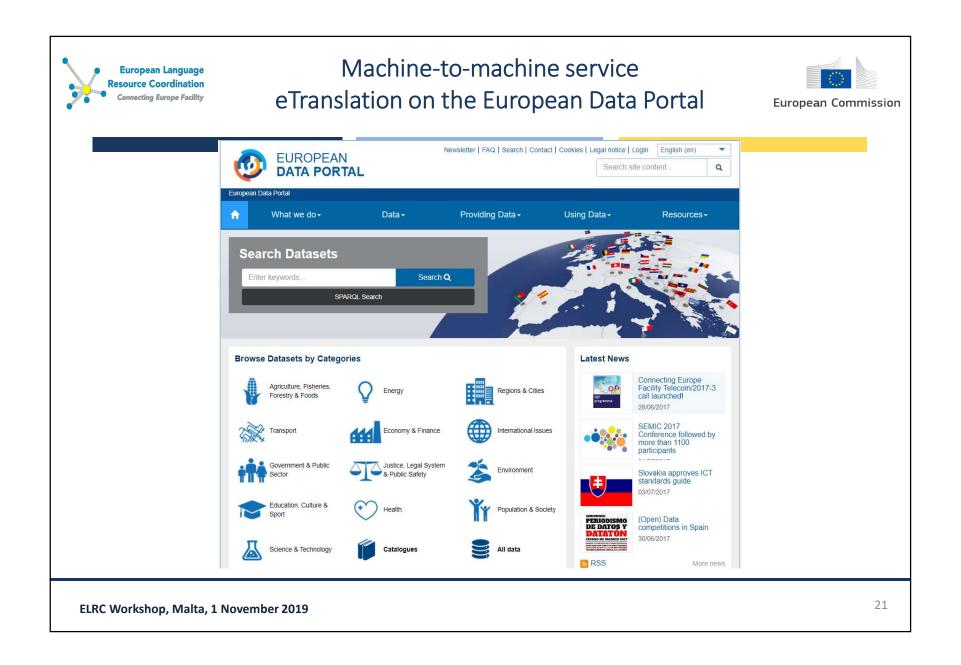
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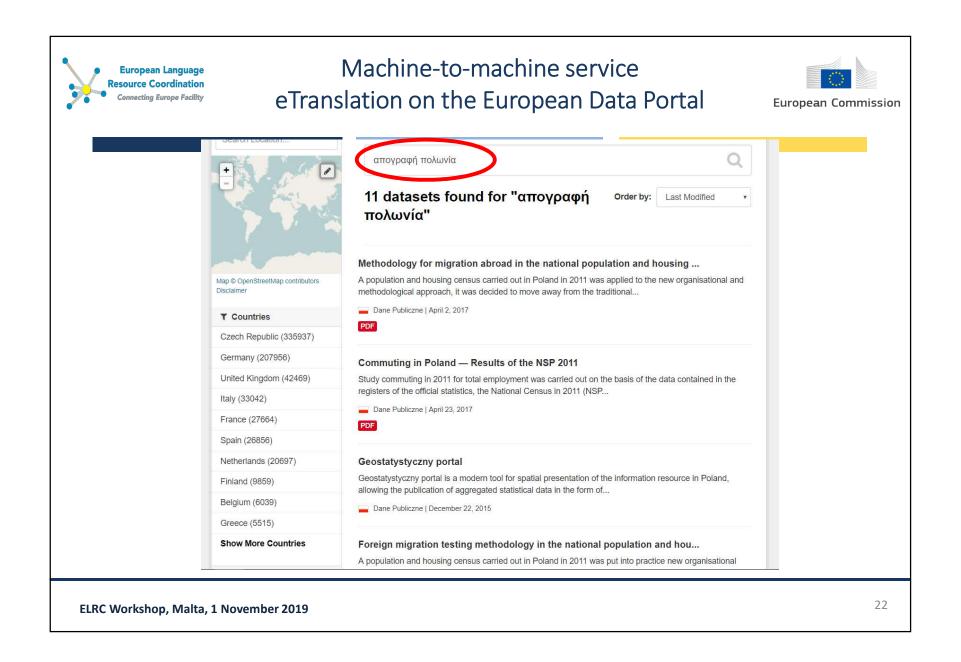


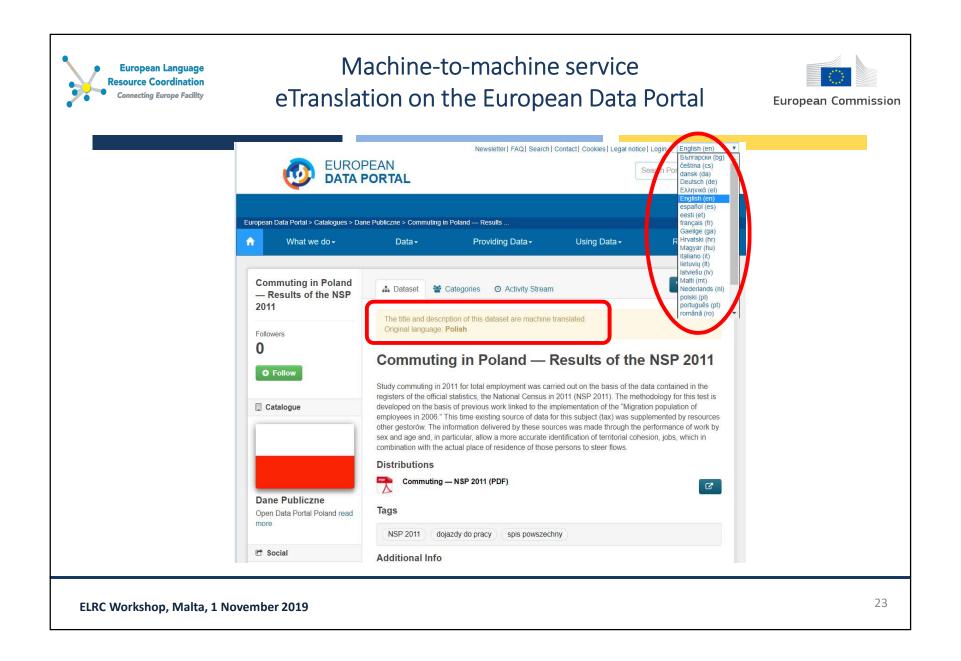
Integration of eTranslation Recommendations



- Human translation for static content, e.g. menus, language policy etc.
- Pre-translation with eTranslation for dynamic content, e.g. news articles (possibly replaced by human translation later)
- On-the-fly translation with eTranslation only for input fields, newly generated text etc.
- Make users knowingly request MT to avoid confusion
- Add disclaimer









How to connect to eTranslation



- Individual users
 - From 6 November 2019: registration via https://webgate.ec.europa.eu/etranslation/public/welcome.html
- Web service integration
 - Technical documentation: <u>https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/How+to+submit+a+tr</u> anslation+request+via+the+CEF+eTranslation+webservice
 - Contact <u>help@cefat-tools-services.eu</u> for credentials (and other support)
 - Adapt your service to multilingual use



Behind the scenes: how it works



- Statistical Machine Translation
 - MT@EC built only on "EU translations" (Euramis database)
 - Covers all 24 official EU languages
 - Euramis (and MT@EC) cover EU policies, subjects and language but limited everyday language
 - Moses-based engines
 - Performs best when trained on large volumes of text pairs (source-translated)
 in specific domains



Neural Machine Translation (NMT)



What is NMT?

- Machine learning: artificial neural networks trained on existing translations
- The computer devises its own rules on how to translate
- Radical departure from the phrase-based SMT approaches

Why is it important?

- Translations read better: more fluent and grammatical
- Better able to fill in gaps in data used for training
- Better for highly inflected languages (e.g. German, Hungarian)

This is where the field is headed

– Will SMT become obsolete?



SMT vs NMT – different types of errors



Original (excerpt from "Maltese: From survival to revival" by Mark Vella; DGTnet):

Maltese has survived and flourished through those ages, despite being essentially an unwritten language for centuries – but with a long-standing oral tradition that we are still studying and discovering.

SMT:

II-Malti ssopravivew u ffjorixxa permezz ta' dawn I-etajiet, minkejja li hija essenzjalment mhux miktuba — iżda b'lingwa li ilha teżisti għal sekli sħaħ it-tradizzjoni orali li għadhom jistudjaw u jiskopru.

NMT:

II-Maltin għexu u ffjorixxew f'dawk l-etajiet, minkejja li huma essenzjalment lingwa mhux miktuba għal sekli sħaħ — iżda bi tradizzjoni orali twila li għadna qed nistudjaw u niskopru.



SMT vs NMT – different types of errors



Original (excerpt from "Maltese: From survival to revival" by Mark Vella; DGTnet):

Malta's accession to the EU in 2004 also meant the culmination of years of struggle for Maltese to earn its rightful place as the country's national language.

SMT:

Malta ssieħbet fl-UE fl-2004 fissret ukoll il-qofol ta' sena ta' taqbid għall-Malti jaqilgħu l-post li jistħoqqilha bħala lingwa nazzjonali tal-pajjiż.

NMT:

L-adeżjoni ta' Malta mal-UE fl-2004 kienet tfisser ukoll il-quċċata ta' snin ta' ġlieda għall-Malti li jikseb il-post leġittimu tiegħu bħala l-lingwa nazzjonali tal-pajjiż.



SMT vs NMT – different types of errors



Original (excerpt from "Maltese: From survival to revival" by Mark Vella; DGTnet):

The chequered travails of the Maltese language are a true example of European multilingualism, illustrating the dignity of different nations' tongues — the story of how cultures and their languages can meld harmoniously.

SMT:

Li jalternaw travails tal-lingwa Maltija huma eżempju ta' veru ta' tal-multilingwiżmu Ewropew, li juru d-dinjità ta' nazzjonijiet differenti" ilsna — l-istorja ta' kif tal-kulturi u l-lingwi tagħhom jistgħu meld armonjożament.

NMT:

It-Trigi li għaddew minn użu tal-lingwa Maltija huma eżempju veru tal-multilingwiżmu Ewropew, li juri d-dinjità ta' lingwi differenti ta' nazzjonijiet differenti — l-istorja ta' kif il-kulturi u l-lingwi tagħhom jistgħu jagħmlu b'mod armonjuż.



eTranslation EU Legislation



Source: EN

THE EUROPEAN COMMISSION, Having regard to the Treaty on the Functioning of the European Union,

[...]

HAS ADOPTED THIS DECISION:

Article 1

The total sum of greenhouse gas emissions covered by Decision No 406/2009/EC for each Member State for the year 2014 arising from the corrected inventory data upon completion of the comprehensive review referred to in Article 19(1) of Regulation (EU) No 525/2013 is set out in the Annex to this Decision.

Target: MT

IL-KUMMISSJONI EWROPEA, Wara li kkunsidrat it-Trattat dwar il-Funzjonament tal-Unjoni Ewropea, [...]

ADOTTAT DIN ID-DECIZIONI:

Artikolu 1

L-għadd totali ta' emissjonijiet ta' gassijiet serra koperti bid-Deċiżjoni 406/2009/KE għal kull Stat Membru għall-2014 li ġejjin mid-dejta kkoreġuta tal-inventarju wara li tlesta rrieżami komprensiv imsemmi fl-Artikolu 19(1) tar-Regolament (UE) Nru 525/2013 huwa stabbilit fl-Anness ta' din id-Deċiżjoni.

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Language resources: the key to success



- More data for all languages
- Better lexical coverage for all languages
- Machine translation adapted to your domain/subject matter



Possible Future Improvements



- Better translation quality
- More file formats
- Engines for texts outside the EU domain
- New languages (RU, ZH, AR, JP)



eTranslation brings...

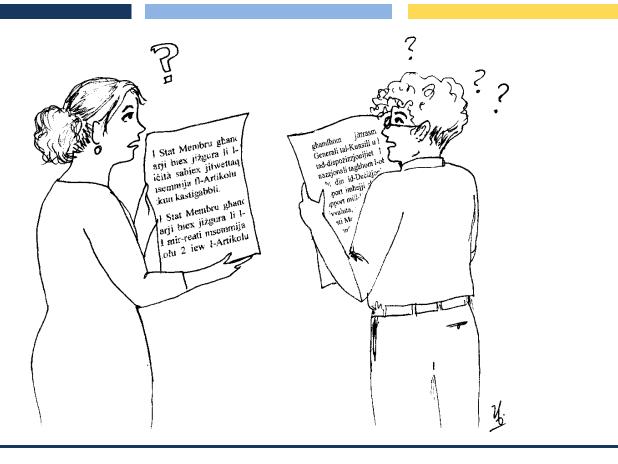


- Reliable and trustworthy translation for EU and Member State public administrations
- Support for languages with fewer speakers (multilingualism policy)
- Opportunities for private sector (eTranslation integration)
- A higher profile for language technologies, thus fostering demand
- Public availability of data collected by ELRC



Solve your language problems!





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