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| **Council Working Group on the Use ofthe six official languages of the Union** |  |
| **10th meeting, Geneva, 14 February 2020** |  |
|  |  |
|  | **Document CWG-LANG/10/2-E** |
| **11 December 2019** |
| **English only** |

**Report by the Secretary-General**

PURSUANT TO RESOLUTION 154 (REV. DUBAI, 2018)
AND RESOLUTION 1372 (C15, LAST AMENDED C19)

This report provides an update to the Council on the implementation of Resolution 154 (Rev. Dubai, 2018) regarding the use of ITU’s six official languages on an equal footing in accordance with Council Resolution 1372, as revised in 2019.

The Council Working Group is invited to take note of the information provided in Annex I on the areas of interest defined by the Council in 2019.

The secretariat is pleased to note that steady progress continues to be made on all fronts leading to full, equitable use of ITU’s six official languages, as evidenced below:

1. **Evolution of the budget for translation of documents to the six official languages of the Union since 2010**

As requested by CWG-LANG, budgetary figures for translation services have been divided into three categories: cost of translation, cost of associated services, and total cost.

Translation volumes continue to reflect full equality of treatment of all six ITU official languages. Translation output figures between 1 January and 31 October 2019 are as follows:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  | Arabic | Chinese | English | French | Russian |  | Spanish | **TOTAL** |
| Output translation | 7271 | 7541 | 1793 | 8170 | 6691 |  | 7192 | **38658** |

**2. Procedures adopted by other international organizations inside and outside of the UnitedNations system and benchmark studies on their costs of translation**

Through its active participation in the International Annual Meeting on Language Arrangements, Documentation and Publications (IAMLADP) and its working groups and task-forces, plus the Joint Inter-Agency Meeting on Computer-Aided Translation and Terminology (JIAMCATT), ITU keeps abreast of procedures and IT tools adopted by other international organizations and adapts its business model and procedures to the best practices resulting from such interactions.

The 2019 International Annual Meeting on Language Arrangements, Documentation and Publications (IAMLADP) took place in Brussels, Belgium, from 27 to 29 May 2019, to discuss the impact of new technologies on language and conference services. IAMLADP members noted that Language Technologies (LTs) and Artificial Intelligence (AI) provide significant potential benefits for language and conference services and are therefore already an integral part – albeit to varying degrees – of the everyday work of IAMLADP members. The challenge for the future is to capitalize on this positive development in order to increase the potential benefits, while identifying potential limitations and mitigating risks linked to the enhanced use of LTs and AI.

IAMLADP members reached a set of strategic conclusions, namely:

1. the importance of conference services having clear frameworks for the ownership and management of the data they use and generate;
2. the importance of inclusive communication and of continuing to use, and to promote the use of, inclusive language; and
3. recognizing the impact, potential and limitations of artificial intelligence and other new technologies, while stressing the importance of:
* ensuring the investment in and application of these technologies, not only for the output of their language services, but also for the management of their workflows and other conference services;
* providing the required support for staff to adjust to the new paradigm, and embrace the advantages new technologies offer;
* managing expectations among clients and leadership regarding the application of new technologies;
* language services driving and shaping the development of language technologies, and retaining control of the accreditation and recruitment of language staff; and,
* conference services driving data management policies

**3. Initiatives undertaken by the General Secretariat and the three Bureaux to increase efficiencies and cost savings on the implementation of Res.154 (Rev. Dubai, 2018) and Council Res. 1372 (Rev. 2019)**

***a) Review of the measures and principles for interpretation and translation***: The secretariat will launch in 2020 a process for the update of the measures and principles for interpretation and translation in ITU, in consultation with the three Sectors, with the outcomes to be reflected in a report to be submitted to the Council Working Group on Languages (CWG-LANG) in 2021 for review and adoption. This review would incorporate machine translation and other alternative translation procedures as well as, in accordance with Council Resolution 1372, the measures taken to ensure the ITU website publishes new or modified pages in the six official languages simultaneously and in equal terms of functionality and navigation.

***b) NMT, CAT tools, voice recognition*:** C&P and TSB are addressing the implementation of high-quality gist neural machine-translation services (ITU-Translate V2) and enhanced computer-aided-translation (CAT) tools that will complement the scope of the work currently covered by C&P’s human translation service.

• A Spanish company is currently developing a NMT tool based on ITU documents and terminology that was provided to them by C&P.

• A webpage translation API based on neural machine translation technology, developed and provided by a Japanese company, was tested on the development website of the ITU Telecom World 2019 event and evaluated in the five target languages. In its current state, the quality of the translation does unfortunately not live up to ITU quality standards and special care needs to be taken when selecting machine translation engines.

• Representatives from UN New York and Geneva visited ITU in May to demonstrate eLUNa and provide Q&A sessions. C&P is currently testing the software.

• A voice recognition tool has been tested in the Chinese language section, but the result is not up to the high accuracy standard of ITU. In addition, more and more machine translation tools have become available. Therefore, C&P will not pursue this tool.

**4. Alternative translation procedures**

Council-17 decided to establish an internal committee of the Union, the **Group on Study and Evaluation of the Translation Procedures**, chaired by the Deputy Secretary-General, to consider the implementation of the best and most economically effective solutions to the provision of translation and simultaneous interpretation services at an appropriate cost, while maintaining quality of service, and to study making use of approved external sources to translate Union documents. The Group met in April 2019, and its report is contained in Annex 2 to this Document.

1. **Progress made on the implementation of measures and principles for translation and interpretation adopted by the Council in its 2014 session**

The measures and principles for translation and interpretation, as adopted by the Council in 2014 and 2016, are systematically considered by the secretariat as a benchmark in the delivery of translation and interpretation services for ITU conferences, meetings, documents, and publications.

To this end, all preparatory and in-session documents, including the provisional Final Acts, were delivered in the six official languages for the **RA-19** and the **WRC-19**. Final versions of the outcome documents for **PP-18** were also published in all six languages. A schedule is being prepared for the delivery of all relevant preparatory documentation in six languages for the **WTSA-20**.

TSB continues to translate **Recommendations approved under the Alternative Approval Procedure (AAP)** within the limits of available translation budget, and in accordance with requests received from the linguistic groups and the ITU-T study groups. The table below reflects the number of Recommendations and English pages whose translation was requested into the various languages in 2019.[[1]](#footnote-1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| F | S | C | A | R |
| Recs | Pgs | Recs | Pgs | Recs | Pgs | Recs | Pgs | Recs | Pgs |
| 22 | 740 | 22 | 740 | 22 | 740 | 22 | 740 | 23 | 778 |

1. **Review of possible approaches to financing and maintaining a WSIS Forum website available in the six official languages of ITU**

ITU-Translate, the ITU neural machine translation tool, has been deployed for the dynamic translation of the WSIS-2019 and the WSIS-2020 websites. C&P budget allocated to “Web translation project” with a total amount CHF 230,000 provides the relevant financial support (see Annex II).

**Annex I**

**Areas of interest for the implementation of Resolution 154 (Rev. Dubai, 2018) over the period 2019-2022**

According to the *instructs the Council* of Resolution 154 (Rev. Dubai, 2018), the Council is required to:

1. consider proposals for the adoption by ITU of alternative translation procedures (*instructs the Council* 1);
2. analyse the application of the updated measures and principles for interpretation and translation adopted by the Council at its 2014 session (*instructs the Council* 2);
3. pursue and monitor specific operational measures (*instructs the Council* 3).

Therefore, as regards implementation of Resolution 154, the areas of interest identified by the Council over the period 2019-2022 are:

**1. Review of ITU documentation and publication services with a view to eliminating any duplication and to creating synergies**

The three Sectors and the General Secretariat collaborate closely among themselves to identify and minimize duplication, gaps, and overlaps. The Sectors’ resolutions are modified as needed to avoid duplication and create synergies, particularly through alignment with Plenipotentiary resolutions and decisions.

A new BDT policy on publications is in the last stages of approval. It intends to rationalize the planning, production, and publication process, thus also avoiding any duplication and unnecessary translation.

See also subparagraph *a)* of Item 3 of this Report (Review of the measures and principles for interpretation and translation).

**2. Explore and implement all possible measures to reduce the size and volume of documents (page-limits, executive summaries, material in** **annexes or hyperlinks), and achieve greener meetings**

***a) Reduction of the size and volume of documents***

With regard to page limits, progress has been made in all areas of reducing the volume and cost of documentation, through the membership’s and secretariat’s diligent implementation of Resolution 154 (Dubai, 2018).

The General Secretariat continues to implement the general length restriction to four pages for its documents prepared for the Council, when feasible and appropriate. Exceptions are made for some documents, such as financial reports, budget, strategic and operational plans, etc. Additional information can be added to documents via hyperlinks. The secretariat considers this task as an ongoing operational requirement and is consistently looking to introduce new and better measures.

ITU-R Resolution 1-7 deals, in its Annex 2, with the General Principles linked to ITU-R documentation, which establish a general limitation in length (if possible, less than 3300 words).[[2]](#footnote-2)

ITU-T Resolution 2 (Rev. Dubai, 2012) advises that Contributions should not exceed 2500 words.

ITU-D Resolution 1 (Rev. Buenos Aires, 2017) provides indications on the length of contributions to be submitted to ITU-D Study Groups (maximum of 1650 words), as well as encourages cross-references. It also provides that, for contributions exceeding this limit, an executive summary will be produced and translated, leaving the remainder of the contribution in the original language.

***b) Efforts to achieve greener meetings***

With regard to greener meetings, providing free online access to ITU Publications has dramatically reduced the use of paper copies in all ITU meetings. This effort – together with the increase in the use of electronic working methods, including correspondence activities, e-meetings, videoconferencing and remote participation which are used extensively by ITU to achieve greener meetings – encourages participation from developing countries and enhances the quality of output documents, converging with the overall goal of the United Nations to reduce paper usage and Green House Gas (GHG) emissions.

As the specialized agency of the UN for telecommunications/ICTs, ITU is committed to working in partnership with other organizations in the fight against climate change. This includes contributing actively to the work of the UN system, including to the UN Framework Convention on Climate Change (UNFCCC). It is working within the UN High Level Committee on Programs (HLCP) to “deliver as one” in the area of climate change and work to deepen the global understanding of the relation between ICTs and sustainability. More information about ITU’s efforts to address climate change can be found at the following address: <https://www.greeningtheblue.org/what-the-un-is-doing/international-telecommunication-union-itu>.

In 2019, ITU developed a starter kit with a view to ***greening ITU events*** by establishing what is a sustainable event, how to reduce or offset GHG emissions while engaging all event stakeholders. In December 2019, the ITU approved an ***Environmental Sustainability Statement*** establishing clear principles with the purpose of protecting the planet through continuous improvement of the environmental performance and systematic integration of environmental sustainability across the organization.

**3. Implementation in ITU of the United Nations system objective of multilingualism**

In March 2019, the Secretary General appointed an ITU Focal Point for Multilingualism. In April, the ITU responded to a questionnaire circulated by the Chief Executive Board (CEB) with a view to develop a coordinated approach to multilingualism among CEB member organizations. In July, ITU responded to a questionnaire sent by the Joint Inspection Unit (JIU) aimed at assessing the status of implementation of multilingualism across the United Nations system, identifying gaps and highlighting opportunities for the system to effectively pursue multilingualism as a core value.

On October 3, as a complement to the responses to the JIU questionnaire, JIU inspectors visited ITU in order to interview representatives of all services implementing multilingualism in ITU, i.e. Strategic Communications Division (SCD), Conference and Publication Department (C&P), Human Resources Management Department (HRMD), Conference Technology Support Division and Standardization Bureau (TSB). The ITU Focal Point for Multilingualism is following up on these initiatives.

**4. Necessary measures for equitable use of the six languages on the ITU website in terms of multilingual content and user-friendliness**

The Secretariat has launched a new ITU-wide web project. The aim of this project is making available publicly accessible, ITU-branded itu.int webpages at level 0, -1 and -2, created and maintained by ITU staff, in the six official ITU languages. These would include, in particular, the static pages describing ITU and its activities, as well as the dynamic Homepage and Media Centre. These are the all-time interfaces with the general public.

**5. Review, in collaboration with the Sector advisory groups, of the types of material to be included in output documents and translated**

Approved new or revised ITU-R Recommendations and Questions are published in the official languages of the Union as soon as practicable. Reports, Handbooks and Opinions are to be published, as soon as practicable, in English only or in the six official languages of the Union depending on the decision of the relevant group.[[3]](#footnote-3)

The outputs of ITU-T statutory and non-statutory meetings are normally English only. There are two exceptions: TSAG and ITU-T Study Group 3 translate all meeting reports into all six languages; Determined draft Recommendations (Traditional Approval Process, Section 9 of WTSA Resolution 1 (Rev. Hammamet, 2016)) are output in all six languages.

As for ITU-D meetings and events, final outputs are usually translated into the six languages, although interim versions are kept in English in most cases. WTDC is an exception to this rule. In ITU-D Study Groups and TDAG, the practice has often been to only translate the body of contributions, leaving the annexes in English only. This keeps to a minimum the number of translated pages.

See also subparagraph *a)* of Item 3 of this Report (Review of the measures and principles for interpretation and translation).

**6. Possible measures to reduce, without sacrificing quality, the cost and volume of documentation as a standing item, in particular for conferences and assemblies**

As refers to the volume of documentation, please refer to para. 2 of this Annex. As an important step with a view to reducing the cost of documentation as refers to translation, TSB has developed, in collaboration with C&P, an open-source, royalty-free neural machine translation tool, called ITU-Translate, and has trained it with ITU documents. ITU-Translate provides gist translations among ITU’s six official languages that successfully preserve the original document format.

TSB and C&P are now working on the extension of ITU-Translate to documents from all the Sectors of the Union. It will additionally cover the translation of webpages that are currently not translated because of technical reasons or because of budget limitations, and enhances C&P’s computer-aided-translation infrastructure with tools developed within the project.

1. **Statistics on use, download and purchase of the different language versions of ITU documents and publications**

***a) Statistics on downloads of free ITU publications***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Sector**Language* | ITU-D | ITU-T | ITU-R | ITU-S | Total by Language |
| Arabic  | 73205 | 10653 | 12757 | 4182 | **100797** |
| Chinese | 17989 | 10024 | 34187 | 3524 | **65724** |
| English | 705313 | 1377212 | 1030253 | 656137 | **3768915** |
| French | 69954 | 47368 | 110208 | 4038 | **231568** |
| Spanish | 52107 | 38844 | 141522 | 11562 | **244035** |
| Russian | 20951 | 9838 | 200955 | 3177 | **234921** |
| Total by Sector | **939519** | **1493939** | **1529882** | **682620** |  |

These data shows that ITU website clients have consumed 4,645,960 free publications since the beginning of 2019 (an average of 12728 downloads per day). English takes the lion’s share with 81.12% of the downloads. Spanish, Russian and French follow with approximately 5% each, while Arabic and Chinese get roughly 2% and 1% respectively.

ITU website clients show a lot of interest for ITU-R and ITU-T with a very close level of attractiveness respectively at 1,529,882 and 1,493,939 downloads. ITU-D free publications are also of interest with 939,519 downloads. The ITU secretariat closes the loop with 682620 downloads.

***b) Publications***

In 2018, the multilingual format in six languages (M6) was the most widely distributed (94%) comprising mostly mandatory Maritime publications.

This was followed by publications in English-only format at 3% and three-language format M3 (English, French, and Spanish) at 2%.

All other publication languages, namely French-only, Arabic-only, Russian-only, Chinese-only, and Spanish-only, together constituted less than 1% of total sales.

|  |  |
| --- | --- |
| **Language** | **% of sales\*** |
| M6 (Six Lang. on CD/DVD) | 94.49% |
| English | 3.14% |
| M3 (Three Lang.: E, F, S on CD/DVD) | 2.27% |
| Spanish | 0.06% |
| French | 0.03% |
| Russian | 0.00% |
| Arabic | 0.00% |
| Chinese | 0.00% |

*\* Excluding souvenirs, editable recommendations sold, insertion in ITU News, royalties and other income.*

**8. Respect of deadlines for the submission of contributions that require translation to conferences, assemblies and meetings of the Union**

In 2019, all provisions related to deadlines for the submission of contributions that require translation to major meetings of the Union have been generally respected.

**Annex II**

**Report of the** **Group on study and evaluation of the translation procedures**

**Introduction**

Council 2017 agreed to request the Deputy Secretary-General to preside over an internal committee, reporting to the Council through the CWG-LANG, on alternative translation arrangements based on the proposal from the United Arab Emirates ([C17/108](https://www.itu.int/md/S17-CL-C-0108/en)).

The group has been established with the following terms of reference:

In collaboration with the Directors of the three Bureaux, and in consultation with the Council Working Group on Languages and the ITU regional offices:

1. Study the most economically effective solutions for the provision of translation and simultaneous interpretation services at an appropriate cost, while maintaining quality of service in general.
2. Investigate the use of approved external bodies and centres to translate ITU documents, in collaboration with Member States and regional offices.
3. Study the practice of other United Nations organizations in this regard.

Remote participation is made available for the Regional Offices to participate.

The group is composed of representatives of each Bureau, the General Secretariat Departments and the Regional Directors. This document provides a status report on the work of the group and invites CWG-LANG to offer its comments. In 2019, the Group held four meetings and dealt with the pilot tests conducted (on neural machine translation, automatic translation of webpages, translation of webpages with the help of some administrations and remote interpretation) and the practices of other UN organizations.

**1** **Status of pilot projects on automatic translation, web content management, translation of webpages by Member States, remote interpretation**

**Automatic translation:** In line with Plenipotentiary Resolution 154, which instructs the Directors of the Bureaux to report on the use of innovative translation technologies, and considering the specific needs of the Telecommunication Sector, especially the need for the translation of technical meeting documents that are seldom translated by the ITU translation services due to budget limitations, TSB has developed, in collaboration with C&P, an open-source, royalty-free neural machine translation tool, called ITU-Translate, and has trained it with ITU documents. ITU-Translate provides gist translations among ITU’s six official languages that successfully preserve the original document format of .html and .docx (Word) documents, including Word files with revision marks.

The use of ITU-Translate has already given better results in the context of ITU-T technical texts than other well-known neural machine translation systems. Nonetheless, the tool continues to evolve and is permanently retrained for still better results in all the language pairs of the Union. ITU-Translate has been available at MyWorkspace (TIES access) and has been successfully used by ITU-T delegates for the translation of technical meeting documents.

C&P and TSB are thus addressing Resolution 154 with the implementation of high-quality gist translation services and enhanced computer-aided-translation (CAT) tools that will complement the scope of the work currently covered by C&P’s human translation service.

**Pilot test for automatic translation of webpages:** The market offers several cloud-based machine translation tools. These tools have limitations when it comes to the translation of ITU’s technical content, but which are applicable to general language expression. The project identifies and applies the best tools available per language pair for the translation of general-language webpages that are currently not translated. This website translation tool has currently been deployed on [Focus groups](https://www.itu.int/en/ITU-T/focusgroups/Pages/default.aspx) and [BSG](https://www.itu.int/en/ITU-T/gap/Pages/default.aspx) SharePoint webpages, as well as for the dynamic translation of the [WSIS-2019](https://www.itu.int/net4/wsis/forum/2019/) and the [WSIS-2020](https://www.itu.int/net4/wsis/forum/2020/) websites. This website translation tool uses different commercial services depending on the language pairs.

The project will start in January 2020 and will have a duration of 12 months.

**Pilot project for the translation of webpages with the help of some administrations:** Council 2018 authorized the secretariat to conduct a trial for the translation of webpages with the help of some administrations, in which the responsible Member States would verify themselves[[4]](#footnote-4) whether the quality of translation is sufficient and, if so, the translated webpages would be directly posted on the ITU website by the secretariat. As for this trial, the secretariat has not yet received enough internal feedback and is therefore unable for the time being to properly assess the results.

**Remote interpretation**: The Information Services Department is in the process of introducing and deploying a new Multilingual Interactive Remote Participation (MIRP) platform, to gradually replace the current platform. While the current platform has been providing the service since 2010, it will be phased out by 31 December 2019 due to support and operational issues.

The new platform is a fully cloud-based solution, which is scalable and can respond rapidly to technological changes and new market requirements. All communications (six languages and floor audio and video) are transmitted over the Internet, eliminating the need for any landline or mobile phones for connection. The new platform provides better end-user experience, higher audio/video quality and lower operations cost.

**Pilot project for automatic captioning**

ITU has also been testing AI captioning from a Chinese company during some ITU meetings in Geneva, and the last test was conducted during WSIS Forum 2019. The solution is based on a standalone laptop that takes the audio input (at the time of the test, ITU tested only English language) from the room, and using AI software installed in the laptop, performs automatic captioning. The transcription is then displayed directly on the laptop, which is also connected to the room’s projector. The accuracy has improved a lot, but the quality shown during WSIS was still not good enough for ITU meetings that demand very high accuracy.

**2 Practice of other United Nations organizations**

The 2019 Joint Inter-Agency Meeting on Computer-Assisted Translation and Terminology (JIAMCATT) took place in Luxembourg, from 13 to 15 May 2019, and was hosted by the European Commission. The theme was “The Shape of Things to Come: How technology and innovation are transforming the language professions”. Among the conclusions of the meeting:

Machine translation is now an established part of the documentation workflow in most organizations. Many JIAMCATT members have reached a degree of maturity in their implementation of these systems and are encouraged to share their experiences and expertise in training, testing, communicating and rolling out these models. Research into machine translation shows that post-editing is a complex task, and feedback from practitioners suggests that it may even increase the cognitive load on language professionals.

The transformation of the language professions will require member organizations to adopt comprehensive strategies that draw on the strengths of existing assets while harnessing the potential of new technologies. Communication, training, transparency, and staff involvement will be key to achieving this transformation successfully.

1. At 30 November 2019. [↑](#footnote-ref-1)
2. ITU-R Resolution 1-7, para. A2.2.3.5, “Contributions should be limited in length (if possible, less than ten pages)”. [↑](#footnote-ref-2)
3. ITU-R Resolution 1-7, para. A2.1.2.2 [↑](#footnote-ref-3)
4. With oversight and assistance by the secretariat [↑](#footnote-ref-4)