

D1.3

Report on all consultations with stakeholders

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# **List of Acronyms**

AI Artificial Intelligence
CL Computational Linguistics
DLE Digital Language Equality
EDIC European Digital Infrastructure Consortium
FSTP Financial Support to Third Parties

EFNIL European Federation of National Institutes for Language

ELE European Language Equality

ELE1 European Language Equality (preceding project)
ELE2 European Language Equality (this project)
ELEN European Language Equality Network

ELG European Language Grid (EU project, 2019-2022)

ELT European Language Technology

EP European Parliament EU European Union

KPI Key Performance Indicator
LDS Language Data Space
LR Language Resource
LT Language Technology
MCP Multi-Country Project

META-NET EU Network of Excellence to foster META

NLP Natural Language Processing

SRIA Strategic Research and Innovation Agenda STOA Science and Technology Options Assessment

WP Work Package



#### **Abstract**

This deliverable reports on the consultations conducted with a range of stakeholders identified by the consortium of the European Language Equality 2 (ELE2) project as relevant contributors to the overall maintenance, extension, refinement and finalisation of the ELE Strategic Research and Innovation Agenda (SRIA) and Roadmap designed to achieve Digital Language Equality (DLE) in Europe by 2030. Special attention is devoted, in particular, to the constituencies of language communities, research, industry and consumers, whose direct engagement is central to generate wide buy-in and support at the European, national and regional levels from policy- and decision-makers all across Europe. This is essential to successfully bring to fruition the proposed large-scale multi-year ELE Programme based on the ELE SRIA and on the associated recommendations, as a vital and much anticipated scientifically, economically, socially and politically relevant strategic plan to achieve DLE in Europe by 2030, which will benefit the whole of Europe.

#### 1 Introduction

#### 1.1 Context and Scope of the Deliverable

The 12-month European Language Equality 2 (ELE2) project has built on the success of its 18-month predecessor project ELE1 to advance the cause of Digital Language Equality (DLE) for all languages of Europe, in particular preparing for the implementation of the refined and extended ELE Strategic Research and Innovation Agenda (SRIA) and Roadmap and the associated recommendations through a large-scale programme in the coming decade. As part of this ongoing effort, the main aims of work package (WP) 1 of ELE2 ("SRIA: Further Consultations and Documentation of Stakeholder Commitment") have been to continue, intensify and extend consultations with the wide range of diverse stakeholders involved in and affected by this ambitious and vital plan, to mobilise the required mix of support at the European, national, regional and local levels in terms of political will and financial backing. There have been several efforts in the recent past to support the vitality of European languages (e.g., Ceberio Berger et al., 2018), and the two ELE projects continue the important work in this direction by specifically aiming to achieve DLE in Europe by 2030.

Since its beginning, ELE2 has continued the interactions and consultations with stakeholders who had been identified in ELE1 through its 52-member consortium. ELE2 has extended the connections with new stakeholders who share an interest in promoting DLE across Europe, with a view to establishing the widely supported all-encompassing and inclusive ELE Programme for the coming decade. This process has taken place systematically and in a coordinated manner with the input and involvement of all ELE2 partners, following the approach specified early on in the project in Hegele et al. (2022). This deliverable described how to conduct consultations with stakeholders and how to document their commitment – in this sense, Hegele et al. (2022) has provided the blueprint for subsequent effective consultations, especially to engage with new stakeholders, beyond those with which the ELE2 consortium partners already enjoyed well-established links and collaborations. This has been a crucial part of the overall endeavour to further refine, extend and finalise the SRIA, taking on board the input and feedback of new and broader stakeholder groups, to match the actual needs, aspirations and potential of Europe's language communities, in the joint pursuit of DLE.

The huge effort underpinning the establishment of the ELE Programme has brought together actors from the fields of Language Technology (LT), language-centric Artificial Intelligence (AI), Natural Language Processing (NLP) and Computational Linguistics (CL), alongside

All public deliverables are available at https://european-language-equality.eu/deliverables/



national, co-official and regional language institutes and relevant civil society associations, policy- and decisions-makers, to the benefit of all citizens, consumers and businesses in Europe. Throughout the first 11 months of ELE2 so far, WP1 has pursued activities to ensure a broad and effective reach to relevant stakeholders and key representatives, using a variety of means to consult with them as effectively as possible, including a range of awareness-raising campaigns, dissemination events, surveys, interviews, focused consultations etc.

These activities served the purpose of further promoting stakeholders' awareness, engagement and support with respect to the SRIA as the overall foundation of the ELE Programme, whilst also eliciting focused feedback and input to refine the plan to be implemented in order to achieve DLE in Europe by 2030. In addition to the stakeholders' visions, needs and demands, other specific topics of interest included in the consultations concerned relevant use cases for the various sectors and domains that the stakeholder groups represented; best-practice examples illustrating the benefits of LTs; implementation of LT solutions in current or legacy systems; access to compute infrastructure; and key performance indicators (KPIs) suitable for the SRIA. As all partners of the ELE2 consortium were also members of the successful ELE1 project, there has been continuity between the two initiatives, which meant that stakeholder consultations could continue seamlessly without disruption.

Within this context, this deliverable reports on all consultations with relevant stakeholder groups, focusing in particular on the language communities, research actors, industry players and consumers.<sup>2</sup> The work presented in this deliverable has been conducted mostly in Task 1.2 within WP1, which concerned the various activities required to liaise with all relevant stakeholders to secure their input, feedback and commitment to the refinement and finalisation of the SRIA. In the interest of clarity, and to avoid repetition and overlap across project outputs, this deliverable describes underlying and common mechanisms and processes of the various extensive consultations that have been conducted with stakeholders in ELE2. It cross-references the relevant deliverables that include further detailed specifications and especially those that discuss the actual results and document the outcomes of the stakeholder consultations, by analysing the input and feedback obtained from the various sources. In particular, as explained in more detail in Section 2.1, the parallel deliverable D3.4 reports on all the material prepared in WP1, WP2 and WP3, and analyses the results of the consultations with the various stakeholders, presenting their consolidated feedback, responses, ideas, visions, needs and demands.

#### 1.2 Structure of the Deliverable

Following this introduction, which situates the deliverable within the broader context of the overall ELE initiative and explains how it contributes to its main aim of achieving DLE in Europe by 2030, Section 2 presents the background and related work that has led to the consultations with stakeholders reported here, including in collaboration with other WPs of the project and other tasks beyond Task 1.2, covering activities that have been supported by, and in turn informed, a range of tasks across different WPs. Section 3 provides a high-level report of the consultations with the stakeholders conducted in the first 11 months of ELE2, focusing in particular on language communities (Section 3.3), research (Section 3.4), industry (Section 3.5) and consumers (Section 3.6).

Section 4 gives an overview of the feedback-gathering and community engagement activities with stakeholders that took place through the SRIA contribution projects via the Financial Support to Third Parties (FSTP) mechanism, which have been completed or are approaching completion at the time of writing and whose main results will be presented in

This deliverable can be seen as a follow-up to Way et al. (2022), that started the discussion on insights gained from surveys and interviews conducted with a cross-section of LT developers, LT users and consumers, eliciting their views on a range of matters related to DLE that were in focus during ELE1.



detail in Deliverable D2.1 at the end of the project. Finally, the last section draws some conclusions from the consultations with the ELE stakeholders, assessing their overall success, and discussing the role and importance of engaging with stakeholders to elicit input and feedback in the process of extending, refining and finalising the SRIA as the basis for the large-scale ELE Programme. The concluding remarks discuss the lessons learned during this work and outline some ways forward to maintain the attention towards and interest in the important aims pursued by the project; in this sense, following a bottom-up approach, the wide consultations with relevant representatives and stakeholder groups conducted in ELE2 have laid solid foundations for future developments towards achieving full DLE in Europe in the coming decade, for the benefit of all citizens.

#### 2 Related Work

#### 2.1 Background to the Stakeholder Consultation Activities

In continuity with the work conducted in ELE1, the follow-up ELE2 has also involved direct communication and engagement activities with relevant stakeholder groups and community representatives, with emphasis laid on reaching out to new and more diverse stakeholders through focused and direct consultations. Since the membership of the project consortium has substantially shrunk between the two stages of the project, in ELE2 more emphasis has been placed on pursuing external consultation meetings with new stakeholder groups. The additional input and feedback received on the first full version of the SRIA and associated recommendations have been systematically collected and analysed (with a detailed analysis of the results presented in the parallel deliverable D3.4) so as to be included in the revised version of the SRIA, which will be presented in D4.2 at the conclusion of the project.

To this end, the work conducted within Task 1.2 that is documented in this deliverable has been tightly connected with a number of related tasks within WP1, particularly Task 1.1 (specification of approach, documented in Hegele et al., 2022), Task 1.3 (specifically dedicated to liaising with national and international funding agencies and policy makers, as well as national and regional language institutes, whose main results are presented in Kirchmeier et al., 2023)) and Task 1.4 (documentation of stakeholder commitment). The overall combined aim of these related tasks, as reflected in the respective deliverables, has been to strengthen support for and involvement in drawing up the revised SRIA, and to provide a solid foundation to implement the large-scale multi-year shared ELE Programme to achieve DLE in Europe by 2030. This ambitious and much-anticipated development with the potential to positively impact a very wide range of beneficiaries requires political will as well as financial support from a broad spectrum of policy- and decision-makers at the European, national and regional levels. The parallel report D3.4 presents a detailed analysis of the consolidated and curated input and feedback received from the multiple stakeholder groups consulted, thereby supplementing the information presented here.

# 2.2 Anticipated Synergies and Latest Developments: The Emerging Language EDIC (European Digital Infrastructure Consortium)

A noteworthy recent development in connection with ELE and its pursuit to achieve DLE in Europe is represented by the introduction of the European Digital Infrastructure Consortium (EDIC), a new type of initiative launched in early 2023 that enables EU Member States to implement multi-country projects (MCPs). EDICs are characterised by a number of distinctive features, most notably rapid set-up by interested Member-States, while keeping the



possibility open for others to join subsequently, legal personality, and the option to combine different sources of funding from the EU and Member States. This unprecedented set of features is expected to facilitate infrastructure deployment, while also ensuring the long-term sustainability of EDICs. Since the beginning of 2023, a number of EU Member States have expressed their interest in establishing a Language EDIC, i. e., an MCP set up under this framework to address topics and goals related to LTs.

The Language EDIC that is expected to gradually take shape would represent a significant novelty in the European LT landscape, introducing the first ever official, pan-European coordination body under which topics related to LT, NLP and language-centric AI will be discussed, decisions taken and actions implemented. This would have obvious relevance for, and a great impact on, expected developments with regard to DLE all across Europe, including for the activities of the ELE Programme. Although it is difficult predict the next steps, at the time of writing this deliverable (late May 2023), it looks rather likely that the Language EDIC will be established in the second half of 2023 or early in 2024. This is a development that the ELE consortium is awaiting with anticipation, in the hope of having a formal body in which to discuss and tackle issues related to the promotion of DLE in Europe in the future, beyond the lifetime of ELE2, which would be of great benefit.

The recently started EU procurement project Common European Language Data Space (LDS), coordinated by DFKI, implements the European Language Data Space infrastructure. It collaborates closely with the Language EDIC Working Group.

#### 3 Consultations with Stakeholders

#### 3.1 General Approach

The envisaged large-scale multi-year ELE Programme can be successfully implemented to the benefit of all of Europe's languages only by establishing collaborations and leveraging synergies that assemble the support of the full range of institutional, political and financial bodies, from the broadest EU-wide level, through national and state agencies, all the way to regional and local authorities that can mobilise appropriate targeted interventions for the languages of interest to their communities. Hegele et al. (2022) specified the approach to be used for stakeholder consultations and to document their commitment to support and implement the ELE SRIA and Roadmap. It also outlined the directions in which the engagement activities already conducted in ELE1 should be expanded in ELE2 by way of priority. This entailed building on and extending the wide-ranging external consultations and surveys documented in Way et al. (2022), indicating additional stakeholder groups to be approached and outlining the most effective processes and instruments for consulting with them.

In particular, Section 3 of Hegele et al. (2022) covered one key aspect of the process of revising and extending the SRIA, emphasising the need to include not only representatives of the LT, language-centric AI, NLP and CL communities, but also members of neighbouring fields and communities. To this end, it provided a broader preliminary breakdown of the most relevant stakeholders to be further engaged in ELE2, including representatives of (i) language communities, (ii) research, (iii) industry, (iv) consumers, and (v) policy-making bodies and funding agencies. Stakeholder groups (i-iv) are within the scope of this deliverable, and are covered in turn in the following sub-sections, noting that for category (i) language institutes have already been specifically covered in Kirchmeier et al. (2023) alongside category (v) of policy-makers and funding agencies. For these two stakeholder categories, in the interest of clarity and to avoid repetitions across deliverables, the results of the relevant consultations have been thoroughly analysed and discussed in Kirchmeier et al. (2023).

In mapping the landscape of the most relevant stakeholders to be targeted, Hegele et al. (2022) included a list of well over 120 organisations of various sizes, divided into 20 fine-

grained categories (e. g., digital heritage and libraries, media, publishers, news, broadcasting, etc.) with the corresponding countries and regions, to ensure the widest possible coverage across domains, sectors, areas and languages. It should be noted that some of the listed organisations have a Europe-wide or international remit, while others operate within a single country or a small set of EU Member-States or in specific regions therein. The stakeholder consultations covered here and reported in the sub-sections below were guided by these valuable indications provided in Hegele et al. (2022) early on in ELE2. The consultations identified relevant units or departments and specific individuals with appropriate responsibilities and duties to be approached within the various organisations, filling in any gaps and further extending the coverage to new and additional organisations and bodies.

Stakeholder consultations in ELE1 were guided by the direct connections and ongoing collaborations of the large 52-member consortium, and relied mostly on surveys and questionnaires, whose results are reported in Way et al. (2022). Building on this, Hegele et al. (2022) envisaged that in ELE2 online surveys and questionnaires would be supplemented as much as possible by focused consultations with stakeholder groups, partly because the effort concentrated on potential supporters of DLE in Europe who were not yet necessarily familiar with our community and how we have been working towards DLE, thus requiring more flexible approaches to secure proper engagement. This is why Hegele et al. (2022) provided for the possibility that more direct and interactive forms of outreach may not always be feasible for, or welcome by, identified stakeholders, for a number of reasons. For example, they may not be typical in certain types of organisations or industries. In such cases, our outreach plans provided more flexible options to meet the needs and preferences of specific stakeholders with whom we were keen to establish connections, so as to elicit their feedback and input for the revision and extension of the ELE SRIA. For instance, in early May 2023 a dedicated online consultation session was organised for stakeholders with whom the consortium had not yet had the opportunity to directly engage with otherwise. During the consultation, following a 25-minute high-level presentation covering ELE, DLE and the SRIA, there were questions from some of the attendees that the ELE Coordinator and consortium members answered. This also provided the opportunity to gather feedback and input from the perspectives of the engaged stakeholders and representatives. In this and other similar occasions, the stakeholders praised the work, especially the SRIA, noting that it was highly relevant and comprehensive. More details about the reactions and needs voiced on these occasions are discussed with an in-depth analysis in D3.4.

As noted above, an important point in terms of approach is that throughout ELE2 an attempt has been made to combine (and coordinate) consultations with a very wide range of diverse stakeholders at both international (EU-wide), national (Member-State), as well as regional and local levels, pursuing the contacts and collaborations that were deemed most effective to promote the LT development of all European languages in the current era of rapid developments in AI. As a result, the list of contacts provided in Hegele et al. (2022) was a starting point that was subject to ongoing revision, extension, and refinement, with the aim of finding the ideal coverage across different domains and sectors, as well as a good geographical spread and inclusions of as many languages as possible.

In addition, Appendix A presents a selection of over a dozen high-profile gatherings and conferences aimed at relevant audiences, categorised according to the prevalence of scientific/academic, industry/business, and political/institutional stakeholders. These events were attended by ELE2 partners since the very beginning of the project in July 2022, to give presentations and talks on the project's activities and to introduce (previews of) the SRIA and Roadmap with the associated recommendations. They served the purpose of engaging European, national, regional and local stakeholders across Europe, often with exchanges and conversations taking place alongside the official sessions and formal proceedings of these events. Some in-depth engagements were also encouraged by the gradual return to in-person and face-to-face (or occasionally hybrid and mixed) conferences and gatherings, that followed



the prolonged switch to mostly, if not exclusively, online and remote formats due to the COVID-19 pandemic, which was typical across Europe throughout most of ELE1. As a result, the several occasions to directly engage, also informally, with stakeholders presented valuable opportunities to establish new and broader direct connections and to develop focused conversations with representatives from the community, alongside the more formal presentations and talks given by consortium partners at several events since mid-2022, a selection of which is provided in Appendix A.

#### 3.2 Stakeholder Groups Consulted to Update the ELE SRIA and Roadmap

The full version of the ELE SRIA that originated from ELE1 (ELE Consortium, 2022) was officially presented and launched at a Science and Technology Options Assessment (STOA) Workshop dedicated to the topic Towards Full Digital Language Equality in a Multilingual European Union, which took place on 8 November 2022 at the European Parliament (EP) in Brussels.<sup>3</sup> This STOA Workshop was the third edition of a series of related events focused on LTs in the EU, following previous occasions in 2013 and 2017, and explored the research and development environment of LTs in the context of multilingualism in Europe, presenting the key results of ELE1 to European politicians and senior officials. Following presentations from ELE partners, a panel discussion took place with senior policy-makers and experts from academia and industry to discuss the relevant issues and the anticipated impact of the ELE SRIA. In particular, a high-level summary of the main recommendations towards full DLE in Europe by 2030 was presented. More details of the consultations conducted with policyand decisions-makers, particularly at the EU level, which are outside the scope of this deliverable, are provided in Section 3 of Kirchmeier et al. (2023). In addition, some of the selected dissemination and outreach events listed in Appendix A where the key results of ELE were presented along with the SRIA to relevant stakeholders were also attended by politicians and decision-makers, beyond those specifically aimed at political representatives, most notably the above-mentioned STOA Workshop.

In keeping with the timeline envisaged in Section 6 of Hegele et al. (2022), time-wise the consultations with stakeholders were ramped up after the SRIA was presented at the STOA Workshop in November 2022, following extensive preparation activities in the previous months to enlarge, refresh and consolidate the list of new stakeholders and to identify the most appropriate individuals to approach within the relevant organisations. This involved a range of preparatory activities, from searching online for information about key roles and units within the organisations, to contacting the information desks to be directed towards senior executives and eliciting directions from colleagues and associates, to making sure that the outreach and engagement activities targeted the most relevant and suitable people, without omissions or gaps among the identified representatives and stakeholder groups.

Following the very successful STOA Workshop, systematic consultations with the identified stakeholder groups took place, based on the willingness of the organisations to respond to invitations to engage with the ELE consortium and in accordance with their preferred formats, which were quite variable. Section 4 of Aldabe et al. (2023) presents a thorough review of specific content from the 35+ language reports that focused on projects, initiatives and, crucially, stakeholders for European languages, to identify any relevant stakeholders that had been potentially missed. The analysis divided up the identified stakeholders into four main categories, namely (in descending order of frequency) government, research institutions, industry and finally independent organisations. This thorough examination concluded that

<sup>&</sup>lt;sup>3</sup> Further details are available in Rehm et al. (2022). Information and materials related to the STOA Workshop of November 2022, including recordings of the sessions, are available online at www.europarl.europa.eu/stoa/en/events/details/towards-full-digital-language-equality-i/20220711WKS04301. In addition, third-party sources also covered this high-profile Workshop, for instance the popular online journal *Slator* dedicated a full article to the event: https://slator.com/european-parliament-should-support-digital-language-equality/.



"the ELE project has consulted nearly every stakeholder type reflected here at some level" (Aldabe et al., 2023, p. 14).

#### 3.3 Language Communities

Kirchmeier et al. (2023) was submitted in early May 2023, and included a thorough description of the direct consultations conducted with national, co-official and regional language institutes as representatives of the relevant language communities, including a thorough discussion of the results. These consultations were driven by the European Federation of National Institutions for Language (EFNIL) and the European Language Equality Network (ELEN), as the two ELE2 consortium partners (who were also members of ELE1) with the closest institutional links with, and most direct access to, the bodies protecting and promoting Europe's languages – for previous work in this area, see, e. g., Ceberio Berger et al. (2018).

These consultations were conducted through a tailored online questionnaire, followed up by more focused one-to-one interviews. In particular, Section 4 of Kirchmeier et al. (2023) analysed the results of the consultations with national language institutes led by EFNIL, while Section 5 was devoted to the outcomes of the consultations with the co-official and territorial language institutes, driven by ELEN. In both cases the methodology for the consultations is explained, including a description of the format of the questionnaire and overall structure of the direct follow-up interviews, an analysis of the respondents' profiles, and a description of the main activities of their organisations. In Kirchmeier et al. (2023) particular attention was devoted to aspects that are crucial for languages that need to fill gaps with regard to LTs and digital support, e.g., future plans for the creation and sharing of digital language resources (LRs), and issues that currently prevent language institutes from sharing the electronic language assets that they hold.

The relevant results in terms of input and feedback from Europe's language communities presented in Kirchmeier et al. (2023) will be considered in the revised, extended and updated version of the SRIA. More specifically, information about ELE has been disseminated regularly to ELEN members, mostly via email, and with dedicated formal updates given in particular at the ELEN General Assembly in October 2022, following similar previous occasions. The ELE SRIA was also presented at the EFNIL General Assembly, also in October 2022. Finally, some of the selected external dissemination and outreach events listed in Appendix A at which ELE was presented, also introducing the SRIA and associated recommendations, saw the involvement and participation of representatives of European language communities. Particularly relevant events in this respect were the "Celtic Knot: Wikimedia Language Conference" and the launch event for *Just – The Journal of Language Rights & Minorities*, that was specifically devoted to the theme of "the impact of technology on language use and rights". In addition, relevant contacts for language communities were followed up with targeted interviews, and the results of all consultations with representatives of language communities are discussed in Kirchmeier et al. (2023).

#### 3.4 Research

Researchers in public institutions (e. g., universities, government-funded consortia, national research councils, policy planning organisations, etc.) as well as private entities (e. g., innovation centres, start-up incubators, etc.) make up a major stakeholder group whose collaboration has been vital to the work done so far in ELE, in particular to refine and finalise the SRIA. Regular contacts with researchers have continued in ELE2, seeking to expand and diversify the actors involved, with a view to gathering all-encompassing quality input and feedback.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> The interest and involvement of researchers and scientists in ELE2 is also reflected in the wide third-party coverage of the initiative. One example is the article featured in the *European Science-Media Hub*, an online publi-



Over the past 11 months the consortium continued sustained focused interactions with researchers, also presenting ELE and more specifically the SRIA at several research-oriented and scientific forums, some of which are included in the list of selected events in Appendix A. In particular, the "NeTTT New Trends in Translation and Technology" conference, the "2nd LITHME Roadshow – Language in the Human-Machine Era" conference, "IberSpeech" and the invited keynote at the NoDaLiDa 2023 conference can be singled out as high-profile research forums where several interactions were initiated or further consolidated with interested researchers and scholars from across Europe and beyond.

#### 3.5 Industry

Industrial stakeholders are also a vital constituency consulted by ELE to ensure that the refined SRIA reflect their needs, visions and aspirations, in the interest of implementing an all-encompassing and realistic ELE Programme that is worthy of the large-scale EU-wide political support and financial backing required to achieve DLE in Europe by 2030. In the past 11 months, relevant industrial stakeholders were consulted based on the initial extensive list included in Hegele et al. (2022), that has been gradually refined and further expanded as described in Section 3.1.

Targeted consultations in this area took place on the basis of a range of supporting activities during ELE2 to raise the visibility of ELE and awareness about DLE in Europe among industry representatives in particular. These are reflected, for instance, in articles and interviews in online publications that originated from or led to direct contacts with industry stakeholders. One such example is coverage on Slator, a well-established online magazine that presents itself as the "leading source of analysis and research for the global translation, localization, and language technology industry" and has a wide international readership, including in particular professionals based in Europe.<sup>5</sup> While *Slator* is an industry-oriented journal, its scope makes it a relevant and interesting publication also for other stakeholder groups, including language communities (Section 3.3), researchers (Section 3.4) and consumers (Section 3.6). In addition, within the context of this deliverable, the FSTP projects that are covered in more detail in Section 4 can also be seen as opportunities to engage not only with research, but also with industry, and valuable contributions of interest to industry stakeholders that provide feedback and input to the revised SRIA. For example, the FSTP projects elaborated feasibility studies, developed best practices and formulated guidelines for the deployment of LTs geared towards DLE.

Among the dissemination and outreach events (Appendix A), the European Big Data Value Forum 2022 was arguably the most relevant event in recent months in terms of featuring industry representatives and policy-makers among the speakers as well as in the audience of delegates. The call for more support for LT and DLE, as expressed by ELE representatives at the introductory panel on the first day of the conference, was well received.

#### 3.6 Consumers

ELE1 had already carried out extensive work in engaging with LT users and consumers, especially through the additional multilingual online survey conducted by the original consortium, that obtained responses from well over 20,000 European citizens who expressed

cation maintained by the Research Service of the European Parliament that brings together scientists, journalists and policy-makers to encourage better communication of important scientific matters to the general public: https://sciencemediahub.eu/2022/11/02/professor-andy-way-smaller-languages-could-soon-become-extinct-online-if-the-eu-doesnt-address-the-matter/

One of the articles on ELE published on *Slator* took the form of an interview in which the SRIA and Roadmap were presented, and is available at https://slator.com/call-for-endorsement-ele-strategic-agenda-digital-language-equality-europe/.



their opinions on LTs and tools available for their languages. This was the largest ever consultation undertaken with ordinary European citizens to attempt a broad assessment of the perceived relevance and level of maturity of LTs for European languages. Compared to language communities, research and industry considered above, the very broad and diverse group of consumers is arguably the most elusive, insofar as it is not gathered or formally represented in any official body. As a result, as was the case in ELE1, in the subsequent stage of the project this still proved to be the most difficult group from which to extract formalised input and structured feedback with regard to the ELE SRIA.

In particular, it became evident that even against significant efforts to engage directly with LT consumers, issues of linguistic balance and national EU-wide representation cropped up, due to the unequal distribution of consumers across countries, regions and language communities, which are vital factors in ELE's pursuit of DLE (see Gaspari et al., 2021, 2022; Grützner-Zahn and Rehm, 2022, for a description of the Contextual Factors of the DLE Metric). These difficulties were compounded by the reality of a consortium of seven partners having to cover all stakeholder groups and representatives of relevant communities, including most notably consumers, within a limited time of a few months to elicit feedback and input for the revision of the SRIA. As a result, consumers turned out to be the most difficult stakeholder group to engage with extensively and systematically, also due to the understandable absence of dedicated dissemination and focused outreach events, given how wide and diverse this population is across Europe.

The European Language Technology (ELT) Newsletter<sup>7</sup> that was issued on a regular basis throughout ELE1 and ELE2 (additional information on this is provided in Section 3.8) represented a valuable means to encourage engagement with and elicit feedback from European LT users and consumers. In particular, beyond the regular issues of the ELT Newsletter in which the progress of ELE2 was presented, along with updates on the key developments concerning the SRIA of interest to LT consumers all across Europe, a special issue was circulated in mid-February 2023 to promote highlights of the SRIA, raise awareness about them and their implications for all languages of Europe, and encourage endorsements. In retrospect, the impressive amount of over 20,000 responses obtained through the multilingual online European Citizens survey carried out in ELE1 represents an even greater achievement than we initially realised, and the responses collected through that large-scale survey continue to provide a body of valuable evidence and opinions that still enables us to take on board consumers' input and feedback in defining the SRIA, which will be presented in its final form in D4.2 at the end of ELE2.

#### 3.7 European Language Equality Book

The forthcoming ELE book (Rehm and Way, 2023) will be published by the scientific publishing house Springer in full open access in June 2023, supplementing the sister publication on the European Language Grid (ELG) project (Rehm, 2023). The ELE book is divided into two main parts, respectively addressing the status quo in terms of DLE in Europe as of 2022, and the envisaged future situation in 2030 and beyond. Overall, the volume has 45 chapters, and includes over 30 reports authored by experts from the relevant language communities describing in detail the state-of-the-art of Europe's languages in terms of LT support and digital readiness, as an update 10 years later to the ground-breaking *META-NET White Papers* (Rehm

In this sense, this deliverable can be seen as a follow-up and extension to Way et al. (2022), that started the discussion of insights gained from surveys and interviews conducted with a cross-section of LT developers, LT users and consumers during ELE1, eliciting their views on a range of matters related to DLE that were of interest during the first stage of the project.

More details and the archive of the circulated ELT Newsletters are available at https://european-language-equality.eu/elt-newsletter-archive/

<sup>8</sup> More details about the book are available at https://link.springer.com/book/9783031288180.



and Uszkoreit, 2012). Other chapters include deep-dive reports focusing on machine translation, speech technology, text analytics, natural language understanding as well as other topics related to fulfilling the vision of DLE in Europe.

The book is a major tangible product and valuable legacy of ELE that will continue to engage new and diverse stakeholders beyond the lifetime of ELE2. It will be launched at the conference META-FORUM 2023, to be held in Brussels, Belgium, on 27 June 2023, right at the end of ELE2's runtime. Copies of the ELE book will be handed out to all delegates attending META-FORUM 2023, which will be an in-person only event, aimed at European policy- and decision-makers, who have been specifically invited to the event, and the soft (fully openaccess) version of the book will be widely promoted through ELE's digital channels in the last few weeks of the project to maximise its timely dissemination.

#### 3.8 META-FORUM 2023 and other Engagement Activities

As noted above, at the very end of the ongoing 12-month ELE2, META-FORUM 2023 will take place in Brussels as the second annual ELE Conference, representing the culmination of work conducted over the previous year. META-FORUM is the well-established international conference series started in 2010 devoted to powerful and innovative LTs for the multilingual information society, with a focus on Europe. META-FORUM 2023 will be an in-person face-to-face full-day event, held at a prestigious and easily accessible location in central Brussels, and has been timed to encourage the widest possible participation of European politicians and senior officials of EU institutions, most notably the European Commission and the European Parliament. The programme will feature presentations showcasing the main results of ELE2, including the revised SRIA, the new features of the DLE Dashboard (Aldabe et al., 2023) and an update of the comparison of LT support for all European languages.

Other highlights of the programme of META-FORUM 2023 will include a panel discussion with representatives of language communities, presentations on the SRIA contribution projects, a project expo, and a range of talks on the latest developments in LTs and language-centric AI in the European space given by senior speakers from European institutions, academia and industry alongside ELE project members. Overall, META-FORUM 2023 will represent an additional valuable opportunity to bring together relevant stakeholders and representatives who have been the focus of the consultations conducted throughout ELE2 and covered in this deliverable (i. e., language communities, research, industry and consumers), alongside policy- and decision-makers as well as funding agencies at the European, national, regional and local levels.

All ELE2 communication activities have been conducted consistently with the plans laid out at the beginning of the project (Grützner-Zahn et al., 2022) and turned out to be very successful. This was achieved, for example, thanks to continuous social media campaigns of all partners and the circulation of the ELT Newsletter, that has been regularly sent out to more than 4,000 recipients. The official ELE digital communication channels have also been used to promote and disseminate outreach and consultation activities with relevant stakeholders throughout the past 11 months. Thanks to its thriving European ecosystem that has the potential to deliver DLE if the political will and financial resources required finally materialise, as has been consistently advocated by ELE partners, expected developments such as those of the Language EDIC and the LDS (discussed in Section 2.2), among others, represent excellent opportunities to continue outreach and engagement activities with relevant stakeholders also beyond the lifetime of ELE, with a view to finally achieve full DLE in Europe.

More details about META-FORUM 2023 are provided in Section 3.8 and are available online at https://european-language-equality.eu/meta-forum-2023/programme/.

DFKI is currently investigating options to continue the ELT social media channels and newsletter on a regular basis beyond the conclusion of ELE, drawing on other resources.



# 4 Feedback-gathering Activities and Community Engagement with Stakeholders through SRIA Contribution Projects (FSTP Mechanism)

As part of WP2, ELE2 organised and managed an open call for SRIA contribution projects, to be financially supported through the Financial Support to Third Parties (FSTP) mechanism. The FSTP Project Board together with the broader ELE consortium mapped crucial areas where the SRIA recommends an extension or update, and proposed ten topics in an open call to which applicants could submit their proposals. In line with expectations, following a rigorous selection process and strict evaluation criteria including an effort to select projects covering as wide a range of the identified topics as possible, nine projects were eventually selected that covered the following four topics:

- Topic 1. Data sets for more robust speech technology (five projects)
- Topic 5. General NLP/LT Domains (Desk Research) (one project)
- Topic 7. Computing facilities for LT (Desk Research) (one project)
- Topic 10. Basic LAnguage Resource Kit (BLARK) (Desk Research) (two projects)

The duration of each project was expected to be three months during ELE2's lifetime. These FSTP projects have covered a range of European languages and have implemented use cases and best-practice examples of LR development and LT implementations in relevant industry sectors and areas of life, thus promoting buy-in and take-up from the funding agencies and implementing parties who are expected to contribute to the achievement of DLE in Europe through the large-scale ELE Programme.

These FSTP projects contributed to elaborating feasibility studies, developing best practices and formulating guidelines for the deployment of LTs geared towards achieving full DLE in Europe. Once projects finished their execution phase, feedback was gathered from the relevant members regarding the ELE initiative by asking them to answer three questions in the projects' self-assessment reports:

- What are your expectations regarding the ELE Programme and its future developments, as defined in the SRIA?
- Do you have any recommendations or suggestions regarding its activities?
- Do you see possible engagement of you and/or your company/institution in the ELE initiative in the future? If so, in which direction and under which conditions?

Deliverable D2.1 due at the end of the project will cover in detail the setup and full results of the FSTP projects, including feedback on the ELE initiative funded under the open call, with a preview of the main highlights offered to the community at the upcoming META-FORUM 2023. The key results of the projects that have already finished their execution are also summarised in the parallel deliverable D3.4. Overall, the FSTP projects selected and funded under the open call have been conducted fully in line with expectations and have provided very positive outcomes, such that their results will contribute to the update of the ELE SRIA, that will be presented in D4.2, and will be showcased at the upcoming META-FORUM 2023, so that best practices and the valuable lessons learned from the ELE FSTP projects can be promptly shared with the whole community.

Detailed descriptions of the individual topics are available in the call documentation on the ELE website at the following URL, along with, e.g., the guide for applicants, evaluation criteria and the proposal template: https://european-language-equality.eu/open-call/.



### 5 Conclusions: Lessons Learned and Ways Forward

This deliverable has reported on the consultations conducted with the wide range of stakeholders that ELE2 sees as the main sources of input and feedback to develop, refine and finalise the revised and updated SRIA (which will be presented in D4.2). This will be the basis to implement the much-anticipated multi-year ELE Programme to achieve DLE in Europe by 2030. The discussion has focused in particular on the background, context and scope of this work conducted mostly within the project's WP1, but with interactions and collaborations across all WPs and with the involvement of all ELE2 partners, building on previous consultation rounds completed in ELE1. The general approach and underlying mechanisms of the latest stakeholder consultations have been described, paying particular attention to language communities, researchers, industry players and consumers; the results of these consultations will be used to inform the revision of the SRIA. To complete the picture, the ELE book, additional forms of consultation and engagement activities with ELE stakeholders and the SRIA contribution projects have also been covered.

Overall, we believe that the consultation activities conducted in ELE2 have been successful in reaching out to and engaging with key stakeholders. Consultations with stakeholders have always been of utmost importance in ELE, to elicit feedback and input that can help in the ongoing process of refining and finalising the SRIA in the most comprehensive and inclusive way, to offer a solid foundation to implement the ELE Programme. The work described here and in related project deliverables, also building on the preparation activities of ELE1, offers a blueprint to repeat similar actions in other regions and parts of the world that want to promote real, fair and equitable multilingualism, enhanced by LTs and language-centric AI, to realise the associated benefits in the interest of all citizens. To perform the focused and targeted consultations reported in this deliverable we could rely on the preparation work and preliminary rounds of consultations conducted since ELE1 with some sub-sets of relevant stakeholder groups and representatives, that were subsequently expanded and enlarged, also pursuing focused consultations and direct interviews with new stakeholders.

Admittedly the most difficult group from which to receive feedback has been that of consumers, covered in Section 3.6 and already investigated in ELE1, due to its large and diverse composition, which makes it hard in particular to gather balanced views in terms of linguistic and geographic representation, which are crucial issues for ELE's work. In addition, it has become apparent early on in the project that consultation protocols had to be adjusted and tailored with flexibility to the needs and preferences of the targeted stakeholders, that had different expectations and requirements when it came to interacting with ELE partners to share their views and opinions on the SRIA. In performing the work presented in this deliverable, we have endeavoured to meet the expectations and match the preferences of stakeholders, to form a comprehensive and inclusive picture of their stance to be reflected in the revised SRIA, and to reach out to European, national, regional and local interlocutors.

Overall, we are confident that the combination of the extensive and diversified consultation activities described in this deliverable, whose results are analysed and discussed in depth in D3.4, will have a positive impact on the final iteration of revision of the SRIA, that will be issued at the end of the project with D4.2. The comprehensive consultations described here will also ensure that the final SRIA makes a valuable contribution to the broad ecosystem of LTs and language-centric AI in Europe, including for future collaborations with related initiatives such as the LDS as well as to exploit synergies with anticipated developments such as the Language EDIC (Section 2.2). The members of the ELE2 consortium still have ongoing collaborations and interactions with the much broader ELE1 consortium members, and will continue to pursue the objective of achieving DLE in Europe.

Alongside engaging with relevant communities and stakeholder groups, this effort will involve continuing to raise awareness, generate interest and encourage opportunities for



(EU-wide, national, regional and local) funding resources and policy instruments that can help further promote DLE for all languages of Europe. To this end, we share the anticipation and hopes of Europe's LT and language-centric AI communities about the launch in the short term of the much-needed large-scale ELE Programme that will enable the implementation of the ELE SRIA to finally achieve full DLE in Europe.

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# **Appendix**

# A Selected Dissemination and Outreach Events Targeting Stakeholder Groups

Date	Event	ELE Involvement	Audience
1-3 July 2022	Celtic Knot: Wikimedia Language Conference	Presentation	Mixed
4-7 July 2022	NeTTT New Trends in Transla- tion and Technology	Poster presenta- tion	Scientific
9 Sept. 2022	LITHME 2nd Roadshow	Presentation	Scientific
11 Oct. 2022	EFNIL General Assembly	Presentation	Scientific/Political
8 Nov. 2022	STOA workshop	Chair and presen- tation	Political
15 Nov. 2022	IberSpeech	Poster presenta- tion	Scientific
21-23 Nov. 2022	European Big Data Value Forum 2022	Organiser and presentation	Scientific/Industry
30 Nov. 2022	Language Technology Conference	Poster presenta- tion	Scientific
16 Dec. 2022	Launch of Journal of Language Rights & Minorities	Presentation	Scientific
20 Dec. 2022	Symposium Views of Wellbeing in Academia	Presentation	Scientific
10 Feb. 2023	Joint EFNIL/DGT seminar on eTranslation and ELE	Presentation	Scientific/Political
02 March 2023	MintegiXak	Presentation	Scientific
20 April 2023	Meeting of the STOA Panel, presentation of feasibility study "European Streaming Platform"	Presentation	Political
23 May 2023	"Towards Digital Language Equality in Europe: An Overview of Recent Developments." Keynote at NoDaLiDa 2023 (The 24th Nordic Conference on Computational Linguistics, Tórshavn, Faroe Islands) by Georg Rehm	Presentation	Academic/Political

Table 1: Selected events