

## H2020 research calls for project proposals on Digital Accessibility

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### ICT-57-2020

### An empowering, inclusive Next Generation Internet

Novel mobile applications translating between speech and sign languages



Research and Innovation Action (RIA)

EU Funding: 7M€



#### The Next Generation Internet (NGI) Initiative

- Launched by the European Commission in autumn 2016.
- Aimed to shape the future internet as a human-centric interoperable platform ecosystem that embodies the values that Europe holds dear:
  - openness, inclusivity, transparency, privacy, cooperation, protection of data.
- Spanning domains such artificial intelligence, Internet of Things, interactive technologies (including accessibility and language technologies), etc.





#### The idea

- Develop novel mobile applications translating between speech and sign languages to assist people with hearing impairments.
- The projects should leverage on current state-of-the-art in translation between official spoken and sign languages of the EU and associated countries for efficient and effective use on mobile devices.
- Pragmatic and useful solutions in real life, addressing challenges arising from automated recognition of speech, hand signs, facial expressions, movement of the mouth, gestures, body positioning, etc.



#### **Proposals should aim to**

- How end-users can best interact and cooperate with the application.
- How the system adapts to users in real-life conditions and prevents unintended gender bias in translation.
- The applications should be open source, robust, cost-effective and validated across a wide spectrum of users.
- Priority to projects addressing a wide range of languages, in particular underresourced languages.



#### **Expected** impact

- Improvement of multilingual speech processing and sign language detection on mobile devices.
- Deployment of solutions allowing wide take-up by people with hearing impairments.
- We are not looking for:
  - Fundamental research.
  - Social study only.



#### **Key actors**

#### Research entities and communities in:

- assistive technologies;
- language technologies;
- artificial intelligence.

#### Associations of people with hearing impairments or sign language teachers

Mobile software developers.



#### **Call details**

- Research and Innovation Action.
- Call for proposals: 19/11/2019 22/04/2020.
- Minimum number of beneficiaries: At least three legal entities, each established in a different EU Member State or Horizon 2020 associated country. All three independent of each other.

#### Total budget: 7M€.

- Indicative project size: 2-4M€.
- Other amounts admissible.
- Funding rate: 100%.



#### **Current project portfolio / Topics evolution**

#### Interfaces for accessibility (ICT-23-2017)

- RIA: Interfaces and affective computing for people with cognitive disabilities / Solutions, for information extraction from brain and neural signals.
   Projects: <u>EXTEND</u>, <u>Easy Reading</u>, <u>INSENSION</u> and <u>SUITCEYES</u>.
- IA: Decision support tools for the assessment of compliance to web sites accessibility standards and guidelines. Projects: <u>WAI-Tools</u> and <u>WADCher</u>.

#### A multilingual Next Generation Internet (ICT-29-2018)

- IA: A European Language Grid. Project: <u>ELG</u>.
- RIA: Domain-specific/challenge-oriented Human Language Technology.
  Projects: <u>Bergamot</u>, <u>COMPRISE</u>, <u>EMBEDDIA</u>, <u>ELITR</u>, <u>GoURMET</u> and <u>Pret-a-LLOD</u>.
- New forms of delivering public goods and inclusive public services (DT-GOVERNANCE-05-2018-2019-2020)
  - **CSA**: Cost efficient provision of inclusive digital services. Project: <u>WAI-Guide</u>.





### DT-TRANSFORMATIONS-23-2020 Digital Accessibility Observatory



Coordination and Support Action (CSA)

EU Funding: 1.5M€



#### The idea

#### Set up a digital accessibility observatory

- to take stock of market and technological developments.
- monitor progress in digital accessibility.
- provide opportunities for exchange of best practices.
- Support the implementation of the European <u>Web Accessibility Directive</u> by helping relevant actors identify the most appropriate accessibility solutions.
- Contribute to the widespread recognition of the benefits of accessible digital services and information.



#### **The Web Accessibility Directive**

A dual objective

To increase digital inclusion by ensuring that the websites and mobile applications of public sector bodies are more accessible to users, in particular to persons with disabilities.

To **improve the functioning of the internal market** by establishing common accessibility requirements.



#### Web Accessibility Directive: Art. 7 – Additional measures

- **4.** Member States shall promote and facilitate training programmes, relating to the accessibility of websites and mobile applications for relevant stakeholders and staff of public sector bodies, designed to train them how to create, manage and update the accessible content of websites and mobile applications.
- 5. Member States shall take the necessary measures to raise awareness of the accessibility requirements set out in Article 4, of their benefits to users and to owners of websites and mobile applications, and of the possibility of giving feedback in the case of any failure to comply with the requirements of this Directive (...).
- 6. For the purposes of the monitoring and reporting (...), the Commission shall facilitate cooperation at Union level between Member States, and between Member States and relevant stakeholders, with a view to the exchange of best practices between them and to reviewing the monitoring methodology (...), market and technological developments and progress in accessibility for websites and mobile applications.



#### **Timeline of practical application**





#### Proposals should aim to

- Take stock of market and technological developments for solutions for digital accessibility:
  - Identify gaps, affordable solutions and services.
  - Identify existing new solutions (possible game changers).
  - Involve people with disabilities in the identification of gaps and testing of solutions.
- Monitor progress of market development and deployment of cost efficient accessibility solutions across the EU.
- Create a digital accessibility platform/repository.
- Facilitate exchange of best practices.
- Promote awareness raising and capacity building.



#### We are not looking for

- Proposals developing new tools or methodologies for accessibility testing.
- Proposals developing new tools of platforms for accessibility monitoring and reporting.
- Proposals producing guidance or training material on accessibility.



#### **Key actors**

- Member States (WADex expert group, WAD monitoring and reporting bodies).
- International organisations (e.g. W3C, Daisy).
- NGOs representing people with disabilities (e.g. EDF, EBU, EUD, or national organisations).
- Standardisation bodies (ETSI, CEN, CENELEC).
- Industry.
- Research and academia.



#### **Call details**

- Coordination and Support Action.
- Call for proposals: 05/11/2019 12/03/2020.
- Minimum number of beneficiaries: At least one legal entity established in an EU Member State or Horizon 2020 associated country.

#### Total budget: 1.5M€.

 The Commission considers that proposals requesting a contribution from the EU of around 1.5M€ would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

#### Funding rate: 100%.



#### **Related links**

- EU-funded projects on technologies for accessibility
- EU-funded projects on language technologies
- Web Accessibility Directive
- Harmonised European Standard EN 301 549 (PDF)
- The Next Generation Internet Initiative

#### **Upcoming** events

Funka accessibility days (1-2 April, Stockholm).



# Thank you for your attention!



## Outlook into the next EU Multiannual Financial Framework (2021-2027) For information





## Research and Innovation

#### **Horizon Europe – Preliminary Structure**

**Pillar I** Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

**Research Infrastructures** 

**Pillar II** Global Challenges and European Industrial Competitiveness

#### **CLUSTERS**

• Health

- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Join Research Centre

**Pillar III** Innovative Europe

**European Innovation Council** 

**European Innovation Ecosystems** 

European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area

Widening Participation and Spreading Excellence

Reforming and Enhancing the European R&I System



#### **Deployment**

