

# THE DIGITAL ENVIRONMENT OF THE BASQUE LANGUAGE

Recommendations  
2021-2024



EUSKO JAURLARITZA



GOBIERNO VASCO

KULTURA ETA HIZKUNTZA  
POLITIKA SAILA

DEPARTAMENTO DE CULTURA  
Y POLÍTICA LINGÜÍSTICA



# THE DIGITAL ENVIRONMENT OF THE BASQUE LANGUAGE

RECOMMENDATIONS  
2021-2024



**BASQUE LANGUAGE ADVISORY BOARD**  
SPECIAL COMMISSION TO PROMOTE  
THE BASQUE LANGUAGE IN THE DIGITAL ENVIRONMENT

**EUSKO JAURLARITZA**



**GOBIERNO VASCO**





KULTURA ETA HIZKUNTZA  
POLITIKA SAILA

DEPARTAMENTO DE CULTURA  
Y POLÍTICA LINGÜÍSTICA

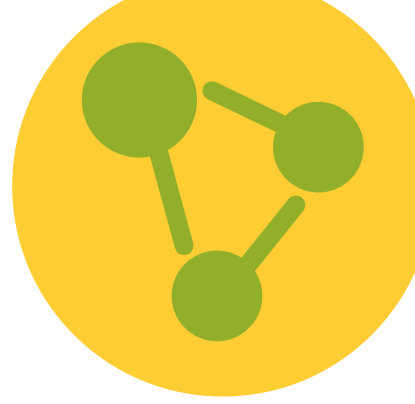
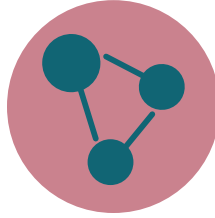
Vitoria-Gasteiz, 2021



# TABLE OF CONTENTS

|   |     |
|---|-----|
| SPECIAL COMMISSION OF THE BASQUE LANGUAGE ADVISORY BOARD TO PROMOTE BASQUE IN THE DIGITAL ENVIRONMENT   | 7   |
| FOREWORD  | 9   |
| INTRODUCTION  | 13  |
| STRATEGIC LINES   | 21  |
|  <b>PROMOTE DIGITAL CONTENT IN BASQUE</b>   |     |
| 1. Promote the leisure audiovisual sector, particularly aimed at young people.  | 23  |
| 2. Develop digital content for the academic world, including audiovisuales, and particularly for young people   | 35  |
| 3. Promote the use of Basque in the digital media   | 46  |
|  <b>PROMOTE DIGITAL TOOLS, APPS AND DIGITAL RESOURCES IN BASQUE</b>                           |     |
| 4. Promote the development of Basque language technologies  | 53  |
| 5. Promotion of mobile apps in Basque   | 66  |
| 6. Guarantee the presence of Basque on platforms that are widely used   | 72  |
|  <b>SHOWCASE THE BASQUE LANGUAGE AND DIGITAL RESOURCES IN BASQUE TO ENCOURAGE THEIR USE</b> |     |
| 7. Enable ICTs to interact in Basque  | 75  |
| 8. Guarantee the dissemination of digital tools and resources in Basque   | 86  |
|  <b>GUARANTEE TECHNOLOGY WATCH</b>  |     |
| 9. Give impetus to setting up a technology watch structure of the Basque Language   | 95  |
| 10. Obtain data on the use of Basque and encourage research in order to implement effective policies  | 99  |
| BIBLIOGRAPHY  | 103 |





## **SPECIAL COMMISSION OF THE BASQUE LANGUAGE ADVISORY BOARD TO PROMOTE BASQUE IN THE DIGITAL ENVIRONMENT**

The Special Commission of the Basque Language Advisory Board has drawn up this document to Promote Basque in the Digital Environment in 2020.

Composition of the Committee for the period 2016-2020:

- Chairperson: Miren Dobaran Urrutia,  
Deputy Basque Minister for Language Policy
- Director: Maite Goñi Eizmendi
- Secretary: Josune Zabala Alberdi

Experts:

- Iurdana Acasuso Atutxa
- Iban Arantzabal Arrieta
- Xabier Arrieta Goiri
- Joseba Arruti Lafuente
- Lourdes Auzmendi Aierbe
- Luistxo Fernandez Ostolaza
- Gorka Julio Hurtado
- Igor Leturia Azkarate
- Aitor Lopez de Aberasturi Ortiz de Pinedo
- Montse Maritxalar Anglada
- Eneko Oregi Goñi
- Xabier Paya Ruiz
- Eli Pombo Aramendi
- Miriam Urkia Gonzalez



- Aitor Urzelai Inza
- Josu Waliño Pizarro

Technical Secretariat:

- Ane Crespo Calvo
- Jone Aboitiz Legarra

During the preparation of this document, the Special Commission received input from experts from various institutions and organisations, including: Euskal Wikilarien Elkarte, Librezale, Hitz Zentroa at the University of the Basque Country, Game Erauntsia Association, The Basque Media Observatory, PuntuEus Foundation, 2deo Audiovisual Laboratory, SPRI and the Basque Government's Deputy-Ministry of Culture.

Many thanks to you all



# FOREWORD

The 2020-2024 Government Programme is committed to increasing knowledge of Basque and, above all, to promoting its use in socio-cultural, economic, digital and public spheres. Our proposals include the approval and implementation of the Plan for the Promotion of Language Technologies, an increased presence of the Basque language, the generation of content in Basque and the use of Basque in the digital environment.

We have multiple tools at our disposal, but there is no doubt that this document will be the most effective and valuable one to develop Basque as necessary so that it can establish its rightful place in the digital environment.

In these uncertain times, digital tools have proven to be great allies of everyday life. The digital environment has caught on in education, work, leisure and culture and is a trend that is taking root in our society. Our young people are digital natives; the digital environment is their natural meeting point. That is why our priority is to adopt measures to guarantee and promote the presence of Basque in the digital environment. The digital environment is a space to create opportunities to use Basque and guarantee the linguistic rights of Basque speakers.

New challenges require adapting to new times, and we are by no means starting from scratch in fact, we decided some time ago to promote Basque in the digital environment. Many people and organisations have joined us along the way, and we hope to continue building this path together.

I would like to congratulate the members of the Special Commission to Promote Basque in the Digital Environment for participating in the preparation of this document, especially the Commission's



Director, Maite Goñi. In addition to congratulating them, I would like to thank the Commission members and, in fact, all the experts and representatives of institutions beyond the Commission for their advice, opinions and commendable contributions.

This document is an excellent working tool for the Basque Government and will be our roadmap for the coming four years. We would also like it to serve as a guide for other public authorities, associations and companies in the sector working to develop the digital environment. It opens up new possibilities for collaboration and is yet another opportunity for both the Administration and society as a whole to come together to continue to promote the Basque language.

It is up to us to make the most of this opportunity. Let us not let it slip away.

**Bingen Zupiria Gorostidi**

Basque Minister for Culture and Language Policy



# THE DIGITAL ENVIRONMENT OF THE BASQUE LANGUAGE:

## RECOMMENDATIONS 2021-2024







# INTRODUCTION

The Basque Language Advisory Board (BAB) has been studying the digital environment for several years now. In fact, the Commission in charge of this task has been in existence for several years, albeit with different names: The ICT Commission, The Commission to Promote Basque in the Digital Environment and its current name, The Commission for the Digital Environment.

Looking back, the most important result of the work carried out by the Commission was the publication of the document entitled *ICTs in Basque: recommendations for public authorities*. The document contained 12 recommendations for public authorities on how to promote Basque in the digital environment.

Given that this was a Commission document, it was the Commission itself that undertook to follow up on it. Thus, from 2018 onwards, several meetings were organised to determine the degree of compliance with the recommendations. An assessment was also requested.

The objective of the monitoring process has always been to design a new roadmap for the coming years. In other words, by means of follow-up meetings and ongoing assessments, providing a snapshot of the situation and also showing the way forward by pinpointing areas for improvement and future challenges.

A number of conclusions were drawn from this follow-up, but perhaps the most noteworthy was the need to renew the 12 recommendations document by 2020 at the latest. To this end, the Commission indicated the need to first produce a series of sectoral



reports containing information and concrete proposals for action in specific areas. Reports were requested on Education, Audiovisuals, Technology Watch and Dissemination.

By the time the sectoral reports were received, we had gathered a large amount of material to begin work on preparing a possible roadmap for the coming years:

- ▶ Inputs from the Commission meetings (Game Erauntsia with information about the videogames industry; Wikipedia; Technical Report on the Plan for the Promotion of Language Technologies; Basque Digital Library; EITB (the Basque Country's Public Television and Radio Broadcasting Service); 2deo; The Basque Language Indicator System...) and several other contributions.
- ▶ Diagnosis of the 12 recommendations document.
- ▶ Sectoral reports.
- ▶ An event organised on 11th December 2020, which gave us the opportunity to learn about various European experiences regarding language strategies.

And to top it all (read this ironically!) we asked for advice and reports to be able to better define concrete actions or whole areas and to clarify roles. These included areas such as the digital media and the Common Voice initiative.

In 2020 no stone was left unturned! We worked on the basis of all of the above. We collated all the material and classified in order to structure the future roadmap.

Four strategic lines of work have been drawn up to facilitate the prosperity and vitality of Basque in the digital environment. They are by no means new, in fact, they were also included in the initial 2016 document containing the 12 recommendations, and they are as follows:



- ▶ Promotion of digital content in Basque.
- ▶ Promotion of digital tools, apps and resources in Basque.
- ▶ Increased visibility of the Basque language and digital resources in Basque to encourage their use.
- ▶ Technology watch.

We have pinpointed a number of recommendations for each strategic line. However, we have not limited ourselves to these and have also included feasible actions that can contribute to the implementation and advancement of each of the recommendations. In total, 24 proposals for action have been compiled, accompanied by complementary ideas or proposals.

Although all these proposals for action are addressed to the Basque Government, given that it is the function of the Special Commission of the Basque Language Advisory Board to guide the Basque Government in its areas of competence, we must not forget that the digital environment has no physical limits. Thus, it is our intention to make these recommendations available to all public and private institutions in the Basque Country so that they can act within the framework of their competences and powers. We are all allies in this task.

As regards the actions, we believe that a flexible approach to assuming and understanding these proposals is required. Given that we are dealing with a field that changes at break-neck speed, some of the actions may need to be modified in order to implement the recommendations.

Given it is a fast-changing area, we want to broach two themes that are closely related and which are strategic and cross-cutting: technological sovereignty and free software and licences.



- ▶ Technological sovereignty: the subject of technological sovereignty has been raised on several occasions in recent years. Information and communication technologies and infrastructures, technologies used to collect and store data should comply with the law, needs and interests of the countries where the users are. Users' data and information should not remain in the possession of agents who are outside the users' control. It should be noted that this aspect goes beyond promoting Basque in the digital environment. It clearly also affects the use of Basque in the technological environment, as sovereign technologies, unlike those of the major technology companies, guarantee that they can be in Basque. Therefore, it would be interesting to open up a discussion around this strategy to analyse whether the Basque Government should foster sovereign technologies in Basque, along with the relevant avenues for promotion.
- ▶ Free software and licences: even though a specific recommendation has been made, the possible contribution of free software and licences to the mainstreaming of Basque should be taken into account in the proposed initiatives, as they allow the software or content to be in Basque. Thus, it is important to stress that by promoting free software and licences we are paving the way for content, resources, apps and tools in Basque.





Finally, an end should be set for this roadmap. Our intention is for the 24 proposed actions to be underway or completed in 4 years' time, at the end of this parliamentary term. The digital environment is alive, strong, transformative, interesting, but can also be described as changing. This means our constant attention is required to detect new challenges.





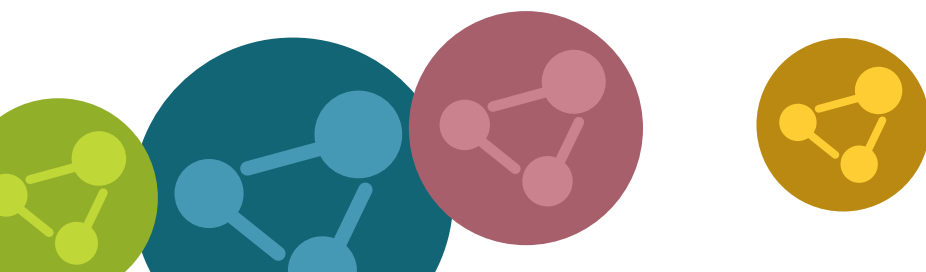
Our intention here is to provide not only the Basque Government, but also everyone who wishes to set off down this path with the necessary groundwork to do so.



| STRATEGIC LINES   | RECOMMENDATIONS |  |
|---|-----------------|--|
| <b>PROMOTE DIGITAL CONTENT IN BASQUE</b><br>   | <b>1</b>        | Promote the leisure audiovisual sector, particularly aimed at young people.                                |
|   | <b>2</b>        | Develop digital content for the academic world, including audiovisuals, and particularly for young people. |
|   | <b>3</b>        | Promote the use of Basque in the digital media.  |
| <b>PROMOTE DIGITAL TOOLS, APPS AND DIGITAL RESOURCES IN BASQUE</b><br>                           | <b>4</b>        | Promote the development of Basque language technologies.   |
|   | <b>5</b>        | Promotion of mobile apps in Basque.  |
|   | <b>6</b>        | Guarantee the presence of Basque in platforms that are widely used.  |
| <b>SHOWCASE THE BASQUE LANGUAGE AND DIGITAL RESOURCES IN BASQUE TO ENCOURAGE THEIR USE</b><br> | <b>7</b>        | Enable ICTs to interact in Basque.   |
|   | <b>8</b>        | Guarantee the dissemination of digital tools and resources in Basque.                                      |
| <b>GUARANTEE A TECHNOLOGY WATCH</b><br>  | <b>9</b>        | Give impetus to setting up a technology watch of the Basque Language.                                      |
|   | <b>10</b>       | Obtain data on the use of Basque and encourage research in order to implement effective policies.          |



| ACTIONS     |  |
|-------------|--|
| <b>1.1</b>  | Foster the creation of audiovisual content created specifically for web and mobile digital environments, particularly aimed at young people and adolescents. |
| <b>1.2</b>  | Boost Basque and its use in the field of videogames.   |
| <b>1.3</b>  | Encourage young people to become digital audiovisual content producers.  |
| <b>2.1</b>  | Promote the development of Wikipedia and Txikipedia in Basque.   |
| <b>2.2</b>  | Explore the possibilities of creating "Hezkuntzapedia" (Educapedia).   |
| <b>2.3</b>  | Explore the possibilities of using Basque media content for educational purposes and to increase the number of adult Basque speakers.                        |
| <b>3.1</b>  | Encourage cooperation with different stakeholders in the digital media world.  |
| <b>3.2</b>  | Establish criteria so that Spanish-speaking or bilingual digital media offer content, or more content, in Basque.  |
| <b>4.1</b>  | Define and draft the Plan to Boost Language Technologies.  |
| <b>4.2</b>  | Boost the Common Voice project.  |
| <b>4.3</b>  | Discuss and analyse subtitling proposals.  |
| <b>4.4</b>  | Develop support tools for teaching Basque and, in general, for education.  |
| <b>5.1</b>  | Define a strategy to give impetus to mobile apps in Basque.  |
| <b>6.1</b>  | Guarantee ongoing contact at institutional level with the leading Internet technology companies.   |
| <b>7.1</b>  | Set up the devices of the public administration in Basque.   |
| <b>7.2</b>  | Set up the devices of the education community in Basque.   |
| <b>7.3</b>  | Encourage companies and private entities to use the Basque settings of the browsers and ICTs of their devices.   |
| <b>7.4</b>  | Encourage people to set up their mobile phones in Basque.  |
| <b>8.1</b>  | Explore the need to create a repository with digital tools and resources in Basque and, where applicable, bring it into service.                             |
| <b>8.2</b>  | Conduct campaigns to raise awareness of the resources in Basque.   |
| <b>8.3</b>  | Showcase audiovisual productions and videogames in Basque.   |
| <b>9.1</b>  | Guarantee a technology watch of the Basque Language in the digital environment, supported by a smart network.  |
| <b>10.1</b> | Organise a data measurement system for Basque in the digital environment: working on identifying and systematising indicators.                               |
| <b>10.2</b> | Encourage research to respond to specific needs.   |







## STRATEGIC LINES

The specific actions and recommendations of this document are based on four strategic lines to promote the presence of the Basque language in the digital environment. These lines are not new as they appeared in the background working paper submitted to the ICT Committee of the Basque Advisory Board in 2015. *ICTs in Basque: recommendations for public authorities* was then published (2016). The structure of the background paper has also been followed here. Once the main sections had been revised and updated, the recommendations were identified and specific actions proposed to implement them.

These are the four strategic lines that must be taken to promote the presence of the Basque Language in the digital environment:

**1**

**PROMOTE DIGITAL CONTENT IN BASQUE**

**2**

**PROMOTE DIGITAL TOOLS, APPS AND DIGITAL RESOURCES IN BASQUE**

**3**

**SHOWCASE THE BASQUE LANGUAGE AND DIGITAL RESOURCES IN BASQUE TO ENCOURAGE THEIR USE**

**4**

**GUARANTEE A TECHNOLOGY WATCH**



Strategic Line:

# PROMOTE DIGITAL CONTENT IN BASQUE

PROMOTE THE LEISURE AUDIOVISUAL SECTOR,  
PARTICULARLY AIMED AT YOUNG PEOPLE.

**1**  
RECOMMENDATION



## WHY?

As regards content in Basque, the audiovisual sector has particularly grown in importance in recent years (not overlooking the other content) and it looks set to be the trend in the future. There has been a steady increase in audiovisual and interactive content, as shown in the following infographic:



Data never sleeps 2020, Domo!  
How much data is generated every minute?, 2020.

1. "Data Never Sleeps 8.0 Infographic | Domo." <https://www.domo.com/learn/data-never-sleeps-8>. Recovered on 16 October 2020.



Therefore, the avenues to create, consume and promote that content will need to be observed. Effective means will have to be found to offer and use content in Basque in the main consumption channels, platforms, etc. The emphasis will therefore need to be to the content disseminated online.

Apart from promoting policies and steering actions that may be appropriate for society overall, special attention must be paid to young people and adolescents in this regard. People in those age brackets are used to consuming audiovisual content and their presence in social media is constant.

In any event, a series of data on the use of Basque by young people should be recalled. In the field of education, Model D (Basque as the medium of instruction, with Spanish Language and Literature as subjects) prevails as regards choice of language, and according to the latest Sociolinguistic Survey<sup>2</sup> (2016), the majority of the population BAC would opt for Model D as the language of schooling for their children (69.3%). This should be grounds for optimism, but the reality is that Spanish prevails outside the school environment and, in general, in the digital environment.

That trend is clear the *Basque Youth and Social Media*<sup>3</sup> report, published by the Basque Youth Observatory in 2019; in fact, Spanish is the main language used in social media. At least that is what 81.5% of people aged 15-29 reported. Only 15% said they mainly used Basque. The older the person, the greater the use, but the increase is not significant. The fact that Basque is the main language in formal education does not guarantee its use among

---

2 VI Sociolinguistic Survey 2016

3 Basque Youth Observatory: 'La juventud de Euskadi y las redes sociales' 2019-10-17, <https://www.euskadi.eus/gobierno-vasco/-/noticia/2019/el-observatorio-vasco-de-la-juventud-presenta-el-estudio-la-juventud-de-euskadi-y-las-redes-sociales/>





young people, not even in their leisure time as they get older, as shown by the Youth Observatory figures. There are several factors that explain this situation (family language habits, language used for leisure consumption, specific socio-linguistic contexts...).

It should be noted that native Basque speakers do not see that Basque meets their leisure needs, as the supply is scarce and not visible. Stimulating consumption by adolescents is therefore essential and audiovisual content in Basque thus needs to be attractive. The sector needs to make a particular effort to work together and create quality content. The importance of promoting entertainment audiovisual content is therefore obvious.



## HOW?

Some of the actions that can be implemented to promote the entertainment audiovisual content sector, specifically aimed at young people, are to:

|            |   |
|------------|---|
| <b>1.1</b> | Foster the creation of audiovisual content created specifically for web and mobile digital environments, particularly aimed at young people and adolescents |
| <b>1.2</b> | Promote Basque and its use in videogames  |
| <b>1.3</b> | Encourage young people to become digital audiovisual content producers  |



## 1.1. Foster the creation of audiovisual content created specifically for web and mobile digital environments, particularly aimed at young people and adolescents

Given this is a very broad field, international models should be taken into account. An interesting option would therefore be to produce a transmedia series for adolescents. The success of the *Golazen* series, for example, could be a good starting point to embark on such an initiative. The most successful characters of the series could lead to spin-offs, as part of a comprehensive transmedia strategy, harnessing the possibilities of smartphones and using different platforms or networks to whip up interest in the services and to be in contact with the fans.

Furthermore, and as part of this initiative, designing a videogame focused on the transmedia series would also be very appropriate. It would cover the gap in this regard and be a perfect tool to foster gender equality-ethical values, for example, among adolescents.

## 1.2. Promote Basque and its use in videogames

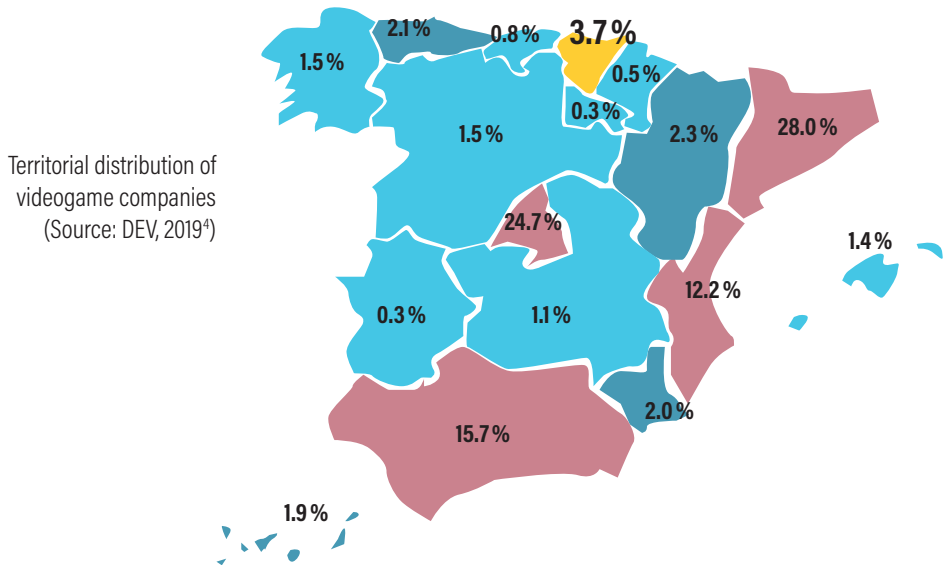
The *ICTs in the Basque Language: recommendations for public authorities* document stresses the importance of increasing the use of Basque in the world of videogames. We therefore devoted a recommendation to the subject, the seventh, and proposed several avenues for promotion.



We should recall a series of statements made in that document and which continue to be valid:

- ▶ The use of videogames has steadily grown, particularly among young people, in recent years. More and more adults are also playing videogames on different media.
- ▶ However, there are very few videogames in Basque and those that do exist are for children. It is difficult to find a platform or game in Basque for young people and adults. It is critically important for Basque to have a greater presence in such a key leisure phenomenon and to which such a large amount of time is devoted.

On the other hand, if we focus on the videogame sector of the BAC, according to the *White Paper on Spanish Videogame Development 2019* (DEV, 2019), the Basque Country is the fifth autonomous community in the Spanish state in the videogame industry, after Catalonia, Madrid, Andalusia and Valencia. Between 2000 and 2017, for example, 277 videogames were created in the Basque Country; 76 of which are in Basque.



Looking back, Basque companies began to show interest in videogame development in around 2008, when the “AZPlay” festival and “Fun&Serious Game Festival” were organised for the first time. Given that entertainment videogames are hard to sell, more and more companies are moving to simulation videogames or those dubbed *serious games*. Fundamentally, the problem is that even if videogames are created, the effort is not monetised; a shift to other formats has been seen, to the *serious games*, to advertising games or to 3D. The Basque Government’s Industry 4.0 strategy is committed to videogames, but not to those for entertainment purposes.

4 <https://www.dev.org.es/publicaciones/libro-blanco-dev-2019>



With this in mind, it should be taken into account that the indirect and direct consumption of videogames is constantly changing. The following should be noted:

- ▶ Smartphones and tablets have made it easier to access videogames. A games console or computer is no longer needed to play.
- ▶ E-sport are increasingly more widely accepted. In the same way as for traditional sports, there are professional commentators for official championships, but that is not as yet the case in Basque.
- ▶ Live or recorded videogame tournaments have become important audiovisual products. They are broadcast on platforms such as Youtube, Facebook and Twitch and allow interaction between the creators (youtuber or streamer) and the audience. There are no Basque-speaking references.
- ▶ Videogames became particularly important during the COVID-19 lockdown. According to ISFE —Interactive Software Federation of Europe— data, videogame consumption increased during lockdown and then fell afterwards. Therefore, videogames are related to the home environment and have become an important entertainment resource in times of crisis.

That being the case, and in order to promote the Basque language and its use in the world of videogames, some of the specific actions that may be of help are as follows:

- ▶ Promoting free software games. The most successful games on the market are not usually free. Developers are not interested in or need to translate their games into Basque, often because they do not know the language. On the other hand, many do not accept “amateur” translations. Therefore, preparing and identifying a list of free software games (they are usually mainly Indie games) could be an interesting option.



- ▶ Monitoring the videogames produced in order to identify those that can be translated. New videogames would have to be monitored. Therefore, a working group tasked with daily monitoring would need to be set up. Between 300 and 500 games are published each month (10 a day) on the Steam platform<sup>5</sup>.
- ▶ Providing training to translate and localise videogames. It should be noted that specific training is required to translate videogames. The context needs to be known and, sometimes, some programming skills (HTML...) are required. A working group could be set up and training offered. This action could be carried out at, for example, the 2deo<sup>6</sup> audiovisual laboratory, using their facilities and with the target of translating one indie and free software game a month. A translation memory bank should also be set up.
- ▶ Focusing on Basque videogame producers. Most videogames are in English (large companies only translate them with grants) and there is hardly anything in Basque. The BAC market will have to therefore be analysed to find producers that use Basque as their working language and promote their work. In this regard, emphasis could be on setting up an incubator or a grant to develop free software games.
- ▶ Promoting gamers and gameplay in Basque. An effort has been made to back Basque-speaking youtubers, but the same doubts remain: Can this shortage only be made up by subsidies? According to the Game Erauntsia association, a whole ecosystem is needed. In addition to funding the setting up of youtubers, the ecosystem could be strengthened by means of the following initiatives: benchmark sessions only in Basque (for professionals and for gamers), tournaments, etc.

---

5 <https://store.steampowered.com/>

6 <https://www.tabakalera.eus/es/laboratorio-audiovisual>



- ▶ Contributing to the dissemination of videogames in Basque. During the first Jokoteknia sessions, the need for a videogame distributor was mentioned: the games (the majority from the USA) reach us through Spanish distributors, and the following question arises: is a distributor needed that opts for local games and in Basque? If yes, does a new one need to be set up or would it be better to use one that is working well in other areas? Durangoko Azoka or events such as Jokoteknia could be used, as they are currently our best showcases that we currently have. Room could also be made for videogames on television, along with supporting initiatives similar to 'Gamer gela' or organising in-person tournaments, in other words, a type of "Game Gune" but for the whole BAC and in Basque.
- ▶ Training in the videogame creation sector would also have to be in Basque. Everything that is currently available is in Spanish or English, and this aspect must therefore not be overlooked.

Since 2019, the Basque Government has worked with the Game Erauntsia association to foster the use of Basque in the videogame sector. This partnership has allowed the association to stabilise its structure and its work, along with better defining its annual programming. Game Erauntsia is currently the clear benchmark to drive actions aimed at promoting Basque in the world of videogames. Maintaining that partnership is deemed necessary to provide continuity to the work areas of recent years.



## 1.3. Encourage young people to become digital audiovisual content producers


Enriching the entertainment audiovisual content for the youth audience is an important goal. One option would be to involve them in a key role, i.e., get them to create audiovisual content in Basque. Nowadays, any adolescent has the essential hardware (smartphones) and software for audiovisual creation. Furthermore, accessing software is also easy and free. This offers many advantages for creating audiovisual content. However, adolescents show little interest in creation, particularly in creating audiovisual content in Basque: more than creators, young people are consumers. They create very little and even less so in Basque.

Therefore, not only are formulas needed that young people will embrace, but also the necessary means must be provided to trigger their creativity. A specific proposal in this regard could be to implement initiatives to encourage them to create audiovisual content in Basque —short videos, memes, live broadcasts, youtuber and gamer events...—, working with different entities and always remembering that the content is for young people. The importance of live broadcasts should here be stressed.

When considering these initiatives, the conclusions from the *Audiovisual Consumption and Creation in Basque of Adolescents of Gipuzkoa*<sup>7</sup> survey by Gipuzkoa Provincial Council, should be taken into account, and which were extracted from the assessment of several youth audiovisual creation initiatives in the Basque Country:

- a. Regarding the work areas:

---

7 Gipuzkoa Provincial Council, *Gipuzkoako nerabe euskaldunak: Ikus-entzunezko edukien kontsumoa eta sorkuntza* 





- Their interests need to be established. One option would be to go to the schools and ask them.
  - There has to be room for a casual approach. Young people want to enjoy themselves, like a fun environment and humour. Thus, informal subjects should be used, which allow them to express themselves in their own way, which they consider interesting or are what they ask for.
  - Limits have to be established. Even though leaving a free hand to creativity may be appropriate, limits need to be set, as they are usually necessary for young people to keep to a pattern.
  - They should be crosscutting from the gender perspective.
- b.** Regarding the formats to be worked:
- It is important for the initiative to be dynamic and intense.
  - Importance has to be given to productions. Their dissemination and showcasing should be guaranteed.
  - Rewards and a fun atmosphere are essential. That is what attracts young people.
  - It is about reaching out to youth, not vice versa. It is important to create comfortable environments, so young people can create freely, far from the classroom setting and avoiding any educational format.
  - They should be in synergy with the usual social media participation of young people.
- c.** About the organisation:
- The community concept is fundamental. In general, we like to know what it is that people around us are doing, see faces we know and be part of a fun setting. The intergenerational issue can be added. People from other age brackets can take part in the initiatives aimed at young



people, for example, audiovisual sector professionals, etc. If the approach is casual, adult participation is usually welcomed.

- Coupled with this, young people look for facilitators or role models, who are important as guides.
- There must be enough time for the initiatives to be consolidated. However, they should also be up-to-date with the latest trends in youth leisure activities in order to come up with appropriate proposals.
- Perseverance and fieldwork are needed. This type of dynamics requires time. A long-term dynamic requires in-depth work and the greatest dissemination possible, and needs time and commitment to work.
- They should be linked to leisure activities.



## DEVELOP DIGITAL CONTENT FOR THE ACADEMIC WORLD, INCLUDING AUDIOVISUALS, AND PARTICULARLY FOR YOUNG PEOPLE

# 2

RECOMMENDATION



### WHY?

Education was excluded from the *The ICT in Basque: recommendations for public authorities* document and that, along with the media, was one of the shortcomings identified at that time. Thus, many reports were prepared for this roadmap at the request of the Special Commission to Promote the Basque Language in the Digital Environment, including one focused on Education. "What can be done to foster Basque in the digital environment in compulsory education?" was the baseline question. Several education stakeholders met to try and find an answer. The report in question takes into account several aspects and its conclusions include the following:

- ▶ A lack of strategy could be seen in the preparation of materials, and apart from the work that teachers and others could do on a voluntary basis, there needs to be an emphasis on materials prepared by professionals: interdisciplinary, accessible, from an inclusive approach and using a free licence. On the other hand, special attention has to be paid to the audiovisual field, because there is a lack of material in Basque to supplement the curriculum content (in this regard, the option of using EITB (Basque Broadcasting Company) content in education should be assessed).
- ▶ A collaborative culture needs to be fostered: it is essential to allow and encourage the reuse of content for education, as



technology provides a unique opportunity to put educational resources within everyone's reach and share the creative skills of teachers and experts. Therefore, current standards must be met when sharing information, so that the generated resources can also be used on other platforms. Accordingly, and order to make up the existing shortcomings, the resource repositories should be expanded, making the existing ones available to users and creating new platforms.

In short, the lack of a unified strategy when preparing materials was noted. It is obvious that if we do not want setbacks, it is a strategic matter in the field of formal education that all educational materials and resources, on the one hand, and the technologies used, on the other hand, are in Basque and can use that language.

In this regard, it is known that young people are increasingly delving further into the digital environment for their activities, whether when it comes to reading or for pleasure: they look for information online, use ICTs to communicate, pitch in and create content; watch and produce music and videos; take part in social media... Teachers, in turn, are also intensifying their endeavours in this field to use digital resources and technologies (to create educational sequences, make content available to students, teach...).

It is increasingly more important that all those resources are available in Basque if we want it to prosper in the digital medium. Our young people are used to attractive information and resources (multimedia content, simulation, interactive activities, infographs etc.) and that attractiveness prevails over language. Therefore, if they do not find that content in Basque, they resort to other languages online (Spanish, English...).

Thus, apart from the clear lack of recreational content, a shortcoming has been detected in the preparation of basic materials linked to



the curriculum as regards digital educational resources in Basque, either because they have not been developed or because even though they have already been developed, they are sometimes not accessible in standard open formats.

Therefore, it is strategic that free and attractive educational resources are and can be used in Basque in the field of formal education, specifically regarding the curriculum, to prevent students from resorting to other languages and there being a setback in this regard.



## HOW?

The following are some of the actions that can be carried out to promote a whole range of content in Basque (including audiovisual and other digital formats) in the academic field.

|            |  |
|------------|--|
| <b>2.1</b> | Promote the development of Wikipedia and Txikipedia in Basque  |
| <b>2.2</b> | Analyse the possibilities of creating "Hezkuntzapedia" (Educapedia)  |
| <b>2.3</b> | Explore the possibilities of using Basque media content in education and to increase the number of adult Basque speakers |



## 2.1. Promote the development of Wikipedia and Txikipedia in Basque

*The ICTs in Basque: recommendations for public authorities* document prioritised the development of Wikipedia in Basque, which was top of the recommendations. Since then, and as we will explain below, significant progress has been made both in the quantity of articles and in the quality of the content and technological innovation. However, given the importance of this project, continuing to promote it is considered to be essential.

Wikipedia is the sixth most visited website in the world and the Wikipedia in Basque is the most visited website in Basque. It receives around 80,000 visits a day, over 100,000 on school days. It can therefore be said that it is a resource of general interest for citizens as a whole. Special mention should be made of its strategic nature in education and that, in turn, it is an essential tool today for linguistic mainstreaming, as digital vitality, an appropriate explanation of scientific terms or discussing cultural matters are fundamental for the prestige of Basque.

If we look at the progress made so far, the Euskal Wikilarien Kultura Elkarte (Association of Basque Wikipedists), working with the Basque Government, embarked on a robust Education Programme in 2017. The aim was to improve Wikipedia, a resource that students use routinely, with content that could be of interest. As we have explained, Wikipedia in Basque receives tens of thousands of visits a day and it is the most visited website in Basque. Even so, students do not always find what they need and, in those cases, they tend to shift to another language.

Two goals were therefore set:



1. Create and improve the list of articles for students.
2. Establish an ongoing relationship between students and university teachers who could improve those articles. The university would work on basic themes in each scientific area and secondary school students would read those articles.

In parallel, the aim has been to implement initiatives to disseminate Wikipedia itself and measures have been adopted to make Wikipedia in Basque more useful and usable. Technological innovation and imaginative proposals can be seen along that path, including the creation of Txikipedia, the first encyclopaedia within Wikipedia for children aged 8 to 13.

According to Euskal Wikilarien Kultura Elkartea (EWKE), numerous goals have been accomplished in recent years.

These include EWKE's very active work both in Wikipedia and in Txikipedia to create more articles in Basque and add content to the existing ones. It organises presentations and runs training sessions in at least 200 classrooms. It has conducted many activities both in the majority of the universities of the Basque Country and in Compulsory Secondary Education. However, they recognise that it is more difficult to reach the education centres in the latter case, as they have to present the project in each centre and not as a project of the whole educational network. The cooperation started with Ikastolen Elkartea seeks to contribute in this regard. In any case, and given that adding content to Wikipedia and Txikipedia is an ongoing task, the steps could be as follows:

- Within the Education programme, provide the existing stakeholders with the opportunity to operate autonomously, and as far as possible, to reach more students and teachers. The necessary steps must also be taken to overcome some of the significant problems when addressing certain topics, particularly social and history ones.



- Open up new avenues with the Education Department and with the Berritzegune so that Wikipedia in Basque reaches secondary education centres. Namely, going beyond voluntary initiatives. For example, a topic could be included in the curriculum to contribute to Wikipedia in Basque, so that students, within their digital skills, can publish in Basque.
- Rise up the list of articles that have to appear in all the Wikipedias. It is important that those topics are well prepared, as they are visited many times and it is also where the prestige of the Encyclopaedia is gauged.
- Embark on partnership projects with the different GLAM institutions<sup>8</sup>. Working with different GLAM institutions is important for the Wikipedia in Basque to become the centre of the free knowledge ecosystem. The aim is to move out of the logic of museums and for different stakeholders to work together. New partners will have to be sought to set off on a journey that is expected to be long.
- As regards heritage, progress has been made with the WikiLovesMonuments contest and all the protect buildings of the BAC are currently in Wikidata. However, participation in those photo contests was not very high. In the Basque Country, there are many photography and heritage associations and it is important to get them involved. Initiatives to showcase towns' heritage can also be carried out at schools.
- Working with the WikiEmakumeok group towards greater gender balance. Progress has been made in this regard in the number of biographies and the percentage has increased significantly, but we continue to be far from the

---

8 GLAM (galleries, libraries, archives and museums).





ideal. Several municipalities are interested in this topic and projects with WikiEmakumeok could get underway.

- Increase the number of users of Wikipedia in Basque. Even though Wikipedia is known, the majority of Basque speakers do not use Wikipedia in Basque and resort to Spanish. This is mainly due to Basque speakers not having the settings in their devices set to Basque in general. Thus, most possible visits are missed and, as is logical, Wikipedia in Basque loses visibility. Projects such as “Lehen Hitza” (“The First Word”) –which we will explain in detail later in the report– should be linked to Wikipedia.
- As regards Txikipedia, creating a minimum corpus is essential. Working with teacher training colleges and with different faculties is a way to build that corpus and guarantee first-rate educational content. Given that it is an interesting educational resource, there needs to be a greater emphasis on teaching training so that primary teachers can improve and use Txikipedia and work with students. In fact, the experience with Primary students shows that the youngest children are also able to draft, publish and acquire digital skills. The Berritzegunes will play a fundamental role in that regard.

The steps taken in the last four years show that it is possible to continue to advance, involve the community overall and for universities and schools to take on content creation. However, the projects implemented will need time to be consolidated, particularly in terms of being integrated in the educational ecosystem. Therefore, it is fundamental to continue driving the project for Wikipedia to consolidate its ecosystem, as that consolidation is deemed to be strategic to foster Basque.



## 2.2. Explore the possibilities of creating “Hezkuntzapedia” (Educapedia)

As has been explained in the introduction to this point, there is a lack of a unified strategy when preparing materials. There are several webs and initiatives, including:

- ▶ The Amarauna website<sup>9</sup>, recently launched in the public network.
- ▶ Ekigunea<sup>10</sup>, of Ikastolen Elkartea.
- ▶ The specific ‘Kalitatezko 2.000 artikulu 12-16 urteko ikasleentzat’<sup>11</sup> initiatives (“2,000 quality articles for students aged 12 to 16”) of Euskal Wikilarien Kultura Elkartea, or Wikipedia and Txikipedia overall.

In any event, a lack of strategy in preparing materials can be seen. Apart from the voluntary work of teachers and others, impetus needs to be given to professionals preparing resources in innovative formats: interdisciplinary, accessible, with an inclusive approach and under free licence. When talking about innovative formats, we are referring to the most common multimedia formats at present, namely, videos, infographs, timelines, simulations or interactive content, in addition to texts.

Therefore, it may be of interest to analyse the need to create a free and open space for the education community overall. One option could be to include a space called Hezkuntzapedia (Educapedia) in Wikipedia itself, taking the ‘Atari: Hezkuntza’ space and, in the

---

9 <https://www.amarauna.euskadi.eus/en>

10 <https://ikt.ekigunea.eus/>

11 [https://eu.wikipedia.org/wiki/Atari:Hezkuntza/2.000\\_artikulu](https://eu.wikipedia.org/wiki/Atari:Hezkuntza/2.000_artikulu)



same way as the 'Kalitatezko 2.000 artikulu 12-16 urteko ikasleentzat' project ("2000 quality articles for students aged 12 to 16") as the starting point, offer content not only for semantic searches, but also organised according to the curriculum. In other words, for it to be a free and unique reference point to access resources and materials related to the Basque curriculum and which is available to the public in general (public or private, professional or voluntary). Creating it as part of Wikipedia project would guarantee its dissemination, because it is already known by students, and would foster the collaborative culture. Furthermore, if the formats used are free and standard, teacher adaptations will be possible, i.e., teachers will be able to adapt the resources to their needs. At the same time, students could use that resource when working on different topics and no longer have to resort to those available in other languages.

The goal would be to create a central space to be used in education that would offer the following possibilities:

- ▶ Resources to create and improve Wikipedia resources.
- ▶ Txikipedia articles and complementary material. Exercises to work in Txikipedia and application for school computers.
- ▶ Multimedia material, at two levels. On the one hand, material uploaded to Commons and avenues to create new appropriate material to be used at school (art, music, science, infographs..) and, on the other hand, professional videos, currently the missing link. Dynamic and short educational videos to be watched, shared and to learn.
- ▶ Open to teachers and to volunteers. A guide so that anybody can upload and share content, but also with recommendations, exercises, educational units, etc. so that all the existing content can be used in class. The aim is for teachers to be able to be part of this ecosystem so that whole schools can be added in the future.



## **2.3. Analyse the possibilities of using media content in Basque for educational purposes and to increase the number of adult Basque speakers**

Apart from developing resources and instruments to exploit the Wikipedia content, exploring the options of using the media content in Basque in education and to increase the number of adult Basque speakers may also be of interest. Not only to practise the language (grammar, etc.), but also to analyse partial or fake news and to encourage reflection in that regard.

The possibilities that language technologies offer to achieve this goal can be explored. For example, an instrument similar to InsertLearning could be developed, which allows education content to be dynamically inserted on any website (questions, discussion forums, audiovisuals...). Thanks to that browser extension, with just one click, users can use primary sources and add current descriptions to the curriculum in force without needing to use another platform, by going directly to the source.

Another option may be to explore the possibilities of the Newsela project. Newsela is an online platform that offers different levels of news. The learning can be adjusted to the level of the students: news with different possibilities and activities by level. Materials can thus be offered specifically to students with difficulties or those who are going at a faster rate. Content of different types and sources are offered and topics are covered that encourage cross-reading, for example women's rights, the situation of students in Syria or journeys to Mars. All the articles have a series of questions and a short essay, which students will have to answer and then write about what they have learnt. Teachers can see the individual results and for the class as a whole.



Therefore, and coupled with this, making resources to work on current affairs available to teachers and students at schools and at euskaltegis is important. How the content generated daily in the media in Basque (news, reports...) could be used for educational purposes should therefore be studied.



# 3

## RECOMMENDATION



### PROMOTE THE USE OF BASQUE IN THE DIGITAL MEDIA

#### WHY?

The Internet is the main information source for citizens and since 2019, the digital media have been on track to become one of the most used platforms; precisely the possibility of the Net overtaking television was announced for the first time in 2019. It was the result of the survey conducted by Zenith Media consultants of 50,000 users aged 16-60 in 46 countries. Above all, the global increase in the total media consumption was noted, namely, the greater interest by the media in any type of medium, but, above, the crossover between the network and television stood out. They foresaw that television daily media consumption would be 167 minutes and online consumption 170 minutes. The Internet will outperform television in general, but also as a supplier of information.

A survey conducted in the Basque Country in July 2019 by the Media, Society and Education Research Group of the EHU/UPV also reveals the superiority of Internet in the contemporary media panorama (Manias, Gurrutxaga and Ramirez de la Piscina, 2020<sup>12</sup>). There are two notable pieces of information in the survey regarding priority and traditional media that Basque citizens use to find information on current affairs: the digital press is the main medium usually chosen by Basques to get news (83% of cases), along with

---

12 Manias, Gurrutxaga y Ramírez de la Piscina (2020): "Fast or slow: zein da albisteen geroa? Nazioarteko 25 adituk eta Euskal Herriko 500 irakurlek arnasa luzeko kazetaritza aztertu dute» ("Fast or slow: what is the future of news? readers of Euskal Herria analyse slow journalism" *Euskal Hedabideen Urtekaria 2019, Basque Media Yearbook* pp; 73-90 <<http://behategia.eus/txostenak/urtekariak/>>.



it being the priority medium (corroborated by nearly half the people surveyed, specifically 44%). Furthermore, after television, which appears in second position (74% and 24%, respectively), there is also another digital medium: nearly half the population (49%) use social media as their usual means of communication. These are the figures that reflect the public's options to get information. It goes without saying that it is a trend that is also seen in the world of entertainment. Digital is clearly the preferred option.

2020 will therefore be a new milestone on the playing field of digital communication. The pandemic has led to the mainstreaming and widespread use of ICTs, along with an exponential increase in media consumption. During the global lockdown, an increase in media consumption was noted right from the start and, specifically, online media portals posted their best ever figures in 2020. Interest in the media in Basque trended upwards or the number of sessions increased in terms of the relevant digital metric, both globally and here. According to the Anuario de Medios de Comunicación Vascos (Basque Media Yearbook) (Azpillaga y Lizarralde, 2020<sup>13</sup>), the Hekimen association media network posted 10 million sessions in the last five years (from 2014). In 2019, over 28.4 million sessions on those websites entirely in Basque were recorded —nearly five million more and an increase of 18.5% on the previous period—. This increase will undoubtedly be more significant in the future: at the time of writing, according to the data available and without including the last quarter of 2020, the websites of the Hekimen websites recorded over 30 million visits over its 49 portals (Hekimen Analytics, 2020<sup>14</sup>).

---

13 Azpillaga and Lizarralde (2020): «Hekimen elkarteko webguneak 2019. urtean», *Euskal Hedabideen Urtekaria 2019*, ("The Hekimen association websites in 2019") Anuario de Medios de Comunicación Vascos pp; 111-136. <<http://behategia.eus/txostenak/urtekariak/>>.

14 Hekimen Analytics is the instrument that gathers the analytics of the Hekimen association websites (<https://analytics.hekimen.eus/>). The accumulated figure for the first quarter of 2020 was as follows: 30,485,679 sessions 68,957,632 pages visited.



Interest in content in Basque is growing and that can be seen from the indicators showing steady growth of the media entirely in Basque. Furthermore, consumption of digital media is greater than ever, both for information and for entertainment, leisure, etc. The digital media sector is therefore fertile ground to be developed. The increase in the content and digital media in Basque is in keeping with global growth, as the global figure has also increased in the same way as for consumption in Basque. Consequently, absolute growth provides us with opportunities that cannot be ignored to also drive relative growth, i.e., to reach the online consumption in other languages.

Citizens' consumption habits clearly indicate that the future of the media will be digital. In other words, the survival both of Basque and of the media will be decided in the digital environment.

The typical Internet user spend many hours in front of the screen and the media accounts for an important part of that digital diet, consisting of those media portals, on the one hand, and the content of their social media or messenger apps, on the other. Therein lies the key: the content.

The content is at the core of any browsing, as we skip from content to content on our devices. Furthermore, the online content catalogue is now global. We can access the vast content production in other languages with just once click. That is why it is important to boost access to the largest possible amount of content in Basque. Because in order to be able to consume content in Basque, an extensive supply has to be generated in that language (even more so at a time when the public are showing a growing interest in our content).

The main, but not the only producers of that content are the media entirely in Basque. It is as important to promote digital media entirely in Basque as to ask the digital media that work in Spanish to increase their production in Basque. The digital environment currently offers multiple instruments in that regard.





As is well known, a larger digital corpus contributes to the mainstreaming-revival and constant updating of the Basque language, and that it is also strategic when urging its use. The digital media consist of written text, images, audio and audiovisual and allow all those codes to be brought together. This code complementarity also facilitates understanding and, therefore, increases the dissemination and attractiveness of the content.

Digital media in Basque are *arigunes* or practice settings, and the content in Basque generates digital practice settings in the digital media outlets.

In this context, and given that media outlets are strategic to disseminate and consolidate the presence of Basque in the digital environment, fostering cooperation among all the stakeholders is essential. That cooperation needs to be among the sector's stakeholders and also among them and the administration, guaranteeing the coordination between the provincial councils and the Basque Government. Working on cooperation will facilitate the promotion of development initiatives to increase the visibility and the prestige of the media (organising powerful institutional campaigns to promote consumption in Basque), increase the supply of audiovisual content and also to implement new digitalization projects. The Basque Media Panel is already up and running<sup>15</sup> and it is of interest to continue along that path.

---

15 The Basque Media Panel was set up on 8 July 2020 with the following goal: to bring to the table the needs and challenges of the sector and to conduct joint appraisals of them, generate discussions and, as far as possible, to seek consensual solutions. As regards its composition, the public administrations on the panel are the Álava, Bizkaia y Gipuzkoa provincial councils and the Basque Government's Deputy Ministry of Language Policy. Hekimen association will represent the media sector.



## HOW?

The initiatives to foster the use of Basque by the digital media outlets could include:

|            |   |
|------------|---|
| <b>3.1</b> | Encourage cooperation with different stakeholders in the digital media world                                      |
| <b>3.2</b> | Establish criteria so that Spanish-speaking or bilingual digital media offer content, or more content, in Basque. |

### 3.1. Encourage cooperation with different stakeholders in the digital media world

As has been explained in the introduction, promoting digital media is fundamental. The new digital approaches of existing communication projects will therefore be supported, along with channelling initiatives to create new products. It is important for the calls to serve to create websites and digital products for different web formats.

It would also be interesting to use lures to boost browsing the digital media in Basque, by improving the accessibility of the content for users.



## **Establish criteria so that Spanish-speaking or bilingual digital media offer content, or more content, in Basque**

# 3.2.

Another of the proposed actions is to establish criteria for bilingual or Spanish-speaking digital media outlets to use Basque. They could offer more content in Basque.

Language accessibility and visibility could also be incentivised. The current possibilities of language technologies (automatic translators based on artificial intelligences and neuronal networks or speech recognition systems, etc) should be analysed and work carried out on a proposal that the media can embrace.



Strategic line:

# PROMOTE DIGITAL TOOLS, APPS AND DIGITAL RESOURCES IN BASQUE

The recommendations and specific actions to promote tools, apps and digital resources in Basque are listed below:

PROMOTE THE DEVELOPMENT  
OF BASQUE LANGUAGE TECHNOLOGIES

4

RECOMMENDATION



## WHY?

Both the *Hizkuntza-teknologiak sustatzeko planaren txosten teknikoa* report (*Technical Report of the Plan to Boost Language Technologies*), prepared by the Basque Language Technology Centre of the University of the Basque Country-UPV/EHU (HiTZ) at the request of the Basque Government in 2020, and the



delegates at the “European perspective for the digital strategy of the Basque Language” conference (2020) have clearly indicated that the survival of languages in the digital environment —whether dominant or minority languages— now necessarily involves developing language technologies.

The *Hizkuntza-teknologiak sustatzeko planaren txosten teknikoa* document (Technical Report of the Plan to Boost Language Technologies) published a series of conclusions, including the following:

1. It is a sector of strategic importance in terms of the future of languages.
2. The language technology sector will be a core area for Europe in the coming years.
3. The work will focus on research and innovation and will be backed by investments.
4. Important steps need to be taken in this regard if we wish to boost Basque and if the aim is to be on a par or close to that of other languages.
5. The progress observed in other languages, and what can be expected regarding the future, could be considered as an obstacle for communicating in Basque as we live in a multilingual society. However, it can also be an opportunity if we manage to create/strengthen an important setting for research and development, along with boosting Basque.

If we turn our sights to other places in Europe (Wales, Estonia, Catalonia, Iceland...), the importance that language technology plans have acquired in their language policies is immediately clear. The Aina<sup>16</sup> project, recently unveiled in Catalonia, or the language

---

16 <https://www.bsc.es/news/bsc-news/aina-born-the-project-will-guarantee-the-survival-the-catalan-language-the-digital-age>



technology plans implemented in the aforementioned countries are proof of this. The following aspects are developed in them: linguistic databanks, text analysis, voice recognition and synthesis, automatic translation, machine-person interaction technology, automatic spelling and grammar correction...

In the case of Basque, even though it is a language with scarce resources, the extensive development and use of language technologies have been pivotal in its revival and recovery process. In the framework of these technologies, the significant advances in recent years (including *big data* and neuronal networks) could generate a second recovery in the Basque language revival process. If we use what technologies now offer us appropriately, the clear advances in speech processing, automatic translation or text analysis could significantly contribute to facilitating and disseminating the use of the Basque language.

If we wish to guarantee the survival of Basque in the future, it must be a competitive language in the digital world and that involves continuing to develop Basque language technologies.



## HOW?

The actions that can help to develop language technologies are discussed below:

|            |  |
|------------|--|
| <b>4.1</b> | Define and draft the Plan to Boost Language Technologies                 |
| <b>4.2</b> | Boost the Common Voice project   |
| <b>4.3</b> | Discuss and analyse subtitling proposals                                 |
| <b>4.4</b> | Develop support tools for teaching Basque and, in general, for education |



## 4.1. Define and draft the Plan to Boost Language Technologies

The *ICTs in Basque: recommendations for public authorities* document (2016) included the following among its high-priority recommendations: “Contribute to the development of language technologies and develop a specific plan”. Even though important steps have been taken in this direction —for example, the technical report mentioned in the “Why?” section—, the plan still has to be drafted.

Thus, given that the Basque Government’s aim is to define a plan based on that technical report, we believe it necessary to also include it among the proposed activities of this roadmap, to address the topic as a whole and to stress its importance. This is our first proposal for the Basque Government regarding language technologies: to prepare and implement the Plan to Boost Language Technologies.

The technical report has assessed the current situation and has identified the key steps in the medium term. In order to promote and develop language technologies in Basque, the report sets a series of work lines, organised according to six core development areas: management of the plan, linguistic resources (gathering and labelling oral and text material), developing language resources, integration and application of the language resources, automatic translation and voice processing (speech interfaces). In order to be able to implement them all in an effective and practical way, several crosscutting or beacon projects are proposed for the specialist fields of industry and the administration, with the sights set on the following indicators: interest, feasibility, effectiveness and social acceptance.





As regards the beacon projects, these are the proposed areas: Administration, Education, Increasing the number of Basque speakers, Health, Justice, Tourism, Culture and the Media, Police and others.

An introduction, goals and proposed tasks are given for each area. The list of tasks is, therefore, long and diverse. The plan should divide these tasks into short-, medium- and long-term priorities.

In short, preparing and deploying the Plan to Boost Language Technologies would be a milestone on the way.

## **Boost the Common Voice project**

# 4.2.

Common Voice is a Mozilla Foundation initiative and tasked to Librezale Association in the Basque Country. Its goal is to create a set of audio recording data for develop free speech recognition technology (speech-to-text engine).

As it is open code speech recognition technology, anybody —local stakeholders or Apple and other large technology companies— could use it for their developments (real time translators, voice wizards...). It will help to reinforce and democratise the sector, along with boosting the market.

The project is currently being run in 64 languages, including Basque, and there are others in the pipeline. As regards Basque, many stakeholders are taking part in the project: the Librezale group, Euskal Wikilarien Kultura Elkartea, Argia, Iametzta, Ixa taldea (EHU), Elhuyar Fundazioa, Aholab laboratory (EHU), Garabide association (GKE), 1,000 volunteer speakers, etc.



Despite this, only 61,000 phrases have been collected, far short of the 1.2 million phrases needed to develop a quality voice recognition system. Around 10,000 hours of recording are required for a perfect voice recognition system, but a voice recognition level similar to the human one can be achieved with 2000 hours.

Why is developing a voice recognition system for Basque so necessary? The importance that voice recognition has acquired in recent years is clear because voice is increasingly used for communication at home and in cars using different devices (Google Assistant, Siri, Alexa...). It is therefore fundamental to develop a voice recognition system for Basque. Otherwise, we will end up using other languages when giving orders and interacting with different devices.

In any event, voice data are expensive and privately owned, and in the case of Basque, they are also scarce (a huge amount of data is required for machine learning). Additionally, as Basque is not cost effective for the sector's companies, Basque speakers interact with machines in Spanish and we run a serious risk of being left behind in this technology.

Different actions can be implemented to drive this project, including:

**a. Collecting written phrases:**

A database is first needed in order to make recordings, i.e., a large number of written phrases must be collected, which will then be read by the people tasked with the recordings. Those phrases have to be filtered or cleaned (so they do not contain foreign words, for example) in order to be able to use them. As regard the content, it should be diverse so that the voice recognition system has a variety of knowledge.

In the case of the Basque Government, the databases or text compilations that may be useful (translation memories...)



would have to be studied. In this case, there are no copyright problems, as phrases of between 5 and 10 words are needed, and the longer ones are discarded. The selected phrases are jumbled up and there is no way of knowing where they are from. Consequently, there are no copyright problems. The written phrases and the subsequent voice recordings are then in the public domain.

Local councils and the provincial councils may likewise contribute in keeping with their means and in a coordinated way. How the content could be filtered, etc. would need to be considered.

Given that the filtering process (preparing the phrases, summarising them, cleaning them, etc.) requires work, a project could be set up for that purpose. This step should be coordinated with Librezale, because the phrases resulting from the filtering process have to be uploaded to the platform and that association is currently carrying out that work.

#### **b. Encouraging recordings**

It is essential that people of different genders and accents take part in the recordings in order to develop an inclusive voice recognition system and with the ability to recognise the voices of the largest possible number of people. That hinders the task, as it is not enough to subsidise the project. The participation of people is of vital importance.

This project has been envisaged as a Basque-speaking language digital *auzolan* (collaborative work system), and therefore the help of all Basque speakers will be needed. One of the options would be to disseminate the project among the educational community. This would involve gathering together people of different types (teachers and students) who would read phrases prepared beforehand to be recorded. Prior contextualisation work would be required in the classrooms, to



highlight the importance of the *auzolan* and of free technology, etc. Analysing other formats to supply the project is also considered appropriate. In this case, the role that the Basque Government would play would be to help to cover the statistical gaps and to contribute to involving the different stakeholders.

**c. Validate the recordings**

The recordings must be listened to one by one and validated, i.e., two people have to approve them. Good progress can be made with two people working on the task.

Thanks to such initiatives, the main obstacle of the voice recognition systems in Basque would be overcome and the Mozilla free engine could thus understand Basque, rapidly reaching an objective that will be essential in no time at all: for Basque speakers to be able to communicate with our devices in Basque.

## 4.3. Discuss and analyse subtitling proposals

As we have explained in the introduction, in several European countries, such as Estonia, work is being carried out on developing automatic subtitling to be used for live television programmes. The aim is to help those people with hearing problems or who do not understand the language well. Namely, subtitles in the same language are offered in addition to the sound.

However, automatic subtitling offers more possibilities. In our case, for example, and given a limited range of audiovisual products in Basque, this could be significantly expanded if productions that



are international hits are translated into Basque – with subtitles or dubbed, according to the need or the age–.

In the field of education, increasingly more videos are also being used for educational purposes (to teach a class, to present subjects...). The majority of times they are searched for and consumed on line, particularly in YouTube. However, the majority of the videos are not in Basque. Therefore, having the option of automatically translating them with subtitles, so that they can also be consumed in Basque, is important.

In general, there is no clear commitment to subtitles and there is no consensus in that regard. Therefore, apart from scaling up this technology, greater discussion about its use would not be out of place. “How can subtitles help to develop the Basque language in the digital environment? How could they be used?”

In this regard, the importance and need to scale up automatic subtitling should be analysed when defining the language technology plan. On the other hand, setting up a discussion forum on the role that subtitles may play and their importance could be of interest. In the short term, a subtitling seminar or work group could be organised to assess the conclusions and channel the necessary actions as soon as possible.

## **Develop support tools for teaching Basque and, in general, for education**

# 4.4.

COVID-19 has triggered a series of changes in education (in the schools, increasing the number of adult Basque speakers...) while also exposing some failings. One of the conclusions has been



reached is the importance of being able to managing resources and instruments in Basque in the digital environment. From this perspective, instruments will have to be developed in the future to contribute to language teaching and to education in general.

One of those instruments may be the extension for the “Irakurri eta idatzi” (“Read and Write”) browser. This toolbar would help the user to read in Basque, to understand texts better, to learn and to write. Let us look at the origin of this proposal.

As has already been explained, several reports have been produced in order to prepare this roadmap, including one on promoting the Basque language in the digital environment in compulsory education. A specific need was detected during the preliminary interviews conducted:

A toolbar needs to be developed for compulsory education, which lets people better read and understand texts in Basque, and which helps them to learn and write in that language. It would function as a browser extension compatible with different browsers, along with offering multiple resources and language technology in Basque. It should be stressed that this toolbar, which can be taken to be a technical infrastructure and also an educational digital resource is of general interest.

As established in the sectoral report, the Educational Community has already taken a series of steps in that direction:

- ▶ The “digital reader” created through the Basque Government’s Berritzegune Nagusia. This instrument allows students with reading difficulties (dyslexia, etc.) to improve their reading-writing skills. It can also be very useful for many other students (for example, for those with impaired vision or language disorders). In general, it can be used to prepare exercises that



combine text and pronunciation, and can be downloaded from the Berritzegune Nagusia website.

- ▶ As regards the Ikastolen Elkartea association, it is currently immersed in a reflection process on Universal Design for Learning (UDL). Furthermore, they are working on a Basque toolbar that is compatible with different platforms.

The sectoral report proposes using the Read&Write extension developed by Text Help for Chrome as the model and use the existing technology to develop a similar toolbar for Basque.

The main characteristics of that toolbar are even envisaged:

- ▶ Compatible with Google Chrome and Firefox.
- ▶ Reads written texts, using Text-to-Speech technology. It can thus also be used with students with special educational needs (dyslexia, visual impairment, etc.).
- ▶ Automatically translates written or audio texts into Basque, using translation and transcription technology.
- ▶ Subtitles audiovisual content automatically. Users will thus be able to see Basque subtitles for the video that they are watching in another language.
- ▶ Includes voice recognition in Basque, using Speech-to-Text technology. Students will be able to obtain the audio scripts in Basque or dictate using voice recognition.
- ▶ Can be used to consult dictionaries.
- ▶ Can be used to analyse the text information: spelling and grammar correction, analysis of the grammatical complexity and lexical wealth, counting the number of substantives, etc.
- ▶ Creates dictionary lists.



Such a resource would be very beneficial for any type of users, particularly in the world of education, and it would be useful for teachers and students overall. In any event, it should be taken into account, on the one hand, that technological development requires investments and, on the other hand, that it also involves maintenance costs. Namely, given that it uses language technologies, the maintenance costs (updates, need for large servers, etc.) cannot be ignored.

In light of the above, the sectoral report proposed the following action:

Develop a toolbar that can be useful for reading, better understanding the lexis, learning and writing in Basque in compulsory education, which would function as an extension compatible with different browsers.

The following steps could be:

- Reflect on the features and characteristics of the 'Irakurri eta idatzi' (Read and Write') browser extension. An exhaustive functional appraisal would first have to be conducted in order to develop a toolbar to read and better understand texts in Basque, and to learn and write in Basque. The needs of the different educational networks could be studied in greater depth and technology providers contacted as such a tool offers far-reaching possibilities. Priorities should be fixed.
- Develop and deploy the toolbar. It could be launched with the priority features and more added over time.

The Basque Government has already developed the first version of the toolbar. It is called Itzuli +<sup>17</sup> and is available from the euskadi.eus website. It has been launched with the most basic features

---

17 <https://www.euskadi.eus/descargas-itzuliplus/web01-a2eutres/es/>





mentioned above. There is still much more to do before all or nearly all the toolbar features described in the sectoral report have been integrated.

In addition to developing the Itzuli + tool, reflecting on other tools required in language teaching and in teaching in general (online platforms for learning Basque, apps, etc.) would be of interest.



# 5

RECOMMENDATION

## PROMOTION OF MOBILE APPS IN BASQUE



### WHY?

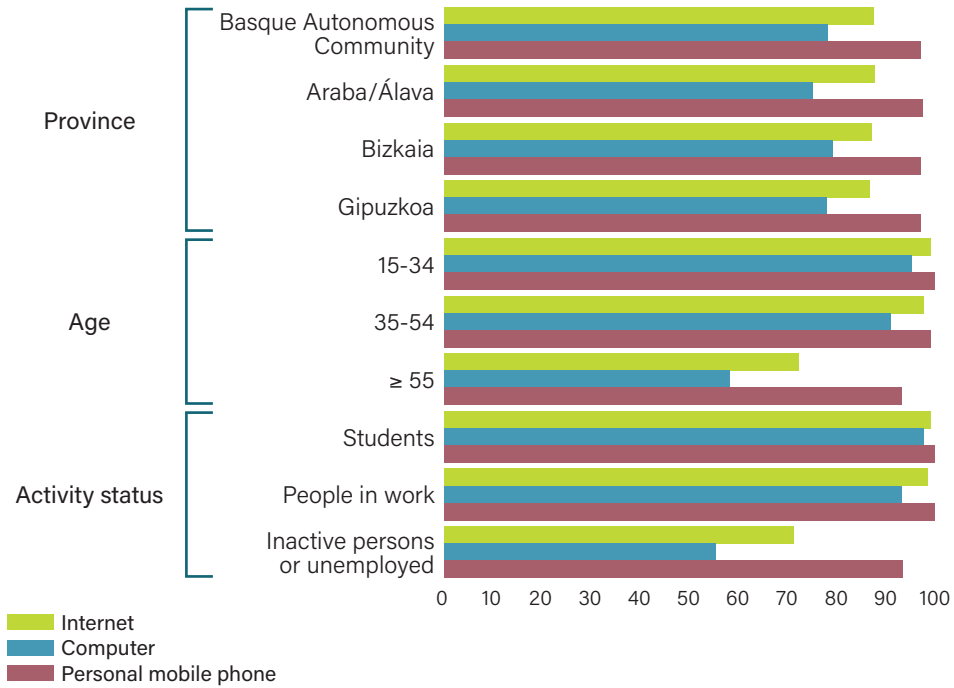
According to the *Information Society Overview 2020* report published by EUSTAT<sup>18</sup>, the Basque population is steadily increasing its technological equipment, although that is not the case of all the equipment and is not all at the same intensity. Mobile telephones are the most commonly owned equipment by people aged 15 and over (97.2%), followed by Internet connections (87.4%) and the computer (78.3%). As regards the provincial distribution of mobile telephones, computers and Internet, even though differences can be seen, the greatest presence is of mobile phones, as shown by the following graph.

And not only from the point of view of the equipment. The great increase in smartphones in digital consumption is obvious and it seems that this trend will continue to rise in the near future. According to the *General Framework of the Media in Spain 2021*<sup>19</sup> report, during the last month of 2020, 94.3% of Internet users connected using a smartphone, as shown in the following table (data for the Spanish State overall).

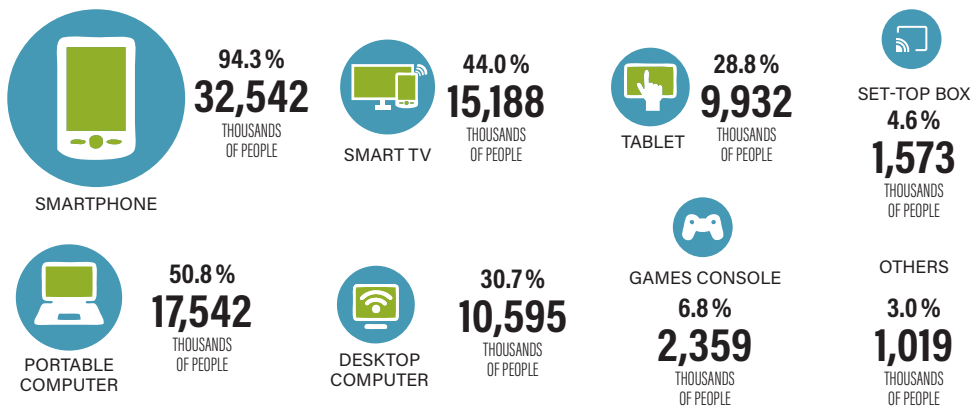
- 
- 18 Panorama de la Sociedad de la Información en Euskadi 2020, EUSTAT [https://www.eustat.eus/elementos/ele0017200/panorama-de-la-sociedad-de-la-informacion-euskadi-2020-pdf-3mb/inf0017264\\_c.pdf](https://www.eustat.eus/elementos/ele0017200/panorama-de-la-sociedad-de-la-informacion-euskadi-2020-pdf-3mb/inf0017264_c.pdf)
- 19 Marco general de los medios en España 2021 <https://www.aimc.es/a1mc-c0nt3nt/uploads/2021/02/marco2021.pdf>



Population aged 15 and over as per the main technologies. BAC, 2019 (%)



Access device in the last month. Spain, 2020





Furthermore, 50% of the queries, formalities and accesses on the Basque Government web services were using smartphones and tablets. As can be seen in the last five years, increasingly more people have connected using mobile devices. This trend is obvious since the euskadi.eus portal was remodelled in 2015 to be accessible using phones and tablets. In the first quarter of 2020, the trend continued and increasingly more people (50%) used a mobile device to access the euskadi.eus portal:

#### ACCESS DEVICE DATA 2015-2020 COMPARISON (1<sup>st</sup> quarter)

| ACCESS DEVICE    | 2020 VISITS<br>(1 <sup>st</sup> half-year) | 2019 VISITS<br>(1 <sup>st</sup> half-year) | 2018 VISITS<br>(1 <sup>st</sup> half-year) | 2017 VISITS<br>(1 <sup>st</sup> half-year) | 2016 VISITS<br>(1 <sup>st</sup> half-year) | 2015 VISITS<br>(1 <sup>st</sup> half-year) |
|------------------|--|--|--|--|--|--|
| Desktop computer | 50.2%                                      | 49.42%                                     | 53.60%                                     | 57.91%                                     | 61.92%                                     | 66.45%                                     |
| Mobile phones    | 46.8%                                      | 46.62%                                     | 41.66%                                     | 36.75%                                     | 31.68%                                     | 27.53%                                     |
| Tablet           | 3%   | 3.96%                                      | 4.74%                                      | 5.34%                                      | 6.40%                                      | 6.02%                                      |

All these figures show that using a smartphone is an absolute must when working on projects, as it is the most common device used in everyday life. Furthermore, it is at the core of audiovisual creation and consumption in Basque, and mobiles are increasingly used for media consumption.

Therefore, its importance must not be overlooked when promoting Basque in the digital environment.



## HOW?

The following action can be implemented in order to guarantee the possibility of using mobile phones in Basque:

**5.1**

Define a strategy to give impetus to mobile apps in Basque

### Define a strategy to give impetus to mobile apps in Basque

# 5.1.

If we want Basque to occupy its rightful place in the world of telephone mobiles, a series of strategies are fundamental: on the one hand, to ensure that mobiles and their apps can be used in Basque, and, on the other hand, to encourage citizens to use those resources in Basque. The current situation is explained below:

- ▶ Not all mobile phones can be configured in Basque. Android mobile phones offer the option of being configured in Basque: according to the assessment conducted during the Lehen Hitza Euskaraz (The First Word in Basque) campaign, 67% of Android mobile phones on the market can be set up in Basque. However, the possibilities are not as good in the case of IOS mobiles. This should be taken into account when working on public policies.
- ▶ The mobile language setting affects all the apps installed on it. Thus, if they are not in Basque, the apps are installed in English, which is off-putting if the user does not know that language.



- ▶ Apps are a fundamental element of current communication experiences and we use them to communicate using our mobile phones. However, the market is very large and it is difficult to discover and find apps in Basque (there are not many).
- ▶ There are currently no grants available to develop mobile apps in Basque. As regards the Basque Government grants, they were stopped with the money going to more appropriate ones. In general, it could be said that in this case the competitive grant scheme was exhausted for several reasons, but, above all, because it was very difficult to develop and market quality and widely distributed apps with a competitive grant.

Our point is that several strategies must be defined to promote the use of Basque in mobile phones.

To start, there has to be a constant push for mobile operating systems to be translated into Basque. This is related to the following recommendation. In fact, strategies are needed to steer and ensure ongoing contact with the leading companies or entities of the digital environment.

Furthermore, emphasis needs to be placed on dissemination and promotion, as in the case of the *Lehen Hitza Mugikorrak*<sup>20</sup> (The First Word for Mobiles) initiative, which we will discuss later.

Finally, it should be noted that promoting apps in Basque needs to be placed at the heart of these recommendations. Apps are a key aspect of current communication experiences. We use apps to communicate using our mobiles, and if we want Basque to be present in that world, defining a strategy to promote the apps is essential. We propose the following avenue as being worth exploring: consider the opportunities of subsidising apps in Basque

---

20 <https://www.lehenhitza.eus/mugikorrak/>



and define a strategy. Therefore, the aspects to be taken into account include the following:

- ▶ When awarding other grants, for example to promote websites, it should be taken into account whether those websites are adapted to be used on mobile phones.
- ▶ With respect to the express promotion of apps in Basque, an assessment must first be conducted in order to identify the needs, to then reflect on the policies to meet those needs (whether in the form of subsidies, calls or public procurement).

Consequently, we recommend defining in this case, with the help of experts, a strategy to determine how to promote mobile apps in Basque<sup>21</sup>.

---

21 "Apps" in the widest sense of the term. i.e., the progressive web apps in addition to the apps that can be downloaded from stores.



# 6

RECOMMENDATION



## GUARANTEE THE PRESENCE OF BASQUE ON PLATFORMS THAT ARE WIDELY USED

### WHY?

The digital environment is constantly changing, along with users' consumption and use habits, as has already been mentioned on different occasions. Nowadays, the typical user uses many different social media and platforms (content consumption, shopping, communication, opinion, etc.). Therefore, it is essential that those platforms or services offer content in Basque or allow their use in Basque if we want to prevent users from having to resort to Spanish or other languages.

Many of those services and platforms are run by large technology companies, and given the number of users in Basque, they are not particularly interested in making their products (interfaces, content offered, advertising, etc.) available in that language. What happens in the world of videogames is a good example of this. Developers are not interested in or need to translate their games into Basque, often because they do not know it even exists. On the other hand, many do not accept "amateur" translations. Another example is what happens with the most famous streaming platforms. They are not at all interested in offering their products in Basque, because it is not worth it economically speaking. Therefore, some of them find it hard to include Basque in their language options. To cite other examples, there is the case of the GoogleMaps services (it amended its place name language policy and place names began to appear in Spanish that had previously appeared in Basque), or the fact that TripAdvisor does not allow reviews in Basque or Twitter officially rejects advertising in that language.





Basque users and other stakeholders are constantly organising campaigns for those platforms to also be in Basque. For example, one was run to translate Twitter and other platforms some time ago. Several campaigns are currently underway. For example, a group of users are striving to get Twitch translated into Basque<sup>22</sup>. The initiatives for the leading streaming platforms (Netflix, Disney<sup>23</sup>...) to offer their content in Basque can likewise not be overlooked. All those efforts are commendable, but they are often not sufficient and are also sporadic. Furthermore, if translation and localisation are required, on the one hand, there has to be a group of people ready to carry out the work, and, on the other hand, the platforms have to approve those translations or localisations once the work has been carried out.

These examples show that will and activism are not sufficient to achieve certain goals. Permanent contact with those companies at the highest institutional level is essential.



## HOW?

The following actions, among others, can be carried out to guarantee the presence of Basque on widely used platforms.

### 6.1

Guarantee ongoing contact at institutional level with the leading Internet technology companies

22 <https://www.berria.eus/paperekoa/1921/030/001/2021-01-27/komunitate-bati-zuzenean.htm>

23 <https://www.berria.eus/paperekoa/2581/005/003/2020-12-04/sinadurak-biltzen-ari-dira-disney-euskaratzeko.htm>  
[https://secure.avaaz.org/community\\_petitions/es/the\\_walt\\_disney\\_company\\_disney\\_euskaraz/](https://secure.avaaz.org/community_petitions/es/the_walt_disney_company_disney_euskaraz/)



## 6.1. **Guarantee ongoing contact at institutional level with the leading Internet technology companies**

Guaranteeing ongoing contact at institutional levels with the technology companies that provide those services is essential in order to translate or localise the interfaces of widely-used apps, to guarantee the presence of Basque on the most popular platforms in order to be able comment and advertise in Basque and for many more reasons.

Thus, being in permanent contact with the strategic Internet companies (Google, Twitter, Facebook, Netflix, Disney, Amazon, Microsoft...) is vital, along with stimulating discussions and agreements by means of open and free-flowing dialogue. Mediation by the Basque Government at the highest level is therefore necessary to facilitate the relationship with the main private stakeholders now and in the future. On the other hand, that relationship and the contacts arising from it should be extendible to local private stakeholders, so that they can better channel the requests, cooperation, etc.

Furthermore, it should not be overlooked that such initiatives would have a greater financial and influence-capacity impact if other government entities linked to the minority language communities in the digital environment are involved.

Strategic line:

# **SHOWCASE THE BASQUE LANGUAGE AND DIGITAL RESOURCES IN BASQUE TO ENCOURAGE THEIR USE**

These are the recommendations and specific actions aimed at showcasing the Basque language and digital resources in Basque to encourage their use:

**ENABLE ICTS TO INTERACT IN BASQUE**

# 7

RECOMMENDATION



## WHY?

In order to showcase Basque in the digital environment and for volume and a significant amount of data to be generated, the first word online being in Basque is pivotal for the greatest number of users. Devices give us that first word online, the one that determines the language that we are using. It is therefore important that browsers or mobiles can be set to Basque. The browser (despite the menus being in different languages) also provides information on language preferences: it indicates which language the user prefers to use when accessing a website.

Unfortunately, the default setting of our devices is Spanish and we usually do not change them. That situation needs to be changed. The aim is to raise awareness among Basque Internet users and developers and offer tools to browse in Basque. Particularly, to set the computer's browser in Basque, to translate content on mobile phones and also help website administrators. For what purpose?

- ▶ To increase the specific importance of Basque in Internet (as the user's browser tells the world about their native language online). Positioning Basque among the most used languages online (or at least among those with the greatest use) is not an option. We have to show website developers, bots and the leading Internet companies that Basque speakers also exist, that we are also online. If they do not see any interest in our language, it will be difficult to get them to develop or allow their products to be developed in Basque.
- ▶ So that the version in Basque can be directly accessed on multilingual websites.
- ▶ So that the version in Basque (if it exists) can be directly obtained when downloading programs.



In view of the above, we propose a specific target: to configure 100,000 devices in Basque. This target means doubling the current number of devices in Basque. Mobile telephones, on the one hand, and computers, on the other:

- ▶ Computers. Desktop or laptop computers can be found in three areas: work, education and at home.
- ▶ Mobile phones: however, mobiles are used for personal and private purposes. Given that its use is widespread and increasing, focusing on this field is strategic.



## HOW?

The actions that can be implemented for the ICTs interact in Basque include:

|            |   |
|------------|---|
| <b>7.1</b> | Set up the devices of the public administration in Basque   |
| <b>7.2</b> | Set up the devices of the education community in Basque   |
| <b>7.3</b> | Encourage companies and private entities to use the Basque settings of the browsers and ICTs of their devices |
| <b>7.4</b> | Encourage people to set up their mobile phones in Basque  |



## 7.1.

### Set up the devices of the public administration in Basque

According to the *Final Assessment of the V Planning Period of the Basque Government*, 71% of public sector workers are able to work in Basque. Working in Basque is also taken to being able to interact in Basque in the digital environment overall. The Basque Government and Gipuzkoa Provincial Council have begun to take steps in this regard.

As regards the Basque Government, preparations began in early 2018 to migrate the corporate computer's core software in 2019. The process was completed at the end of 2019. The project has affected everyone working in the Corporate Administrative Network of the Basque Government. The project consisted of modifying the corporate computer at the time (which included Windows 7 operating system, Internet Explorer 9 browser and MS Office 2010) to install the new Windows 10 software, Internet Explorer 11 and Mozilla Firefox browsers, and MS Office 2016 and LibreOffice 5 as office automation packages. The Basque version of all the products has been installed. The project covered all the departments and autonomous agencies of the Basque Government, i.e., all the computers connected to the Basque Government's Corporate Network. There are approximately 7,000 computer workstations in question. Additional information:

- ▶ Training for the new Office has been run in Basque and Spanish.
- ▶ At the start of the process, 15% of Basque Government workers had their browsers in Basque. Once the process has been completed, the data will be reviewed to determine the difference.
- ▶ Osakidetza has also begun with the process.



The action proposal consists of continuing with the process started by the public administration, extending it to the different departments and to other institutions (provincial councils, local councils, etc.).

## **Set up the devices of the education community in Basque**

# 7.2.

The strategic nature of the education sector has already been mentioned in other sections. In fact, a report in that regard has been one of the starting points for preparing this roadmap. The interviews conducted to reach the conclusions of that report have provided the following snapshot regarding infrastructures:

- ▶ Several infrastructure shortcomings and needs were detected. On the one hand, Basque is not guaranteed in the hardware and software used at the centres and, furthermore, the browsers are not usually set to interact in Basque from the start.
- ▶ As regards hardware, touch computers, which use specific hardware and software, are beginning to be used at the centres in several networks. There is currently no guarantee that they are in Basque, even though translation and adaptation tasks have been carried out on a voluntary basis in some cases.
- ▶ The Education Department, in line with the plan to reinforce the computer equipment at public centres, will give each Primary teacher a laptop computer and apply a new approach to the current equipment for children in the 5th year of primary education. The centre has to choose a Windows/Linux laptop or Chromebook for teachers and a Windows/Linux mini-laptop (ultralight according to the current standards) or a



Chromebook for students. The teacher and student option does not necessarily have to coincide. From a language perspective, it is not the same to choose a Chromebook, a computer with Windows operating system, as one with Linux, as it will always be easier to install free software and translated into Basque in Linux.

- ▶ Use of Chromebook and the Google Suite package of tools has been shown to becoming more common in publicly-run schools and in other networks. Leaving to one side the doubts about managing students' data and other issues, as regards language, Google has made a strategic commitment to translate some of its services, but that strategy may change in the future. Therefore, it is not possible to guarantee that Basque will remain as an option in the case of Google.
- ▶ As has already been stressed, language is not usually the only criterion when making this type of decision. Educational possibilities, convenience and possible management obstacles are given great consideration when it comes to making the choice. Google Suite, for example, is easy for users, because they are used to it, because working together is an option and maintenance is straightforward. That is the same with Microsoft tools. In the case of Linux, however, even though the core working tools are translated, they are not sufficient. Furthermore, Linux support and maintenance tasks can be problematic, as they require people with the appropriate expertise within the centre. The importance of self-management is stressed in order to avoid this type of difficulties.
- ▶ In the case of the Kristau Eskola network, the infrastructure-related decisions are up to each centre. At present, 80 centres of the network have adopted the 1x1 model, namely, one computer per student. They work with Xenon, a supplier using both Microsoft and Google.





Regardless of the operating system, Basque being the preferred language of the browser and of the publishing tools is important in education. At present, however, the browsers of the devices used do not have Basque as a preferred language and technicians or users would have to change the language settings to configure them in Basque. Setting the browsing language and opting for Basque are entirely strategic, because the browser language informs the world about our first language; namely, the language preferred by the user to access the website or download a specific software. This directly affects the browsing. For example, on multilingual websites, when consulting Wikipedia, the browser will direct students to the Wikipedia in the setting language of the device. In other words, if the settings are Spanish, they will be redirected to Wikipedia in Spanish. Thus, even though the content is accessed in Basque, the statistics will reflect Wikipedia in Spanish, which has not been chosen by the user, but is rather determined by the setting language of the computer. The same happens when downloading programs: the download is carried out directly in the setting language.

Therefore, all computers used in education, both those already installed and new ones, will have to interact in Basque right from the start.

The action proposal for the Basque Government in this regard is as follows: configure in Basque the devices (mobiles, tablets, computers) of the users of the education community (Education Department, Universities, Ikastolen Elkartea, Kristau Eskolak).

Thus, the proposal is for the computers, browsers, interfaces and operating systems used in the education centres of the BAC to have Basque as the pre-established option. That means opting for computer infrastructures in Basque for students become accustomed to using ICTs in Basque. Computer brands or specific interfaces, browsers or operating systems are not proposed. The



sole aim is to guarantee the use of Basque in the hardware and software infrastructures. Technologies based on free systems facilitate the use of Basque and for the first word to be in Basque.

In order to drive this measure, the proposal is to include the following criterion in the calls to tender of the Administration: that the operating systems and browsers of computers for education centres have Basque as the preferred language and that the software installed is in that language, as far as possible<sup>24</sup>.

As regards Compulsory Education, including devices to be configured in Basque and the use of resources and tools in Basque for the digital environment as a requirement for the ICT Maturity Certificate is proposed. The idea is to integrate it in the Certificate criteria, both at basic, intermediate and advanced level, in order to take into account and deploy the use of the ICTs in Basque at education centres and to turn it into a quality indicator for the whole education community and to show that the centre places importance on the use of ICTs in Basque and puts that into practice. Several, but not too many, core indicators would therefore have to be used to avoid the contrary effect. For example, what the percentage of the infrastructure and the software of centre in Basque is, if the browsers are set in that language...

Different actions have been envisaged that the Basque Government can implement to support the centres in this process, for example, producing a guide entitled "ICTs and Basque in the Classroom". Its aim would be, according to the criteria to obtain the certificate, to provide information on the actions to be implemented and help in the process. Or the steps to be followed for browsers to be set in

---

24 A quick way to configure school computers in Basque would be to use the plugin of the *Lehen Hitza Euskaraz* (The First Word in Basque) project. The EDUCATIONAL UNIT developed in the *Lehen Hitza (First Word)* project can be used for that purpose.



Basque. However, other tips could be included, such as the projects that may be deployed in the centre to foster Basque.

Including the measure in the ICT Maturity Certificate would give it importance and official standing and would ensure greater compliance. It should be stressed that this action does not require large investments.

## **Encourage companies and private entities to use the Basque settings of the browsers and ICTs of their devices**

# 7.3.

Desktop computers or laptops are used in two areas —at work and at home—, and it is more effective to focus on the workplace.

There are three avenues to achieve this goal:

- ▶ Basque language plans: the main aim of those plans is to increase the use of Basque and integrate it in the culture or systematics of an entity. Thus, given that the entity would have had to assume and embrace those standard management models, it would be logical for them to make an effort regarding digital communication and relations.
- ▶ Basque language certificates: certificates such as Bikain, which accredits a certain level of mainstreaming in the presence, use and management of Basque by an entity. How mainstreaming will take place in the digital environment should be explored. The Bai Euskarari certificate has already made some progress in that regard.
- ▶ Euskaraldia: the second social exercise conducted in autumn 2020 had two core areas: to focus on the language habits of



the citizens and to increase the use of Basque in the entities. Participants were asked to take a step further and assume a specific undertaking to support the use and practice of Basque. It would therefore be logical to extend this commitment to digital communication in future exercises.

## 7.4.

### Encourage people to set up their mobile phones in Basque

Personal mobile phones are used for personal and private purposes and given their widespread use that continues to grow, taking action in this regard is strategic. Therefore, the proposal is to organise a communication campaign, aimed at raising awareness among users and driving change. It would involve designing a comprehensive specific campaign, using direct messages, to set users the challenge of setting their devices in Basque.

The idea is to appeal to the mindset and responsibility of users: "Basque does not exist in the digital environment, it is not visible in the statistics. My mobile is private, what's one more or less..." all devices count and it's up to us. It may be inconvenient to have Whatsapp in English, but it would be more of a drawback to have a digital environment without Basque.

These are the work lines and the envisaged characteristics:

- ▶ Mobile phone campaign: given that the purpose is to change the mobile phone settings, the most effective approach from the point of view of the user's experience is to disseminate the message by mobile. The campaign should be conducted using mobile phones or it should at least be initially designed for mobiles.



- ▶ Bulk translations: the main meeting places of euskaltzales (Bascophiles) are strategic to deploy this type of straightforward and mass actions. At the Durango Fair, for example, the app to translate mobiles can be shared using Bluetooth transmitters. Apart from the digital support, catalysts can be used to make people aware and to get them involved. The aim is to configure a significant number of mobile phones in Basque in just a few days.
- ▶ Euskaraldia: 179,780 people took part in the last Euskaraldia social exercise. Taking part in the Euskaraldia is to assume a commitment and responsibility. Setting the mobile phone in Basque can be as easy and efficiently as adding a sticker.



# 8

RECOMMENDATION



## GUARANTEE THE DISSEMINATION OF DIGITAL TOOLS AND RESOURCES IN BASQUE

### WHY?

The survival of a language depends on its presence in the new technologies and in Internet. In recent years, the Basque Government has therefore been working to ensure there are digital content and tools linked to the new technologies in Basque. Several private stakeholders have also set off down that path. We thus have numerous digital tools in Basque and the variety of content can also be said to be broad. However, due to the characteristics of the products created and to the medium itself, there are still obstacles for all those products to reach users.

The situation caused by COVID-19 has highlighted the importance of being fully prepared for the digital environment. The crisis triggered by the pandemic has radically changed society and has forced us to work and live online to a great extent. It is therefore now more important than ever to showcase the digital tools in Basque, along with encouraging and supporting society to work and live in Basque in the digital environment. And even more so when it comes to children and young people: many of them will only be in contact with Basque online, because the right conditions do not exist at home to use it, and promoting digital tools in Basque is fundamental to help those young people.

Lockdown has hugely increased the use of online resources, also in the case of adults. Now demand has increased at all levels, consumers must be clear about the resources that are available on the digital market.



One of the goals will therefore be to ensure that digital products in Basque are the benchmark and thus reflect the reality of those products, along with encouraging their use.



## HOW?

The actions that can be carried out to guarantee the dissemination of digital tools and resources in Basque include:

|            |   |
|------------|---|
| <b>8.1</b> | Explore the need to create a repository with digital tools and resources in Basque and, where applicable, bring it into service |
| <b>8.2</b> | Conduct campaigns to raise awareness of the resources in Basque   |
| <b>8.3</b> | Showcase audiovisual productions and videogames in Basque   |

### **Explore the need to create a repository with digital tools and resources in Basque and, where applicable, bring it into service**

# 8.1.

Driving the development of a portal is considered of interest to achieve that visibility. Similar to the Softcatalá portal, it would gather together all the digital tools and resources in Basque, organised so that users can access them easily.



There have been attempts to set up such a portal, but, in general, they have failed. In fact, it is not easy to monitor the products (there are many, are very different and the majority are created by private companies, which are also in charge of the maintenance). Therefore, taking into account that the project would require constant provision and updating, its feasibility must be first assessed. For example, an expert group could be set up to analyse, among other things, the strengths, opportunities, weaknesses and threats of the website and put forward other proposals.

If it is decided to go along that avenue, one of the main tasks would be to identify all the products. Therefore, it should be specified what there is, where it is located, what the dissemination channels are. Information should be gathered on Internet, social media, office automation tools plugins, software, mobile apps, etc. In the future, a decision will be required about how to systematise this task, to guarantee its sustainability.

Another option may be to study the usefulness of Wikipedia to disseminate the resources generated. Further to what has been explained regarding the creation of educational materials, the fact that the materials and ICT tools in Basque are well profiled in Wikipedia may provide another type of referentiality and make it easier to find content,

## 8.2. **Conduct campaigns to raise awareness of the resources in Basque**

Starting from the portal discussed in the previous section, all those tools and resources will need to be made more visible. Namely, campaigns must be designed to showcase all those tools





and resources. Those campaigns must be cool, ongoing, and in innovative formats and channels, to reach the largest possible number of people.

There should be a special focus on the .EUS domain, as it places Basque at the same level as other languages. .EUS contributes to language mainstreaming; reflects the identity and personality of the Basque language community and Basque culture; showcases Basque in the digital environment and provides international recognition to the territory of the Basque language. Websites must comply with at least one of the following conditions to be able to use a .EUS domain.

- ▶ A significant part of the content must be in Basque or communications have to be in that language.
- ▶ The content must be about Basque culture or promote it.

To quote some figures, the use of the .EUS domain increased 18% in 2020, 8 points up on the previous year, and exceeding forecasts. 2020 ended with nearly 12,000 domain names. However, and given the above, it is important to continue to drive this growth.

## **Showcase audiovisual productions and videogames in Basque**

# **8.3.**

As regards the development of the audiovisual sector, the aforementioned report includes a series of promotion lines: “Encourage the television content in Basque be under free licence, so that they can be used by anybody” and “explore options so that access is easy to EITB content”



As has already been explained, consumption of audiovisual content has tended to rise in recent years and there are signs that this is going to continue. Therefore, it should be remembered what was stated in the previous report and confirm that we have to continue along the same avenue: "Having the greatest possible number of audiovisuals in Basque is important, so that users can access them when consuming such products. Users constantly use audiovisual content and the challenge is to be able to use them in Basque." Furthermore, showcasing present and future content is important.

In that report, we stressed the important of making content in Basque available for all users, visible in search engines and in the most accessible possible way (with free licences...). We mentioned the importance of making existing content available online, with free licences.

As EITB representatives explained in the *Assessment of the "ICTs in Basque: recommendations for public authorities"* document (at the request of the Language Research and Coordination Directorate and of the Information and Telecommunications Directorate of the Basque Government), the authority has already analysed the procedure and the costs of the availability of the content under free licence, and it seems that renegotiating multiple rights for each work, plus the cost of those negotiations, would require large amounts to be invested, without quoting specific figures. In any event, it is a strategic avenue that still needs to be explored and we would call on the public authority to proceed in that direction, as it could have a huge impact on the consumption of audiovisuals in Basque.

As has already been explained, one way of showcasing existing and future audiovisual content is to improve the channels to access EITB content, in order for users to be able to easily access specific content. The EITB à la carte content should be organised and



optimised in terms of the search engines, so that user can access it easily. The possibility of adding the content of other television companies in Basque under free licence should also be explored.

The number of channels disseminating audiovisuals in Basque should also be increased. Audiovisual content in Basque that can be found online is currently few and far between. That means it is often unknown and difficult to access. Therefore, the supply is not only scarce, but also unknown to many users, which is even more so in the case of adolescents: they do not have known showcases on line to easily access audiovisual productions.

Furthermore, being able to recover and rebroadcast that content (on TV, cinemas, Internet platforms, etc.) and foster the dissemination of audiovisuals in Basque through the greatest possible number of channels are considered necessary. It could be helpful to forge alliances with the stakeholders involved in the dissemination — ETB, cinemas, etc.—, as well as to begin working with the platforms that currently offer à la carte content (Netflix, Amazon, etc.).

Exploring the option of setting up a platform with content entirely in Basque could also be of interest. In addition to films, it would host other content: short films, webseries, etc.

Similarly, it should be considered if that platform would meet the needs of young people or if another platform exclusively targeting young people and adolescents would be necessary, in order to encourage the consumption and creation of audiovisual in Basque by this age bracket.

This hypothetical platform for adolescents would have the following goals:

- ▶ To bring together and update the main range of audiovisual content in Basque for the adolescent audience in a single



platform. The platform would be a showcase and, once it had become a benchmark, adolescents would be clear where to go online to access audiovisual content of interest. In addition to the support of institutions, schools would also need to be involved to make the platform a benchmark for Basque adolescents.

- ▶ Give prestige to and promote consumption of audiovisual content in Basque. Offer adolescent audiences attractive productions and, as the number of users increase, boost audiovisual consumption in Basque. And in passing, achieve a stable number of consumers.
- ▶ Boost the creation of audiovisual content among adolescents and create a pool of young creators. Youths are more consumers than creators. Their creativity therefore needs to be developed. For example, this could be done by means of contests organised on the platform.

The characteristics required are as follow:

- ▶ Individual, à la carte and personalised consumption of the content should be guaranteed.
- ▶ The content would be adapted to the device most used by adolescents, namely, the smartphone, and social media and the other media identified in several studies would have to be taken into account for relationships between adolescents.
- ▶ In addition to audiovisual content, apps in Basque would also be offered, and an instant messaging system would be used for news alerts.

On the other hand, as already mentioned in the point on promoting videogames, it is important to contribute to the dissemination of videogames in Basque and make the existing range in Basque available to users. The need for a distributor committed to local



videogames and in Basque would therefore have to be studied. If that is the case, it would have to be seen if they should start from zero or use one that is already established in other areas. As has been explained, the Durango Fair or Jokoteknia are events that could be used, as they are the best showcases at present. Room could also be made for videogames on television, along with supporting initiatives such as 'Gamer *gela*' or organising in-person contests similar to "Game *Gune*" but for the BAC and in Basque.



Strategic line:

# **GUARANTEE TECHNOLOGY WATCH**

**GIVE IMPETUS TO SETTING UP  
A TECHNOLOGY WATCH STRUCTURE  
OF THE BASQUE LANGUAGE**

# 9

RECOMMENDATION

Ensuring technology watch is essential to develop a digital strategy for Basque, identify technology innovations, ICT trends and new successful tools on the market or even to monitor advances in other languages and other countries to promote the language in the field of ICTs and the digital environment. Furthermore, a prerequisite is to forecast the influence of those trends in society and the changes that technology may trigger in that regard.



## WHY?

The advances in technologies such as artificial intelligence have been accompanied by a series of economic, political, cultural and/or social concerns in society and the institutions. That is also true of the Basque language and technologies.

A series of technology watch structures have been created between local governments, universities and other stakeholders in locations including Argentina, Italy, England and Catalonia in order to address the uncertainty generated by the emergence of these technologies. Structures tasked with analysing the new realities are also necessary here. On the one hand, they would contribute to a better understanding of the new reality and, on the other hand, they would allow different stakeholders to make more appropriate decisions about the digital environment. They would also be the opportunity to develop own narratives and practices in Basque in this area.



## HOW?

The following is proposed in order to guarantee the technology watch:

### 9.1

Guarantee a technology watch structure of the Basque Language in the digital environment, supported by a smart network





## Guarantee a technology watch structure of the Basque Language in the digital environment, supported by a smart network

# 9.1.

As has been mentioned in the introduction, guaranteeing a technology watch is essential. A structure to carry out the work is therefore necessary and creating that structure is, precisely, one of the action proposals. It would have to be able to monitor a series of specific indicators, maintain the watch structure and, in general, gather information and respond to users' experiences.

These are the functions that that structure should carry out:

- ▶ Gather information: establish a watch platform and maintain an indicator system to collect information.
- ▶ Listen to the stakeholders: a direct relationship is needed with the stakeholders of the smart network, defining the watch routine, when gathering appropriate or useful information or to collect it.
- ▶ Compile experiences: converting information into knowledge and tasked with systematising internal and external experiences, along with producing the report on the initiative.
- ▶ Establishing links with other regions: exploring the opportunities of establishing relationships and cooperation with regions managing plans and projects for the digital environment or codifying or creating content (Catalonia and Wales, for example).

Supporting the watch structure also includes setting up a network of researchers and research centres: a smart network that defines the priority strategic lines and which are able to convert the information received into knowledge and intelligence, along with driving projects.



The smart network should be able to set priorities, specify lines and drive projects. Other recommended aspects are university involvement, a multidisciplinary approach and the option of bringing onboard specific non-university stakeholders.

Both structures must pool information and complement each other. It would be of interest for the watch structure to carry out the following tasks: establish mechanisms to monitor the watch platform and the indicator system, and define the watch routine with the smart network. In fact, both structures should, together, produce the first definition of the main lines and planning.



**OBTAIN DATA ON  
THE USE OF BASQUE AND  
ENCOURAGE RESEARCH IN ORDER  
TO IMPLEMENT EFFECTIVE POLICIES**

**10**

RECOMMENDATION



## WHY?

The digital environment may be a refuge or risk zone for languages that are not widely spoken. The situation of a language in the digital environment is called digital vitality. The better positioned we are in the digital environment, the greater the digital vitality of the language will be. Particularly in the case of languages that are not widely spoken, a regular monitoring process of the digital vitality is therefore needed and where the strengths and weaknesses of the language can be detected. This assessment process is essential to correctly channel the subsequent corrective measures or initiatives or to be able to maintain/strengthen the areas where progress has been made.

This data collection should be part of the Basque language indicator system. Thus, the digital vitality of Basque would be periodically measured, while monitoring its performance at the same time.



## HOW?

The actions to obtain data on the consumption of Basque and implement effective policies include:



**10.1**

Organise a data measurement system for Basque in the digital environment: working on identifying and systematising indicators

**10.2**

Encourage research to respond to specific needs

## 10.1. Organise a data measurement system for Basque in the digital environment: working on identifying and systematising indicators

The Basque Government has carried out different work in the framework of this recommendation in recent years. Systematised data collection is a strategic and permanent line. The work has included defining indicators to research the digital environment, which will be included in the Basque Indicator System (EAS). This recommendation or action proposal seeks to stress the importance of the line of work, so that it has continuity.

Indicators need to be developed and their measurement systematised in order to be able to measure and monitor the use habits. Therefore, the Basque Government should continue to develop the system in order to measure the specific importance of Basque in the digital environment, and likewise include the use perspective, i.e.: a data measurement system has to be organised that updates the assessment of the situation and make monitoring possible.

Systematised data collection should include the following:

- ▶ As regards the mass media, conducting quantitative and qualitative assessments is important to measure and understand the media consumption of Basque citizens (what is consumed



and why). In this regard, a comprehensive perspective could be given to the sectoral studies that are dispersed, in order to create a database that is systematically updated. Completing the current digital metrics would also be useful. The metrics of other media entirely in Basque (including newspapers) could thus be added to the panel with the Hekimen media digital metrics (Hekimen Analytics) in order to establish the traffic as a whole. Indicators (sessions, pages, time, users, devices and type of traffic, for example) would have to be defined and grouped into a single panel in an aggregated way.

- ▶ Ongoing data collection in the audiovisual field, more specifically audience surveys, is also important, particularly with respect to the audiovisual consumption of the young people of the Basque Country.

## Encourage research to respond to specific needs

# 10.2.

In addition to systematising data collection and integrating it in EAS, when preparing this roadmap we have detected the need to research a series of specific areas. In fact, research lines have been defined in many of the action proposals of each strategic line. Specific bases are needed to guarantee the effectiveness of the proposed actions.

The need for research and analysis was brought up in the reports that we have used. The following was mentioned, among other points:

- ▶ In the field of videogames, the Basque Government's Basque Culture Observatory should foster specific research



into developer companies and into videogames and their ecosystem to discover the situation of the BAC exactly.

- ▶ Research is also needed into the use of social media and the digital environment in general by young people, given that youth is a priority bracket to foster the use of the Basque Language.
- ▶ As regards subtitling, the importance and need to give impetus to automatic subtitling has already been mentioned. The information on this topic needs to be compiled and assessed in order to analyse the conclusions of this area and to be able to implement the different actions.





We cannot end without mentioning the topic of gender. There are general studies and research into gender in the area of technology, but we cannot ignore the cross-cutting nature of this topic. The relevance should be explored of conducting specific research or studies focused on these three cross-cutting issues: gender, the Basque Language and the digital environment. One of the conclusions of the *Audiovisual Consumption and creation in Basque by adolescents from Gipuzkoa* report by Gipuzkoa Provincial Council, is that there are large gender differences between adolescents in terms of consumption and creation of audiovisual content. It would be interesting to know the situations generated at the point where gender, Basque and the digital environment meet. This can be crucial when planning policies aimed at young people.



# BIBLIOGRAPHY

-  BASQUE LANGUAGE ADVISORY BOARD-DEPUTY-MINISTRY OF LANGUAGE POLICY *Euskarazko IKTak: gomendioak herri-agineentzat / Las TIC en euskera: recomendaciones para los poderes públicos*. Vitoria-Gasteiz: Publications Central Service of the Basque Government, 2016. ISBN 978-84-457-3409-4
-  BASQUE YOUTH OBSERVATORY. *Euskadiko gazteak eta sare sozialak / La juventud de Euskadi y las redes sociales*. Vitoria-Gasteiz: Publications Central Service of the Basque Government, 2019. ISBN 978-84-457-3471-1
-  DEV - SPANISH DEVELOPMENT OF VIDEOGAMES. *Libro blanco del desarrollo español de videojuegos*. 2019 Edition.
-  DEPARTMENT OF CULTURE AND LANGUAGE POLICY. *Sixth Sociolinguistic Survey*. Vitoria-Gasteiz: Publications Central Service of the Basque Government, 2019. ISBN 978-84-457-3504-6
-  GIPUZKOA PROVINCIAL COUNCIL. *Gipuzkoako Nerabe euskaldunak: ikus-entzunezko edukien kontsumoa eta sorkuntza / Consumo y creación audiovisual en euskera de los adolescentes gipuzkoanos*, 2017.
-  MANIAS, GURRUTXAGA &y RAMIREZ DE LA PISCINA (2020): "Fast or slow: zein da albisteen geroa? Nazioarteko 25 adituk eta Euskal Herriko 500 irakurlek arnasa luzeko kazetaritza aztertu dute», ("Fast or slow: what is the future of news? 25 international experts and 500 readers of the Basque Country analyse slow journalism") Anuario de Medios de Comunicación Vascos 2019, pp; 73-90. <<http://behategia.eus/txostenak/urtekariak/>>.



-  AZPILLAGA & LIZARRALDE (2020): «Hekimen elkarteko webguneak 2019. urtean», ("The Hekimen association websites in 2019") Anuario de Medios de Comunicación Vascos 2019, pp;111-136 <<http://behategia.eus/txostenak/urtekariak/>>.
-  EUSTAT. *Informazioaren gizartearen egoera Euskadin 2020. / Panorama de la Sociedad de la Información en Euskadi 2020.*
-  AMC – MEDIA RESEARCH ASSOCIATION. *Marco general de los medios en España 2021.*
-  DEPARTMENT OF CULTURE AND LANGUAGE POLICY. *Euskal Autonomia Erkidegoko herri administrazioetan euskararen erabilera normalizatzeko V. Plangintzaldiaren Amaierako Ebaluazioa 2017. / Evaluación final del V periodo de planificación para la normalización del euskera en las instituciones públicas de la Comunidad Autónoma Vasca 2017.* Vitoria-Gasteiz: Publications Central Service of the Basque Government, 2018.

#### INTERNAL REPORTS:

LANGUAGE RESEARCH AND COORDINATION DIRECTORATE OF THE BASQUE GOVERNMENT. Assessment of *Euskarazko IKT-ak: gomendioak herri-aginteentzat / Las TIC en euskera: recomendaciones para los poderes públicos.* 2018.

GOÑI EIZMENDI, Maite; MARITXALAR ANGLADA, Montse; POMBO ARAMENDI, Eli. D *Derrigorrezko Hezkuntzan euskara sustatzea ingurune digitalean. EAeko errealitateari begirada eta aurrera begirako proposamenak (Promoting Basque in the digital environment in compulsory Education. A look at the reality of the BAC and future proposals).* 2019-2020.

JULIO HURTADO, Gorka; LANDABIDEA URRESTI, Xabier. *Zaintza teknologikoa eta Humanitate Digitalak euskarazko ingurune digitalean (Technology Watch and Digital Humanities in the Digital Environment of the Basque Language).* 2019-2020.

ARANTZABAL ARRIETA, Iban. *EAB-ingurune digitala: euskarazko ikus-entzunezkoak. (EAB-Digital Environment: audiovisuals in Basque)* 2019-2020.

FUNDACIÓN PUNTUEUS. *Gizartearen kontzientziazioan eragitea euskara erabiltzeko ingurune digitalean. (Focus on the awareness-raising of society for the use of the Basque Language in the digital environment)* 2019-2020.





CENTRO HITZ DE LA UPV/EHU. *Hizkuntza-teknologiak sustatzeko planaren txosten teknikoa. (Technical report on the plan to boost language technologies)* 2020.

DIGITAL ENVIRONMENT COMMITTEE OF THE BASQUE LANGUAGE INDICATORS SYSTEM *Euskararen Adierazle Sistema. Euskarak ingurune digitalean duen presentzia neurtzeko proiektua. (Basque language indicators system. Project to measure the presence of Basque in the digital environment)* 2017.

# THE DIGITAL ENVIRONMENT OF THE BASQUE LANGUAGE

Recommendations  
2021-2024



EUSKO JAURLARITZA



GOBIERNO VASCO

KULTURA ETA HIZKUNTZA  
POLITIKA SAILA

DEPARTAMENTO DE CULTURA  
Y POLÍTICA LINGÜÍSTICA