## Section 1.Evolution of the digital divide during the pandemic.

**Question 1.** In general, the academy, NGOs and civil society organisations affirm that the COVID-19 pandemic has worsened digital divides. Do you agree with this idea?

**Answer 1.** One of the key indicators for measuring poverty and social exclusion is access to new technologies for societies and different segments of the population.

This fact has been evident during the state of alarm, in which the role of digital technology has been critical to maintain social relations, to be able to attend online classes in schools and universities or to carry out banking operations that we usually did at the branch office and, in many cases, work, through telematic formulas.

Many internet providers have reported increases in traffic of up to 60% since the start of the pandemic. But this has led to large gaps. For example, the fibre share in countries such as South Korea and Japan is 82% and 79% respectively, while countries such as Austria, Belgium, Germany, the UK, Greece and Israel have less than 5%.

**Question 2.**What are the groups most affected by digital divides? Has the pandemic caused a setback or progress in bridging the digital divides for these specific groups?

**Answer 2.** 91.4% of Spanish households have access to the Internet, which means that one in 10 families is not connected, according to data from the National Institute of Statistics. 9.2% of those in the lowest income bracket are unable to connect to the Internet. The basic step of providing resources must necessarily be followed by another of training. "We have data that tells us that 55% of the Spanish population has very basic digital skills". The digitally illiterate sector has been hit hard. Especially the elderly or population with bad internet access but not only, also young population who is not aware of the impact of the indiscriminate transfer of data that affects privacy.

## Section 2. Causes of the digital divides.

**Question 3.**What are the main causes of digital divides? Could you provide some examples?

**Answer 3.** One of them is the access gap. Creating infrastructures that bring Information and Communications Technologies to all corners of a country and make them available to its citizens is a costly investment, which is aggravated in less developed areas and in rural or isolated areas, for example, fibre optics (already very present in our cities) does not reach all corners of Spain, where there are areas that are completely disconnected from the Internet. Levels of internet access continue to be extremely unequal and, as of today, as much as 10% of the Spanish population, approximately 5 million citizens, do not have an internet connection.

This percentage also includes people with disabilities, who are also a group particularly exposed to digital isolation, given their higher levels of poverty and social exclusion. According to this, many people with disabilities have no internet connection at home and although the remaining do have a connection, a lot of them admit that they are not fluent in the online environment.

Other is Usage gap, Lack of knowledge, lack of training, in general the so-called digital illiterates. This percentage also includes people with disabilities, who are also a group particularly exposed to digital isolation, given their higher levels of poverty and social exclusion. According to the report, 13% of respondents with disabilities have no internet

connection at home. And although the remaining 87% do have a connection, 38% admit that they are not fluent in the online environment.

Financial problems are another major cause, as a large part of the population lacks the resources to afford the cost of installing internet at home or to have other electronic devices.

**Question 4.**How has pandemic contributed to mitigate or worsen them?

**Answer 4.** The pandemic has contributed to worsening them. Schools closed and many families had no means for their children to access online training, companies closed and many had the possibility to implement teleworking, but others did not, disabled people and people without access or knowledge of networks could not perform for example a simple bank operation because the branches were closed etc....

## Section 3. Impact of the digital divides.

**Question 5.**What are the most affected daily activities by digital divides? Could you provide some examples?

**Answer 5.** Most of the information related to confined areas, restrictions etc. could only be consulted online, which meant that people without internet access could not have access to information that was changing every day.

Only essential services such as supermarkets were open, so if the consumer needed to buy any other type of product that was not an essential service, he or she could not do so in person, only online. Day-to-day banking operations were very limited, because despite the fact that banks were essential services, you had to make an appointment to carry out any operation at the branch by counter that was not by card or ATM, and the waiting lists were endless.

**Question 6.**What are the implications of the digital divides for affected persons or groups?

**Answer 6.** See reply to question 5.

## Section 4. Telecommunication networks performance and digital divides.

**Question 7.**Data traffic substantially increased during Covid-19 pandemic, particularly during confinement periods. How would you consider telecommunication networks performance in terms of service availability and capacity?

**Answer 7.** In Spain, as in other countries around the world, networks are registering record traffic and major changes in usage patterns since the adoption of mobility restriction measures that have forced people to stay at home. We are facing a change in our paradigms as a society and the biggest experiment in teleworking in history.

Although Internet service is generally stable and networks are responding spectacularly, the performance of services in Spanish households has been affected due to the large increase in traffic.

All operators have been affected by degradations in web browsing, cloud storage, streaming or gaming,

**Question 8.** Do you know any measure developed during pandemic to ensure a good telecommunication networks performance? Have these measures had any impact on the digital divides?

**Answer 8.** **On 20 March 2020**, the government and telecommunications operators signed an agreement extending measures to ensure connectivity for people and businesses.

According to the signed agreement, during the period of the state of alert, calls made to the 061-health care number will be free of charge for the customer and equally free in interconnection for the operators, each of them assuming their own network costs.

In addition, the operators undertake to develop special measures to extend, at no additional cost to the user, services associated with the mobile telephony connectivity contracts of individual customers, the self-employed and small businesses.

They also undertake to keep customer service channels active, to enrich the audiovisual packages they offer to their users with additional content and to contribute to the measures developed by the Administration to promote distance working, distance learning and remote health care.

Even so, the measures taken benefit digitised consumers, but we still note a lack of training for the digitally illiterate.

**In July 2020**, Spain Digital 2025 was signed, bringing together a set of measures, reforms and investments, articulated in ten strategic axes, aligned with the digital policies set out by the European Commission for the new period.

According to the government, this transformation will be a key lever to relaunch economic growth and reduce inequality.

With this plan, the government wants to give a definitive boost to digital connectivity, the deployment of 5G, the reinforcement of cybersecurity, the digitisation of the Administration and companies - particularly SMEs - and audio-visual production, as well as the data economy and Artificial Intelligence. All of this will promote the guarantee of citizens' digital rights.

The Digital Spain Agenda 2025 aims to achieve adequate digital connectivity for the entire population and to bridge the digital divide between rural and urban areas. The goal is for 100% of the population to have coverage with more than 100 Mbps, compared to the current 89%.

To make this possible, a Digital Connectivity Plan will be articulated with two main lines: connectivity for economic, social and territorial structuring and the promotion of the use of networks with the possible creation of social connectivity vouchers aimed at the most vulnerable groups.

## Section 5. Challenges posed by Covid-19 pandemic for digital divides.

**Question 9.**What are the main challenges that Covid-19 pandemic has posed for bridging digital divides (insufficient bandwidth in internet connections, inadequate equipment, lack of digital skills, economic problems that prevent people from subscribing to better telecommunication services, etc.)?

### Answer 9.

Financial aid for people with economic problems is essential to be able to contract broadband connections and also to be able to buy computer equipment.

Investing in infrastructure to make fibre optics available to all areas

Training for the digitally illiterate, so that they can learn at least the basics of operating an electronic device to bridge the digital divide and also support, not only training.

Providing schools and universities with the means to programme distance and on-line training, taking into account the need to compensate for the digital divide that prevents some students from accessing this type of training. To make available to the educational community, free of charge and openly, the available audiovisual educational resources related to the contents of the specific course.

The pandemic has exacerbated some problems, including the existing digital divide, because communications and technology help to mitigate isolation and unwanted loneliness. We have found that there is a need for devices within everyone's reach, but also for connectivity and technical skills to use them. So it is not just an economic issue, which can be solved by handing out tablets, but we need to train those who have so far been alienated from technology.

**Question 10.**How have these challenges affected specific sectors and activities?

- **a.** Education
- **b.** Health
- **c.** Other public services
- **d.** Commerce
- **e.** Work
- **f.** Leisure

### Answer 10.

Changes such as telemedicine are here to stay.

The provision of **health services** (where distance is a determining factor) by health professionals through the use of information and communication technologies (ICTs) for the exchange of valid information for diagnosis, treatment, disease prevention, research and evaluation and for the continuing education of health professionals.

There is still a face-to-face consultation with a doctor, but a variety of specialists are offered who can be consulted via the Internet. The positive side of this is that it avoids to a large extent the overcrowding of the health centres and in many cases, e.g. the renewal of prescriptions for chronic diseases can be processed with a phone call and a visit to the health centre in person is unnecessary.

In Spain, the public health system has made it possible to make an appointment by telephone with your health centre. Before the pandemic, there were only face-to-face appointments with the doctor.

The suspension of face-to-face classes was accompanied by the establishment of distance education and the first proposals and measures adopted to deal with this new educational situation.

By 2025, half of all public services are expected to be available on a mobile app. Today the percentage stands at 10%.

**In terms of education**, teacher-student interaction and the corresponding learning processes differ greatly by age and educational level: the impact of school closures and the implementation of online classes may be greater at younger ages, with all that this implies in terms of the efficiency and equity of the education system, as these are key stages in the development of pupils' competences and skills. Online education has a greater negative impact on early ages, where technology cannot replace skills development techniques for this sector of the student body, which has a greater need for face-to-face education. When you go to school there is a situation between equals. All pupils have the same opportunities and tools. However, the pandemic forced the elimination of all face-to-face attendance and many children's learning was affected.

**Teleworking** will also see a boost, once it has proved that it is not a pipe dream.

For many, teleworking is a breakthrough in our society and a way to combine work and family life. For many companies and sectors they do not have the financial budget to be able to implement teleworking, making it impossible to adapt their companies to the new technology.

## Section 6. Measures adopted to bridge digital divides during the pandemic.

**Question 11.** Would you highlight any specific measures developed during pandemic to bridge digital divides?

**Answer 11.** The Spanish Red Cross, which is a humanitarian, voluntary and public interest institution, provided tablets and SIM cards on loan. The Vodafone Foundation provided the necessary data connection free of charge so that the children from 8,500 families could remain connected to the programme from their homes. The volunteers who continued to help these children during the months of confinement also made use of digital platforms such as Google Classroom: "Children shared their doubts about their homework and the Red Cross volunteers gave them answers. At the same time, they posted materials, readings, games, recipes or films to watch at home.

**Question 12.**Have these measures been effective? Have they solved the specific problems related to the digital divides for which they were defined?

**Answer 12.** They contributed with aid for 8500 families, which is a lot and is a great help, but unfortunately there are still many other families in poverty and there is still a long way to go.

**Question 13.**What other measures could have been implemented to bridge the digital divides? Who should have led their implementation?

**Answer 13.** Many other actions could have been carried out by the government, such as support for schools with computer equipment and training for teachers, training for the digitally illiterate in public schools, infrastructures for populations without the option of digitalisation, etc.

## Section 7. Expected evolution of the digital divides.

**Question 14.**How do you expect the digital divides to evolve in the short and medium term?Will measures adopted during Covid-19 pandemic affect the evolution of digital divides?

**Answer 14.** If there is one good thing that the pandemic has brought, it is that all processes to reduce the digital divide are being accelerated and that the government has created a programme with actions to be taken before 2025.

**Question 15.**Should exceptional measures implemented during pandemic to bridge digital divides be maintained over time? Is there a risk of widening the digital divide if these measures are removed?

**Answer 15.** All measures must remain in place and also generate new measures and learn from the pandemic situation.

## Section 8. Impact of the pandemic on the digital divides for vulnerable groups.

**Question 16.**How has the digital divides evolved during the pandemic for vulnerable groups (elderly, persons with disabilities, illiterate people)?

**Answer 16.** Many of the elderly had to forcefully adapt to the new situation and with the help of relatives manage to carry out certain financial operations or make online purchases, but unfortunately many of them did not have this option of being able to have an education to adapt to the new technologies.

Quite a number of people with disabilities say that they are not connected to the Internet and ICTs. Three out of 10 people with disabilities aged 16 to 45 do not use it, but this percentage rises to 87.9% among those aged 65 and over.

There is also evidence of more or less use of the Internet depending on the level of education. Those who only had primary education did not use it up to 87%, while among those who had completed secondary education this percentage was 37.9%.

People with intellectual disabilities have a lower use of the Internet than those with other disability profiles.

**Question 17.** Digital skills are the cornerstone to close the digital divides. How has the pandemic favoured (or hindered) the acquisition of digital skills?

**Answer 17.** The pandemic has forced many people to develop digital skills at an accelerated pace and by force.

**Question 18.**What obstacles for digital inclusion of vulnerable groups have worsened (or improved) during the pandemic?

**Answer 18**. As we said before, more aid is needed for the acquisition of devices, to be able to have fibre in all homes, infrastructures to bring digitalisation to rural areas. It is true that the pandemic has slowed down many processes, but much more is needed.

**Question 19.**What successful initiatives have been developed in Europe to improve digital inclusion of vulnerable groups during the pandemic?

**Answer 19.** The European Commission presented the Communication "Shaping Europe's Digital Future "2 . The European strategy contains a set of measures for a Digital Transformation that benefits all, and reflects the best of Europe: open, fair,

diverse, democratic and self-confident. The strategy presents a European society driven by digital solutions that put people at the centre, opens up new opportunities for businesses and gives impetus to the development of reliable technology that fosters an open society and a dynamic and sustainable economy.

**Question 20.**How has the pandemic affected the work of civil society organisations in bridging the digital divides?

**Answer 20**. It particularly affected during the lock-in as offices had to close and direct contact with the consumer who came to the office was not possible.

Contact was still maintained by telephone and email but not in person, so some consumers unfamiliar with new technologies were affected by this.

**Section 9. Lessons learnt from the pandemic related to the digital divides.**

**Question 21.** In your opinion, what are the main lessons that can be drawn from the impact of the pandemic on the digital divides?

**Answer 21.** Digitisation is a reality that is becoming more and more widespread in all sectors of society. Many of the changes are for the better, for example in public services, although we have had to get used to them at an accelerated pace. We must increasingly reduce the digital divide in education, in poverty and provide more training for the digitally illiterate.

**Question 22.** Are we now better prepared to fight against digital divides?

**Answer 22.** The pandemic has made us better prepared and we have learned and advanced a lot.

**Question 23.**Is there now more awareness about the issue of digital divides in the society (governments, public and private institutions, the population, etc.)?

**Answer 23.** We think that yes, maybe there was not so much awareness before.

**Section 10. Recommendations.**

**Question 25.**What recommendations would you propose to bridge the digital divides after Covid-19 pandemic?

**Answer 25.** Public and private institutions must agree to promote digitalisation based on the protection of vulnerable consumers and to promote training and support for the most disadvantaged.