

Agency for Support for BEREC

Call for tenders BEREC/2021/04/OT

Study on post Covid measures to close the digital divide

(BEREC study with a forward-looking approach, which could help NRAs in designing the right conditions to improve digital inclusion for all citizens)

Open procedure

TENDER SPECIFICATIONS

Part 2: Technical specifications

TABLE OF CONTENTS

1. DESCRIPTION: WHAT DO WE WANT TO BUY THROUGH THIS CALL FOR TENDERS?.....	3
1.1. Background and objectives	3
1.2. Detailed characteristics of the purchase.....	3
1.3. Deliverables.....	12

1. DESCRIPTION: WHAT DO WE WANT TO BUY THROUGH THIS CALL FOR TENDERS?

The services that are the subject of this call for tender, including any minimum requirements, are described in detail in the document *Tender specifications – part 2: Technical specifications*, hereafter referred to as *Technical specifications*.

Variants (alternatives to the model solution described in the tender specifications) are not allowed. The *Contracting authority* will disregard any variants described in a tender.

1.1. Background and objectives

Introduction to BEREC and the BEREC Office in the context of the contract management

The Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office) were established by Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018, amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009.

The BEREC Office provides professional and administrative support services to BEREC. The BEREC Office is responsible for carrying out the procurement and will be responsible for overseeing the execution and fulfilment of the contract.

Context

The pandemic has not fundamentally changed our society so far, but it has shown us how societies including the digital society have changed in the past two decades. New digital inequalities have become more evident and the clear realization of the importance of reducing regional inequalities and improving social cohesion.

The digital divide as such is not a new problem for regulators and policy makers. Digital inequalities exist already a long time and closing the digital divide has over the years become one of the long-term goals and long-term thinking in the electronic communications sector. Unfortunately, no sector is good in dealing with long term problems. The Covid-19 pandemic has changed all this and has put this issue back on the high priority list on the short term.

The digital divide is more than ever a global and a European divide. Most problems related to the digital divide are not limited to one-member state alone. They occur in all EU countries with some national differences. Some member states have been hit harder by the virus than others and some have taken effective measures to prevent digital inequalities to expand further. However, the digital divide can be identified as a problem that can benefit from a common European approach. BEREC is a European

body that stands for a consistent European approach of regulation considering national circumstances if relevant.

The Commission has recognised this in its recent Annual Sustainable Growth Strategy 2021¹ on p.3:

The Covid-19 pandemic has accelerated the trends towards the digital transformation: Member States have taken measures to reinforce digital infrastructure, provided online education or supported SMEs in their digitalisation efforts. However, the crisis has also shown shortcomings and exposed vulnerabilities.

And on p.7:

Member States should focus on those reforms and investments that improve connectivity. This includes for instance fostering and facilitating the widespread deployment of very high-capacity networks, including 5G and Gigabit connectivity among urban and rural households and large-scale transport corridors, in line with the EU's 2025 5G and Gigabit connectivity objectives. These investments are important to bridge the digital divide. Equality in access to digital infrastructure, equipment and skills should be supported to prevent a digital divide.

Investments made in the past by the telco sector have increased general access to fast broadband at an affordable price. Because of the lockdown, many households used digital services for the first time. Telework, online shopping and video calls have been booming since March 2020. However, there are still too many people across the EU who have been left out of this process and who have no access to high-speed Internet. It is these people without adequate broadband who suffered the most from being asked to stay at home during the crisis.

Even though one of the most pressing issues that the pandemic has shown regulators and policymakers is the importance of addressing the EU's digital divide, the old recipes will probably be insufficient to deal with the new digital inequalities. A more innovative approach is needed to tackle the digital divide that has been exposed so clearly in the Covid-19 crisis.

Objective

The general objective of the external study is to provide the necessary insights to assist NRAs in developing their approach on closing the digital gap.

¹ Annual Sustainable Growth Strategy 2021 COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS AND THE EUROPEAN INVESTMENT BANK, Brussels, 17.9.2020 COM(2020) 575 final

The key question: what NRA's can do in an effective way to promote digital inclusion in practice and in the short and medium terms.

In accordance with BEREC's role as a body for reflection and advice and with art. 4.1(a) of the BEREC regulation, this study should aim to examine the range of the NRA's possible roles and capabilities in designing the right conditions to improve digital inclusion for all citizens.

The purpose of the study is to investigate how NRA's can contribute in developing and implementing effective measures to diminish the digital divide within their competence and/or in cooperation with other bodies and institutions.

Scope

What should be the future regulatory approach regarding this subject is not so clear yet. This BEREC study should thoroughly analyse the experience gained during the Covid-19 crisis. This will include a quantitative and qualitative research on the impact of this crisis on the digital ecosystem, in particular its effect on the digital divide. The study should draw conclusions and design possible sets of recommendations to further strengthen Europe's digital capabilities to ensure all citizens, including the most vulnerable citizens in the digital ecosystem who lack sufficient access to broadband networks and digital services, become full participants in the digital age.

1.2. Detailed characteristics of the purchase

1.2.1.1. Definitions

By studying the digital divide and the impact of the Covid-19 pandemic on the digital divide, the study should focus on analysing, defining and identifying lessons learnt with recommended improvements to close the digital gap.

The study has to be as complete as possible and capture all the positive and negative consequences that the pandemic has on the digital divide.

The study should develop three parts: quantitative and qualitative analysis, case studies in five member states and recommendations to BEREC.

This analysis should include:

- A literature review of the socio-economic aspects of the digital divide in relation to the Covid-19 pandemic in the EU and a quantitative analysis of available statistical data on this issue (EU, ITU, OECD, etc.);
- Qualitative analysis: interviews of the relevant stakeholders (define a list of relevant operators, NGOs, research centres, NRAs, disability sector, etc.) to refine and complement the quantitative analysis;

- Analyse, examine and identify the main factors that have influenced (enlarged/closed) the digital inequalities between EU citizens during the Covid-19 pandemic;

The study should focus then on developing a forward-looking approach which could help NRAs in designing the right conditions to improve digital inclusion for all citizens. This approach should be neutral. The purpose of the study is not to draft a policy paper. The tenderer should examine and identify successful practices and measures:

- Case studies in a number of (5) representative member states with a real experience, including best practices related to measures that had a positive effect on digital inclusion during the Covid-19 pandemic.

The tenderer should be able to design further three possible sets of recommendations to BEREC:

- Identifying general areas of intervention where NRA's could contribute to close the digital gap;
- To draw up a list of possible and relevant actions for NRA's to promote digital inclusion;
- Identifying areas of cooperation with other bodies and institutions at national and EU level to organise a more coordinated approach to enhance the effectiveness of its actions (e.g. digital literacy).

The conclusion of the study will be included in the final BEREC report on the Covid-19 crisis – lessons learned regarding communications networks for a resilient society.

1.2.1.2. Process

The technical specifications give the main orientations of the study. The purpose of the contract is to engage with a suitable tenderer or a group/consortium of tenderers, having experience and knowledge of both the electronic communications sector and issues related to digital inclusion and having enough resource capacity to finalize the process of the study within 4 months.

The process will follow three steps that correspond with the three parts formulated above i.e. the quantitative and qualitative analysis, case studies in five member states and recommendations to BEREC.

1.2.1.3. Quantitative and qualitative analysis

Literature review of the socio-economic aspects of the digital divide in relation to the Covid-19 pandemic in the EU and a quantitative analysis of available statistical data on this issue (EU, ITU, OECD, UN, academia, etc.).

The main objective is to carry out all the documentary research on the effects of the socioeconomic impact of Covid-19 on digital society and ecosystem. The reports of BEREC monitoring the capacity of electronic communication networks during the pandemic, have shown that broadband networks have proven to be resilient under for instance the increased home working. Many Member States took measures to make it cheaper for certain social groups to study or work from home. However, there is growing evidence in several studies that the digital divide is increasing.

It is required to carry out an analysis of available statistical data to measure the gaps of the digital society. Data analysis should aim at identifying new digital emergencies and areas of intervention that can benefit from a common European approach.

This part of the research should give particular attention to works on different approaches adopted by regulators or policy makers in different countries aiming at improving digital inclusion for all citizens with a specific focus to that part of the population with disabilities. Literature review and the analysis of available statistical data will be the basis for the rest of the study.

A detailed description is to be found in **Annex I**.

Qualitative analysis: interviews of the relevant stakeholders (define a list of relevant operators, NGOs, research centres, NRAs, disability sector, etc.) to refine and complement its quantitative analysis.

The tenderer will conduct an interview survey to determine the challenges faced during the pandemic in relation to the use of electronic communications networks and services, the measures taken during this period and their effectiveness, what would be the expectations for the future, options that should be available to facilitate users' access to services and other issues that would be useful for the present study. It should also cover a range of areas affected during the period of interest such as: access to electronic communications services by persons with disabilities and elderly, education, teleworking, access to public sector services, bank services, health services, entertainment, e-commerce, etc.

The tenderer, on the above basis, will propose a list of stakeholders from which information as described above will be gathered. This list may include for instance NRA's, operators, organisations, bodies related to the above-mentioned fields, equipment manufacturers, etc. It is important that the tenderer interviews stakeholders with different points of view to compare ideas and produce an objective report.

The literature review and the analysis of relevant statistical data carried out beforehand will be important for approaching the interviews with stakeholders, confronting ideas, confirming certain points, and making progress on the subject.

The analysis of the results of the survey will be realized taking into consideration different type of issues and needs that have emerged during the pandemic and must be examined such as:

- Network performance / requirements (internet capacity, network availability, cybersecurity issues, and adequate broadband availability);
- Access by users with disabilities and elderly (available facilities, suitable equipment, and interface);
- Users' digital skills;
- Education;
- Access to public sector services;
- Health;
- Entertainment;
- Teleworking;
- Access to bank services, e-commerce, etc.

The above fields are indicative and should be further enhanced or modified according to the areas determined by the tenderer prior to the interview survey as well as after, as more issues might arise with the compilation of the answers.

The tenderer should conduct a detailed qualitative analysis of the results of the interviews. Also, a summary with the main conclusions of the survey should be submitted.

A detailed description is to be found in **Annex II**.

Analyse, examine and identify and the **main factors that have influenced (enlarged/closed) the digital inequalities** between EU citizens during the Covid-19 pandemic.

(a) Equipment to access ICT Products and Services.

Availability and accessibility to equipment that enables access to broadband can impact EU citizens in all aspects of life including work, family, social interaction if cost and affordability is an issue that limits the benefits and use of broadband in households.

(b) Accessible ICT product or service should be viewed as one which can be used by all its intended users, considering their differing capabilities and situations. (Ref

Summary report on the Workshop to move towards a vision for Europe's telecoms consumers BoR (19) 178 / EN 301 549 – a European Standard for the Accessibility of ICT products and services” ICT accessibility standards such as EN 301 549, WCAG 2.1 / ISO/IEC 40500).

(c) Digital skills and education.

- Digital skills to ensure all EU citizens have the ability to use digital technologies for learning, working, and living in a digital age.
- Digital literacy includes the ability to find, select, evaluate, manage, share, and create information.
- In an education and learning environment factors to be considered include delivery of school and lectures to students of all ages.

(d) Consumer behaviour in respect to behavioural bias.

- In 2016 OECD published a set of recommendations that included among others the principle of information provision and suggested that key was to provide users with basic and essential information that they can use effectively to exercise their rights and improve decision making in the choices for better overall consumer welfare. (Ref. Summary report on the Workshop to move towards a vision for Europe's telecoms consumers BoR (19) 178).
- Consumer behaviour must be considered in the digital divide debate and analysed in respect to why some consumers believe that connectivity may not be enhance or add value to their lives.

1.2.1.4. Case studies

Case studies in a number of 5 representative member states with a real experience, including best practices related to measures that had a positive effect on digital inclusion during the Covid-19 pandemic. The offer should include a proposal with the 5 selected member states.

The main aspects regarding the case studies on each of the selected countries:

- The selection and approach of each of the 5 case studies should be representative in a way that makes the results adequate for most member states. This is necessary for being able to design “the right conditions to improve digital inclusion for all citizens”.
- Relevant for assessing best practices related to measures that had a positive effect on digital inclusion during the Covid-19 crisis.

The detailed descriptions on the case studies can be found in **Annex III**.

1.2.1.5. Recommendations to BEREC

The tenderer should be able to design further three possible sets of recommendations to BEREC.

(a) Identifying **general areas of intervention** where NRA's could contribute to close the digital gap in a structural and sustainable way.

The institutional landscape regarding the role and tasks of the different NRA's is very diverse due to different national legal, economic, social and other circumstances. Nevertheless, it would be useful in this study to identify a general area's where NRAs can intervene with a direct or indirect effect to diminish the digital divide in a structural and sustainable way. By structural and sustainable is meant supporting equality in access to digital infrastructure, services, equipment and skills to prevent a digital divide. Some of these areas are close to the classic roles of the regulators and some are more peripheral and require cooperation with other bodies and institutions. The following list is indicative:

- NRAs play an important role in promoting investments in connectivity;
- Harmonization of the legal framework and regulation;
- Cooperation with network operators and ISPs to ensure a minimal package of e-services for various social categories;
- Promote access in less-developed regions;
- Flexible usage of communication infrastructures (mobile, fixed and satellite) for the distribution of e-services;
- Increasing the transparency of tariffs to promote informed decision making by consumers (including various social categories);
- Developing inclusive e-participation for users with disabilities and elderly, by using new electronic communication and media technologies;
- Promoting ICT skills and digital literacy;

The study should also identify those areas where NRAs could benefit from coordination on these general areas of intervention within BEREC.

(b) To draw up a list of **concrete actions for NRA's to promote digital inclusion**.

The study should produce a “concrete list of actions” and a ranking of “the existing measures in different MS that have been most successful to bridge the digital divide”. These measures are:

- Measures to promote access – i.e., measures that promote the roll-out of VHCN such as different kinds of subsidies (either direct state-aid or tax incentives for end-users) or regulation (such as access regulation or USO) and policy initiatives (such as working with policy objectives, strategies, government-industry task forces working to solve practical problems, databases, services to coordinate information exchange on i.e. network roll-out, digging projects, etc.)
- Measures to promote take-up – i.e., information to consumers, education and support to elderly users, civil society, consumer law, and consumer regulation.

(c) Identifying **areas of cooperation with other bodies and institutions at national and EU level** to organise a more coordinated approach to enhance the effectiveness of its actions (e.g. digital literacy).

The issue of digital inclusion is addressed by several institutional stakeholders besides NRAs such as municipalities, national governments, sectorial agencies, European Union bodies and international organizations.

BEREC post Covid-19 study aims to draw possible areas of cooperation with those institutional stakeholders to foster policy tools efficiency addressing digital inclusion.

The first objective of this item of the study should be to identify the main external bodies (European institutions, international organisations, associations, private entities, national and local entities) that are involved in elaboration and implementation of public tools promoting digital inclusion and the actions they manage. The second objective is to identify the actors with whom BEREC and the NRAs could envisage to organize collaboration to build a more coordinated approach to fight the digital divide.

The study should produce the following results:

- A benchmark of public authorities’ most structuring initiatives at the national, European and international level addressing the digital divide (both connectivity and digital literacy).
- A mapping of all the type of actors involved in those different initiatives including private entities and associations when relevant.
- Interviews with external parties in the framework of “qualitative analysis and interview of stakeholders” part of the study.

- Draw a list of recommendations to BEREC for future possible collaborations with external bodies on the topic.

A detailed description is to be found in **Annex IV**.

1.3. Deliverables

The successful tenderer must deliver the study and other deliverables as indicated below. The tenderer will give a presentation via videoconference of the results of the project to the Board of Regulators of BEREC at one of its plenary meetings.

1.3.1. Structure

The **Final report** should at least include the following sections:

1. Executive summary;
2. A description of the methodology and research questions for the literature review (Annex I Deliverable 1);
3. Results from the literature review and quantitative analysis (Annex I Deliverable 1 and 2);
4. Results of the qualitative analysis including a report of the interviews of relevant stakeholders (Annex II Deliverable 3 and 5);
5. Analysis and identification of the main factors that have influenced (enlarged/closed) the digital inequalities between EU citizens during the Covid-19 pandemic;
6. Case studies (Annex III Deliverable 6 and 7);
7. Recommendations on general areas of intervention, possible and relevant actions that could contribute to promote digital inclusion and possible areas of cooperation with other bodies and institutions (Annex IV Deliverable 8);
8. General conclusions;
9. Annexes (e.g. questionnaires used, Annex III Deliverable 4).

An **Interim report** must be delivered to be presented via videoconference to the Board of Regulators of BEREC at one of its plenary meetings. The interim report must be submitted to BEREC Office before the presentation. BEREC Office will check the required quality of the deliverable within 5 working days. This interim report should at least include:

- A description of the research question and the results of the literature review and quantitative analysis including data collection, description of the methodology, resources and objectives provided in the tender.

- Report on the progress of the interview survey
- Preliminary results of the case studies
- Analysis and identification of the main factors.

1.3.2. Timetable

Number	Deliverables	Interim report	Final report
	Executive summary		Contract signature date + 4 months
1.	Results of the literature review	Contract signature date + 2 months	Contract signature date + 4 months
2.	Results of quantitative analysis	Contract signature date + 2 months	Contract signature date + 4 months
3.	Methodology for the interviews of stakeholders	Identification of stakeholders + questionnaire (phases A, and B of the task) Interim report (report on progress of the task) Contract signature date + 2 months	Final results of the task (deliverable of Phase D) Contract signature date + 4 months
4.	Questionnaire(s) of the interviews	preliminary results Contract signature date + 2 months	Contract signature date + 4 months
5.	Results of the analysis and processing of the answers to the questionnaire(s)	preliminary results Contract signature date + 2 months	Contract signature date + 4 months
6.	Methodology for case studies	preliminary results Contract signature date + 2 months	Contract signature date + 4 months
7.	Results from the case studies		Contract signature date + 4 month
8.	Recommendations to BEREC		Contract signature date + 4 months
	General conclusions		Contract signature date + 4 months

1.3.3. Governance arrangements

All intellectual property rights of the study must belong to BEREC Office. The whole material associated with this study can be used by any of the BEREC members and observers for conducting a similar or different study all depending on decisions made by the BEREC Office.

All deliverables must be written and presented in English, All reports will be submitted in an open electronic format. Exchange of advance copies as well as other non-formal communications shall take place via electronic mail. In addition a summary of the final report will be presented in a set of Power Point slides. The final report must be provided in an open electronic format suitable for publication by the BEREC Office on BEREC websites.

The project will be launched with a video conference (AVC) meeting, a so called kick-off meeting, enabling the contractor to meet the representatives of BEREK Office and the BEREK Advisory Committee.

At least bi-weekly update meetings also required to provide project updates in a virtual form (AVC). These video conferences will be held in order to discuss the state of progress of the study and will be determined based on the need to discuss relevant issues, which will vary between different phases in the study. It will take place between representatives from the successful tenderer and the BEREK Office and the designated BEREK Advisory committee. The aim of the meetings will be to guide the work. The successful tenderer will have ongoing engagement with the Contracting Authority assisted by the BEREK Advisory Committee comprising representatives from BEREK National Regulatory Authorities (NRAs).

ANNEX I

1. Literature review and analysis of available statistical data

1.1. Objectives

Literature review and analysis of available statistical data is the first step to answer to the key question of the study which is what NRA's can do to promote digital inclusion in practice and in the short and medium term.

The main objective is to carry out all the documentary research on the effects of the socioeconomic impact of Covid-19 on digital society and ecosystem. This part of the research should give particular attention to works on different approaches adopted by regulators or policy makers in different countries aiming at improving digital inclusion for all citizens with a specific focus to that part of the population with disabilities.

It is also required to carry out an analysis of available statistical data to measure the gaps of the digital society. Data analysis should aim at identifying new digital emergencies and areas of intervention that can benefit from a common European approach.

Literature review and the analysis of available statistical data will be the basis for the rest of the study including a description of the methodology and research questions used.

1.2. Tasks

Although digital divide is not an unknown issue for regulators and policy makers, the pandemic has brought to surface new digital inequalities across Europe. Such inequalities call for a consistent European approach of regulation considering national circumstances if relevant.

The tenderer will have to investigate the effects of Covid-19 crisis on the digital society. This will include research on the impact of this crisis on the digital ecosystem, in particular its effect on the digital divide.

The tenderer is asked to highlight differences or points of contention between studies or findings, methodologies used, developments in scientific thinking, significant evolutions, elements being considered or consensus between authors.

This section of the study should be sufficiently exhaustive and detailed as it is expected to bring to surface weaknesses and strengths of the digital society emerged during the Covid-19 crisis.

The tenderer will have to read, aggregate, and synthesise all the information given, and complement it with any other relevant material.

It will set the base to the discussion to bring forward in the next sections and it will contribute in identifying areas of intervention for regulators and policy makers to improve digital inclusion for all citizens in a forward-looking perspective.

Literature review and quantitative analysis are a core part of the tender and will constitute specific reports of the study. It should enable BEREC to increase its expertise and position itself on the subject in the coming months.

The outcome of the review will support the tenderer in selecting stakeholders to be interviewed and case studies, best practices related to measures that had a positive effect on digital inclusion during the Covid-19 pandemic.

1.3. Literature review

The tenderer is asked to provide a review of general and academic knowledge about digital inclusion: key words of the research should include current debate on socioeconomic impact of Covid-19, digital skills and literacy, digital infrastructure, citizen with disabilities.

The tenderer will have to carry out all the research necessary to allow for a good understanding of the effects of the pandemic crisis on digital society, even if these effects are indirect and go beyond the scope of the tender.

The tenderer should review and synthesize relevant publications from international and European institutions and bodies, as well as association, academia, public or private organisation which provides suggestions on possible approaches to bridge the gaps emerged because of the pandemic crisis. For example, the tenderer should look at the most recent and relevant studies on the topic such as the recent ITU report “Economic Impact of Covid-19 on digital infrastructure” or the OECD report on “Digital Innovation and inclusiveness”. The tenderer should also review BEREC reports on „Overview of the Member States experiences related to the regulatory and other measures in light of the Covid-19” which summarize the experiences related to the regulatory and other measures in the European electronic communications’ market since the breakout of the Covid-19 crisis.

Older studies that are considered essential also should be included in this literature review, where appropriate.

The literature review should include international references from various countries.

Deliverable 1: Results of literature review including a description of the methodology used (8 weeks after the signature of the contract)

1.4. Analysis of available statistical data

Along with the research, the tenderer will perform a quantitative analysis of available statistical data. It will look at available statistical data on digital divide to identify the key areas of intervention that need to be tackled by innovative approaches at European level. For example, the tenderer can look at available data gathered at International and European level (i.e. EU, ITU, OECD) or by sectoral associations, consumer associations, operators and academia. The tenderer will analyse digital gaps indicators both at European and national level.

The tenderer is asked to consider the fundamental variables for digital exclusion on the demand side and on the supply side. Supply gap is commonly measured by the part of the

population on a given country where broadband connection is not available, and it includes fixed and mobile connections, while the demand gap can be measured by the part of the population living in areas of a given country where broadband is available but do not subscribe to any service because of the cost of devices and services, digital illiteracy and lack of appropriate content. However, having in mind that there is a causal relationship between investment and divide, the tenderer is asked to research both aspects.

Having a clear picture of the digital gaps will help the contractor to identify appropriate forward-looking approaches which could help regulators in designing the right conditions to improve digital inclusion for all citizens. The contractor should not be limited to analyse commonly used indicators to measure digital inclusion.

Quantitative analysis will be methodologically described by the contractor. The methodology for describing the impacts should be simple, easy to explain, easy to understand and defined for the purpose of identification of post Covid-19 measures to close the digital divide.

Deliverable 2: Results of the analysis of available statistical data including a description of the methodology used (8 weeks after the signature of the contract). The results should make use of graphs and tables to illustrate the results.

ANNEX II

Qualitative analysis: interviews of the relevant stakeholders (e.g. operators, NGOs, research centres, NRAs, etc.) to refine and complement its analysis.

Interviews with relevant stakeholders

During the pandemic, the needs concerning the electronic communications networks and services have changed dramatically. Higher speeds are required in numerous types of activities even in areas where very limited or no use was done before.

The tenderer will conduct an interview survey to determine the challenges faced during the pandemic in relation to the use of electronic communications networks and services, the measures taken during this period and their effectiveness, what would be the expectations for the future, options that should be available to facilitate users' access to services and other issues that would be useful for the present study. It should also cover a range of areas affected during the period of interest such as: access to electronic communications services by persons with disabilities and elderly, education, teleworking, access to public sector services, bank services, health services, entertainment, e-commerce, etc.

The tenderer, on the above basis, will propose a list of stakeholders from which information as described above will be gathered. This list may include for instance NRA's, operators, organisations, bodies related to the above-mentioned fields, equipment manufacturers, etc. It is important that the contractor interviews stakeholders with different points of view to compare ideas and produce an objective report.

The literature review and the analysis of relevant statistical data carried out beforehand will be important for approaching the discussion with stakeholders, confronting ideas, confirming certain points, and making progress on the subject.

The detailed list of interviewees will have to be submitted to and approved by BEREC Office. BEREC Office reserves the right to amend the list if it does not prove to be sufficiently balanced.

Also, the proposed interview content will be submitted to BEREC Office for approval prior to the launch of interviews. BEREC Office may request further modifications to the content.

The analysis of the results of the survey will be realized taking into consideration different type of issues and needs that have emerged during the pandemic and have to be examined such as:

- Network performance/ requirements (internet capacity, network availability, cybersecurity issues, and adequate broadband availability),
- Access by users with disabilities and elderly (available facilities, suitable equipment, and interface),
- Users' digital skills,

- Education,
- Access to public sector services,
- Health,
- Entertainment,
- Teleworking,
- Access to bank services, e-commerce, etc.

The above fields are indicative and should be further enhanced or modified according to the areas determined by the contractor prior to the interview survey as well as after, as more issues might arise with the compilation of the answers.

The contractor should conduct a detailed qualitative analysis of the results of the interviews. Also, a summary with the main conclusions of the survey should be submitted.

Specifications of the interview survey

The exact timetable of the interview part of the survey as well as the actions to be taken during the different phases are going to be proposed by the tenderer and finalised with BEREC Office which will give the final approval.

The interview part of the survey will comprise of the following phases.

Phase A: Methodology-Identification of stakeholders

Firstly, the tenderer will submit the methodology that is going to be followed for the interview survey as well as the relevant timetable to follow.

The tenderer will also propose the list of stakeholders that are going to be interviewed. The interview survey will be focused on different areas of interest and needs that have emerged during the pandemic, covering indicatively the following subjects:

- Network performance, quality of service,
- Accessibility for persons with disabilities and elderly,
- Access to public, other services,
- Education,
- Health,
- Users' digital skills,
- Entertainment,

- Teleworking.

The list of stakeholders could include:

- NRA's (adequate number of NRA's representing different broadband penetration rates countries),
- Operators (adequate number of operators from different EU countries),
- Research centres,
- Organisations for people with disabilities and elderly,
- Consumers' organisations.

The tenderer will form a list of stakeholders that are going to be interviewed. The stakeholders can be grouped in different areas of interest or needs if this is considered more effective and appropriate for the survey.

Furthermore, the tenderer will propose whether one or more questionnaires will be necessary to conduct the survey.

Therefore, the tenderer will submit to BEREC Office for approval:

- The methodology that will be followed during the interview survey, from defining the list of stakeholders until the final presentation of the results of the interviews to BEREC Office, which will be in accordance with the present tender,
- The phases of the interview survey as well as the final timetable to be followed should be included, as agreed with BEREC Office,
- The organization, preparation, and supervision of the survey,
- The areas of interest and needs addressed in the survey,
- The list of stakeholders to be interviewed,
- The number of questionnaires needed for the survey explaining how this is derived,

BEREC Office will examine the submission and may request modifications. The final document will be approved by BEREC Office.

Phase B: Questionnaire(s)

The tenderer will form the questionnaire(s) that are going to be used for the interviews and will submit them to BEREC Office for approval. BEREC Office may request modifications prior to the final approval.

Phase C: Interviews

During this phase, the interviews will be performed. The tenderer will inform BEREC Office on the progress of the procedure weekly.

Phase D: Presentation of the results

Within two weeks after the completion of the interviews, the tenderer will submit to BEREC Office the results. The deliverable will include graphs, tables, etc. for the detailed presentation of the results. The conclusions will be available in raw data, in tables as well as in presentation format.

Finally, the tenderer will present the results of the interviews to BEREC Office.

The following table summarizes the different phases and the corresponding deliverables of the interview survey (the actions may be modified if so, proposed by the contractor and upon agreement with BEREC Office):

Phase A

Actions:

- Tenderer will determine and describe the methodology that will be followed for the interview survey from defining the list of stakeholders until the final presentation of the results of the interviews to BEREC, which will be in accordance with the present tender.
- Determine the phases of the interview survey as well as the final timetable to be followed should be included, as agreed with BEREC Office. Also, the organization, preparation and supervision of the survey will be defined.
- The tenderer will determine the areas of interest/needs in the survey and form the list of the relevant stakeholders. Following that, the need for the preparation of different questionnaires per stakeholder group will be examined.

Deliverable 3 Methodology that will be followed for the interview survey:

- The phases of the interview survey and the final timetable,
- The organization, preparation and supervision of the survey,
- The areas of interest, needs of the survey,
- The list of stakeholders to be interviewed,
- The number of questionnaires proposed to be used for the survey for different groups of stakeholders.

Phase B

Deliverable 4 Questionnaire(s) of the interviews

Phase C

Actions:

- Performing interviews,
- Weekly progress reports to BEREK Office.

Phase D

Actions:

- Stakeholders who responded,
- Processing of data collected, analysis, results of interviews,
- Preparation of the analysis and conclusions of the interviews in word file. For the presentation of the conclusions, graphs and tables will be used,
- A presentation in ppt format will be prepared,
- Executive summary of the conclusions,
- Excel file with the results used for the preparation of the graphs.

Deliverable 5 Results of the analysis and processing of the answers to the questionnaire(s):

- Summary of the results,
- Relevant excel files,
- Presentation of the results to BEREK.

Annex III

1. Technical specifications, country selection

1.1. Objectives

The analysis should include case studies in 5 member states including best practices related to measures that had a positive effect on digital inclusion during the Covid-19 pandemic.

The analysis should thoroughly analyse the experience gained during the Covid-19 crisis by using qualitative and quantitative research on the impact of this crisis on the digital ecosystem, in particular on the digital divide.

1.2. Selection of countries for the Case studies

Main aspects of selecting the countries for the Case studies:

- It should be representative in a way that makes the results adequate for most member states. This is necessary for being able to design the right conditions to improve digital inclusion for all citizens.
- Relevant for assessing best practices related to measures that had a positive effect on digital inclusion during the Covid-19 crisis.

The first part of this study will focus on collecting and analysis of available statistical data and interviews of relevant stakeholders (e.g., operators, NGOs, research centres, NRAs, etc.). This means that this part will make use of data on a more aggregate level and qualitative data from the different interviews. The results from the literature review and interviews of relevant stakeholders should be used as input for the Case studies.

The document “Member State measures reducing digital divide” could be a relevant source for selecting which NRAs and operators to interview in the first part of the study and for selecting and proposing the Case studies for the offer.

The Case studies together with the first part of the study should together:

- Identify and examine the main factors that have enlarged the digital inequalities during the crisis,
- Identify general areas of intervention where NRA’s could contribute to close the digital gap,
- Draw up a list of concrete actions for NRA’s to promote digital inclusion,
- Identify areas of cooperation with other bodies and institutions to organise a more coordinated approach to enhance the effectiveness of its actions.

Case studies on a detailed level can be very costly to collect on a large scale, such as the whole BEREC area, but there should be a priority on precision that implies micro-level data. Balancing the need for precision and level of costs leads to an approach that would focus the

analysis on a reduced number of areas. BEREC Office therefore requests tenderers to provide a methodology for selecting a small number of representative test areas, where the case studies will be conducted.

To ensure the study's results are representative enough, a good compromise could be to study various countries or geographic segments (stratified sampling), together illustrating the diversity of member states, the diversity of European electronic communications markets in terms of the size of the markets, the attitudes of consumers, ISPs and society generally towards the digital divide.

The criteria for selecting countries for the offer could be based on, not limited to, but possibly including a selection from the following:

- Sociodemographic variables,
- Variables specific for the electronic communication sector,
- Countries that have real experience, including best practices related to measures that had a positive effect on digital inclusion during Covid-19 pandemic.

The segmentation process is expected to produce a set of countries. This grouping shall not imply that each national situation can be deduced from the characteristics of the group; rather, the aim of the exercise is to build a robust dataset for evidence of general trends and patterns across Europe.

The tenderer will establish a geographic segmentation methodology and the relevant selection criteria. Once the methodology and the criteria are established, the tenderer will apply them to draw the list of geographic segments to be used for selecting the countries for the Case studies, regardless of the country of establishment of the tenderer and its subcontractor(s). BEREC Office could reserve a right to approve or reject the tenderer's proposed selection of countries.

Deliverable 6 Methodology for case studies (2 months after signature):

Regarding this stage, tenderer is required to provide explanations in their response of:

- The methodology used for selecting of the 5 member states for the Case studies
- For the Case studies:
 - How many test areas for the Case studies they believe they would need to give a representative picture, in light of the criteria and geographic categories identified as relevant,
 - How they would make a sample representative in each test area,
 - To what extent it is possible to extrapolate any conclusions for the test areas to other geographic areas, taking into considerations the differences and similarities between areas in each category and between categories,

- Agree with BEREC Office on how the results from the Case studies should be documented and presented in the final deliverable.

Deliverable 7 Results from the case studies (4 months after signature):

Regarding this stage:

- Conduct the Case studies as agreed with BEREC Office at the interim stage,
- Final report including:
 - Results from the Case studies,
 - Results should be presented in the form agreed with BEREC Office at interim stage.

ANNEX IV

Recommendations to BEREC

Context

Public policies related to digital inclusion involve many different actors at the European, international, and national level. These policy tools can be divided into two categories.

- Addressing users ICT equipment from decent Internet access to affordable terminals,
- Society digital literacy, especially digital basic skills mastered by the population as evaluated by the Digital Economy and Society Index.

Hence, the issue is addressed by diverse institutional stakeholders besides NRAs such as municipalities, national governments, sectorial agencies, European Union bodies and international organizations.

Despite the fact that one of the most pressing issues that the pandemic has shown regulators and policymakers is the importance of addressing the EU's digital divide, the old recipes will probably be insufficient to deal with the new digital inequalities. A more innovative approach is needed to tackle the digital divide that has been exposed so clearly in the Covid-19 crisis.

Thus, BEREC post Covid-19 study aims to draw possible areas of cooperation to foster policy tools efficiency addressing digital inclusion.

Objectives

The tenderer should respond to the following questions:

- Which main external bodies (European institutions, international organizations, associations, private entities, national and local entities) are involved in elaboration and implementation of public tools promoting digital inclusion? What type of actions do they manage?
- With which of these actors BEREC and NRAs could foresee to collaborate to build a more coordinated approach against the digital divide?

Results

- A benchmark of public authorities' most structured initiatives at the national, European and international level addressing the digital divide (both connectivity and digital literacy).
- A mapping of all the type of actors involved in those different initiatives including private entities and associations when relevant with an adequate classification by areas of actions and apparent links when there is institutional dependence or existing collaborations on the issue of digital inclusion (for instance if the one agency is working with on connectivity

measures with another institution present on the mapping, it must be visible on the mapping with a line, an arrow or any relevant sign).

- 5 to 10 interviews with external parties in the framework of “qualitative analysis and interview of stakeholders” part of the study including at list one European body, one local actor and one association or private entity.
- A list of recommendations to BEREC, where possible and relevant, for future collaborations with external bodies on the topic.

Deliverable 8 Recommendations to BEREC

Resources that can be used by the tenderers:

[1] Report of the European Commission “DESI 2020 - Human Capital - Digital Inclusion and Skills” <https://ec.europa.eu/digital-single-market/en/human-capital>

[2] File of the Directorate General for Employment, Social Affairs and Inclusion of the European Commission “Inspirational practices for tomorrow's inclusive digital world“ (2019) [https://op.europa.eu/en/publication-detail / - / publication / ed267a95-75f5-11e9-9f05-01aa75ed71a1](https://op.europa.eu/en/publication-detail/-/publication/ed267a95-75f5-11e9-9f05-01aa75ed71a1)

[3] Report “The OECD Skills Outlook 2019” (2019) <http://www.oecd.org/skills/oecd-skills-outlook-e11c1c2d-en.htm>

[4] UNESCO Report “A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2” (2018) <http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>

[5] M.J. Couto, C. Lucas, M.J. Brites, L. Pereira, Digital Literacy in Europe: best practices in six countries, (2018) <https://library.iated.org/view/COUTO2018DIG>

[6] Note from the European Parliament “Bridging the digital divide in the EU“ (2015) [https://www.europarl.europa.eu/ReqData/etudes/BRIE/2015/573884/EPRS_BRI\(2015\)573884_EN.pdf](https://www.europarl.europa.eu/ReqData/etudes/BRIE/2015/573884/EPRS_BRI(2015)573884_EN.pdf)

[7] Directorate General for Employment, Social Affairs and Inclusion of the European Commission “Inspirational practices for tomorrow's inclusive digital world“ (2019) [https://op.europa.eu/en/publication-detail / - / publication / ed267a95-75f5-11e9-9f05-01aa75ed71a1](https://op.europa.eu/en/publication-detail/-/publication/ed267a95-75f5-11e9-9f05-01aa75ed71a1)