

Body of European Regulators
for Electronic Communications

BEREC



BEREC Stakeholder Forum

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#BERECforum

**Transcription
of the event**

>> Good evening everyone and we hope to see you on the 28th of October in person in Brussels. Good afternoon everyone.

It's a little bit intimidating to sit in front of so many people after 18 months of hiding behind my laptop. I must say that, in March when we had a stakeholder meeting online, when Annemarie said she wanted another one in Brussels with you guys in a room, I couldn't believe it. I think it is fantastic. Our field is sometimes seen as a little bit dry. When you tell your friends that you spend all your life doing telecom regulation, they think "poor guy". But what they don't know is how happy we are to see each other. And the Teams and the Zooms are great, but will never replace, I think – not in the coming years – the warmth of human relation. My name is Philippe Defraigne, I am a director with Cullen, and I'll be your MC, your master of ceremony for this afternoon. A couple of crucial points. The beautiful coloured blocks on your tables are actually sweets, courtesy of BEREC, so it is not for decoration. You can go for it. Equally crucial, not on the agenda, we'll make sure we have a coffee break in about an hour. That's all on my side. I wish you a great afternoon. I am sure you will enjoy it. The programme looks great. I am delighted to introduce someone who hardly needs any introduction, Annemarie Sipkes. She is the director at ACM Telecom, the Dutch regulator. And as you know, she's BEREC chair 2022. She will formally welcome you to this event and present you the Work Programme 2022.

(inaudible)

>> **Annemarie Sipkes:** And it was also very important, not just to see each other again, it was also important because we wanted to put into practice one of the long ambitions we had. That is to have a meet and greet with our Co-chairs. I am very happy to welcome you on behalf of BEREC at this real-life stakeholder forum, and I'm very happy that you already showed up at our morning programme. We had a lot of interaction between the Co-chairs and the participants and all the stakeholders. I've had very positive feedback on what happened there. I hope that we will collect your formal feedback on that.

You will receive a digital... It is a short questionnaire, to make sure we can make a tradition out of this and learn from this. The stakeholder forum is of course... we organise this traditionally as part of our consultation of the Work Programme of next year, which is why, on behalf of all of BEREC, the incoming chair is asked to host this meeting. The thing is of course, that the draft Work Programme has already been published and the formal consultation will close this coming Monday, so I hope that you have not waited for this very moment to get your first ideas on the proposals we have put out there.

Let me just briefly go through the main points of the draft Work Programme. Which, here we are. As I said, we started collecting your ideas and all the ideas from our BEREC members. And this is the work cloud to see the richness of all the issues that we in the telco sector face. As

Philippe said, although on birthday parties we may have a hard job, in practice, there are so many relevant, urgent and important matters out there – on digital, on platforms, on best practices, on how to regulate, how to make sure that end-users are profiting throughout Europe from good end-to-end connectivity.

We had a hard job at prioritising to make sure we have an ambitious Work Programme, but also one that we can actually deliver on.

The way we are seeing the work now is that we are in a phase that, of course, there are still a lot of issues out there where we have to act. Think of the comparison tools. How can we make sure end-users can actually compare the offers out there? Think on the new issues, the new regulation discussed currently being discussed right next door on roaming and on the legal issues that are now confronting us on open internet. So there is plenty of work that we have to do and our Working Groups have put on the agenda. But also, we are, of course, at a time when we are asked to innovate and learn about the new technology. What you see in our programme is also that there is a lot of work streams, be it in workshops, be it in reports, where we have to think about how do we, as regulators, respond? How do we look at emerging technologies? With the advent of 5G, how do we look at the value chain? There is not only an ambition in Europe to make giant steps in connectivity digitally, but also to work towards a greener Europe. What does that sustainability ambition in Europe mean for us as regulators, and for the telco sector as a whole? We have to learn and keep up with the technology. We have work streams on that. That's the richness of our Work Programme.

This is actually a new chart. We have tried to make sure, the things we deliver are spread evenly throughout our year. And as you know, every year, the work is not just finished between January and December. We will have some work that we will finish in 2023. Here you see where the workshops are. Especially for stakeholders, the draft report that we are bringing out. We have tried to make sure that they are evenly distributed in quarter 2, 3 and 4, to make sure that when we ask for your input, we are not asking you to reflect on everything at the same time but have been evenly distributed throughout the year. This helps to do our work better, I think, on both sides.

That kind of sums it up. To make sure we have all our dates. The public consultation on our Work Programme runs until the 5 November. We will look at your input, take that on board and produce a new and final Work Programme to be approved at our Plenary 4, which will be mid-December, 2021.

To be sure, every year I think I am not the only Chair, incoming Chair facing this. The things that we would like to do, the things that are out there and are important, are much larger than any group can handle in a year. Be advised, there is also a call for input for the outline of the 2023

Work Programme, which our colleague from Greece will take on. And those 2 consultation processes run exactly parallel.

I think that is all from my side at this point. Philippe?

>> **Philippe Defraigne:** Thank you very much.

This session will be past, present, future.

- I am called past. I am kidding.

- You don't look like it.

- Philippe, you know this old gypsy saying. By the day after tomorrow, tomorrow will be yesterday.

- Thank you. You know Michel.

If we were in the US Senate I would say, thank you for your service.

I am delighted to introduce Konstantinos Masselos. He has been a telecom professional for a long time. Kostas will be Chairman of BEREC in 2023. We will come to Kostas in a minute. He has a few interesting skills in his hand.

To break the ice, I suggest to ask a round of questions while you think of more clever questions. There will be people with microphones, so get ready. I'll make a start.

Institutional questions, questions that you would not think about. I would like to start with you Michel. I know you have personally, at BEREC, taken care of developing the international relations of BEREC. We are so busy of the code-centred Work Programme. I am not so aware of what you are doing outside, so tell us a bit more. What has BEREC been doing in international relations?

Hello hello? Can you hear me? All right. Let me just say hello to everybody. I am pleased to see you here today after 2 years. The previous stakeholder forum was exactly 2 years ago. Yes, Philippe, on international relations, to tell you a little more about that, I need to go back to what we adopted last year. You might remember that we adopted a strategy 2021-25 and in this strategy, we decided to also develop and adopt an international strategy for the work relations we have with the non-EU NRAs and the other international organisations. With this digital policy growing, BEREC has to deal with more and more topics. And as a result, the field for international cooperation has increased exponentially. And to deal with that, we adopted this strategy with a double objective. The first objective is to have a more systematic, structured approach for these international relations, to be beneficial to the attainment of our own

priorities and the fulfilment of the yearly Work Programme, taking into account the limited resources we have. The second objective of this international strategy is to make sure that international relations, international strategy is well embedded in BEREC's core activities, and so concretely, will be implemented in the Work Programme. About priorities, it is quite easy, because the priorities of this international strategy are aligned with the general strategy – promoting full connectivity, also supporting sustainable and open digital markets, and empowering end-users. What are the actions we can see in this strategy? Well, first of all, there is something very important. It is the open model we have. This is quite unique. We are all NRAs implementing the same regulatory framework all over Europe. And this is something we would like to promote with interested parties all over the world.

That's a first element. On the topics, of course, you have the traditional topics for the electronic telecommunications sector, be it open internet or international roaming, consumer protection and so on – you all know that. But, also, broader than the traditional telco sector, with the digital agenda Annemarie talked about in the Work programme – AL, for instance, digital platform regulations. We did it also for last year, and this year as well. And what is also important is that the nature and the timing of these international relations needs to be prioritised. Why is it so? Because we want a positive output from both sides for us, as BEREC members, but also for our counterparts.

- What is the main... There is this Brussels effect. The world wants to know how we do it in Europe, and contrary to what we think in Europe, the world seems to think we do things right outside of Europe. So I can see the benefit for the rest of the world, but what is the benefit for BEREC of “evangelising”, if you like, in India, Canada, the US – I mean, there is a long list.

- Definitely. Why is it so? With all the challenges we face. Take climate change, cybersecurity, consumer protection. Also AI as mentioned. Digital platform regulation. We'll talk about this later. Those challenges have a global nature. To solve and to deal with these challenges, we need a global solution. For that, we need a broader scale. We need to work together at regional level. That's the very interesting part for us. To cooperate. So, the question will be, why? Because we also want to amplify the open value we have and we cherish so much. We know there are different levels of cooperation. The exchange of experiences we have. And we can talk with the heads of other regulators from other regions. Sharing views. Developing new ideas. Also raising awareness about this cooperation, international cooperation. We can also cooperate with experts at expert level. In an informal way or on basis of more institutional advice. Like an agreement or memorandum of understanding. But, again, what about the topic? The question is, what about and who should be involved in this? And this could be also broader than the traditional telco regulators. I talked about priorities. For priorities, we have developed kind of guiding principles. So, one of these principles is quite easy. We want to have a multilateral

approach. We prefer to develop international relations with our counterparts instead of separate regulators. It is more efficient of course. The geographic proximity is important. We have a memorandum of understanding with other organisations, like EasPeReg, for the eastern part of Europe, and EMERG around the Mediterranean sea. That's another type of priority, but also, we would like to cooperate with regions that are very well developed from a technical point of view, so it's a learning process also for us. And in the end, as I mentioned earlier, what we would like to do is to export the European model. That's what we are keen on. And that's the reason we do not necessarily seek to have new partnerships everywhere in the world, but just to develop the partnerships we have with the existing partners.

- Thank you Michel. Now you know more what is behind the scenes on this "Brussels effect", how the values are being promoted. Annemarie, I can't resist to ask you the obvious question. You've been innovating on the format of this day. Many of you this morning were delighted to meet the Co-chair of the Working Group – it's often said the people who do the "real work" at BEREC, in fact. Do you have a first feedback? I thought it was a great idea, but what is your feeling? Will you do it again?

- Well, I already organised, hosted 2 stakeholder forums in 1 year. That's kind of enough. This is actually why I mentioned, I heard from groups and sessions that hugely went outside our timeslot, but that's a positive sign. The fact that the conversation was really helpful and all parties learned from that – from questions that the Co-chairs hadn't thought of yet or things that could be answered readily. As I said, this morning, when we started. I hope this is a start of a more structured, to deepen the structure of the dialogue between stakeholders and the Working Groups. And some of the ideas, this I think is a good start, to know that there are Co-chairs, BEREC is not just an institution or logo, there are people doing real work. We will, every Working Group will have their own E-mail address at BEREC, so if you come up with something else, a piece of information you want to share or a concern or question, feel free to address your question to the relevant Working Group. These are things that I think make it important to have a structured dialogue and maintain it, even if we are working more virtually. Because we will enjoy meeting physically but we shouldn't forget about the advantages of having interaction without having to travel. This is one of the things I thought about. And the other, as I mentioned, I would really like to receive feedback from people on how they experienced this morning, because I could only get a few snippets – so that we can learn, see if this is a good initiative, what could be better, what could be a good frequency, is this something we should do every year or every other year? Just help us reflect and learn. That's also a question I would like to put out there and will address and will be sent to everyone who registered.

- I think it's a great initiative and if you have great ideas, don't hesitate to throw them in between 2 questions. Thank you Annemarie, this is a welcome initiative. This strengthening of dialogue.

Kostas, I introduced you as the Chairman of EETT in Greece and BEREC Chair 2023. But I'd like to be, as a Belgian citizen, a bit nationalistic and remind the audience that you studied for your PhD in Leuven, at the IMEC. The mecca for semiconductors. When looking at the digital compass, to remind me of the connectivity targets the masters set, you have semiconductors. We telecom people know we need semiconductors. In my 30 years of telecom, I never discussed semiconductors, but now it is the line below connectivity in the digital compass. I read things like "Right now, Europe controls 10% of the world value of semiconductors" and "We should be producing at least 20", and there are things that I don't understand about 5 nanometres and 2 nanometres. I don't understand, I'm beyond my level of expertise. But you know, our newspapers are full of the Commission ? really to bring the production here. You are an expert of this. What do you make of this? Is it really so important to produce its semiconductors?

- Well, Philippe, thank you for the introduction and good afternoon. It is really great to be among you today. A question on semiconductors is fortunately relevant these days. As you said, it has been in the media, this issue about the shortage of integrated circuits for so long. I think the European Commission's decision to support high-end semiconductor manufacturing in Europe is the right decision in the right time. For sure. Not because the semiconductor footprint of Europe worldwide will be doubled, 10 to 20%, but also because Europe will have capability for high-end semiconductor production. Europe will be resilient in shortages, possibly in the future, in this very critical component supply chain. For example, consider a manufacturer of electric vehicles that plans to introduce self-driving capabilities to the cars. This means that he needs AI system integrated circuit, which is in fact, super computer chips. 50 billion transistors computer on chip. This will become part of the transportation in the near future. We cannot afford any issues again in the semiconductor supply chain. This is the most important for Europe. This is the right decision. And Europe, to move forward fast in this direction, of course it will have to do maybe 1 or 2 huge investments – 10 to 20 billion euros for semiconductor manufacturing facilities. This means that we have to invest close to already existing facilities or to existing ecosystems, because this will allow us to move faster the production by 12 or 18 months. Still, I would see a role for smaller companies and smaller countries in Europe. The European strategy might consider including some budget – much smaller – for SMEs that work on some niche parts of this semiconductor industry market and supply chain. For example, we see that now computing is moving from multiple computing to heterogeneous accelerated computing. The last 3-4 years we see accelerators for AI, dominant, but also for complex tasks of network protocols to be implemented as chiplets. In the future what we will see, we will be combining chiplets, different accelerators, interconnecting them in what we call "advanced packaging". I would see potential for smaller countries and smaller companies – invest in standardising chiplets and work on technologies to interconnect chiplets. Because this is going to be the key issue in the future. Advanced packaging and interconnecting chiplets. There is opportunity for smaller countries and companies to contribute and become part of this global semiconductor

ecosystem. I think Europe is definitely headed in the right direction. But there are still opportunities for smaller companies and smaller countries in Europe to contribute.

- Thank you for that message. I saw it as reinforcing our resilience. But I had lost, because of this announcement of Intel about where to locate the factory, I had lost sight of the fact that there were opportunities for smaller companies. Thank you for that message.

Let's turn to the room for the first question. I would like to ask somebody courageous to break the ice. I have done my job. Who wants to break the ice on this side and courageously ask for the microphone. Do we have a microphone? Yes. We have Anton here at the front from Deutsche Telekom, thank you Anton.

And the next person should get ready, okay?

- Thank you very much. Deutsche Telekom. My question goes to Annemarie, it's concerning the Work Programme for 22 and the consumer protection part. I believe that bridging the digital divide will be an important part especially because of the COVID situation, because just, I think, 3 days ago, a very extensive report on this has been published. I am still reading through that. I have a follow up question for that: will there be an environmental sustainability aspect introduced into this report or into this work stream in general? Because it is quite clear that this topic is becoming more and more practical with every iteration of major laws. For example, I would expect that the coming Broadband Cost Reduction Directive will introduce a lot of environmental aspects. I'm curious if future tools to bridge the divide will be reflecting the constraints put by the necessity to respect the environment.

- The challenge of the bridging the digital divide while taking into account the new constraints.

- Constraint or maybe some supported by sustainable initiatives.

- Yes, I thought regulators had enough constraints already, so this is one more.

- As I said, we are very aware that the one, as you said, there is a digital divide, and in line with our strategy, we have to promote connectivity, sustainable competition and empower end-users. So bridging the digital divide is very much in our genes. But at the same time we are aware that the green agenda and the need to think about sustainability is out there as well. So this year we started a work stream. To ask ourselves what are the major challenges in the telco sector. This may be one of them. While bridging the digital divide, while rolling out new technology, is that done in a more or less sustainable manner? The first question we ask is: What contribution can we have as regulators and what contribution are we having right now? The basics would be, if we, through our actions, without wanting it or without knowing it, are hampering a move towards more sustainable technologies. Of course we should rethink those policies. Maybe we can also

go one step further, to see if through our actions and interventions we can actually stimulate the more sustainable way towards bridging the digital divide. It is still a question we are looking into and we have been reaching out to a lot of stakeholders we haven't met before, that are specialising in sustainability issues in fellow European bodies.

- We have lost the sound. Just wait.

- I am back again. Lost somewhere in the digital divide. So, this is very much a question that we are working and studying right now. And I hope to have a bit more pointers as to how to take this into account in a productive way. I do think this will be at the heart, one of the things we have to take into account, when thinking about the future of regulation. I can't be more definite yet on what that will look like.

- Thank you Annemarie. If we have time, we should go back to sustainability and 5G, perhaps a bit later. So I've got Innocenzon from MVNO Europe. Can we have a mic here at the front?

Who wants to be next after Innocenzon?

When he's not talking about telecom, you know, Innocenzon is a great jazz piano player. You should go and listen to him if you're in Brussels when he plays.

- Thanks for the introduction. I would like to just, happy to be here after so long lock down period. I am very happy to see so many colleagues. And I would like to congratulate also for BEREC, because we appreciate the draft Work Programme for 22, especially the inclusion of the specific chapter on the wholesale mobile connectivity. Which, as you recognise, is a matter where MVNOs are struggling. We see that you address in the chapter the need for factual investigation - still, we need it. And so we are interested to understand in which potential direction this factual investigation can go. Are you considering to collect data like the kind of wholesale agreement, the market prices, or the way regulation has been working in that market, because even if such markets are unregulated normally, there are some exceptions. There has been a rise in competition as a result of conditions in licenses, or in disputing in front of competition authority and so on. There are a lot of practices in fact which can be collected in order to better understand how this market should evolve and be guided. So, can I understand if you already have something in mind?

- Thank you. Where do we go next? It is back now the topic. Some people will know it. Some will be concerned.

- As you say, Philippe, the mobile market is drawing a lot of attention. I think, of course has to do with the fact that the 5G advantage is getting more and more concrete and substantive. And we

do see with the growing need for high connectivity, broadband connectivity, you see the importance of mobile market and the interest of the stakeholders.

This part of the work stream is exactly as it says it is. We want to factually investigate the competition dynamics given the fact that we are on the verge of the 5G advent to the market. We want to get a better grasp of the competition dynamics. It is not an evaluating study on the impact of our regulation. It might play a role. But this is just to get a factual basis to start the internal discussions on how we can understand the competition dynamics we can see in the various markets in Europe. For the rest, this part will be dealt with through the chair study, because the people in the Working Group have enough on their plate as it is. We are still working out the details of the questions. But, it is what it says it is. There is an increased interest in how does the market evolve at present and how are we to understand the competition dynamics.

- You wish to comment, Kostas?

- Yes, just a couple of comments complementary to what Annemarie already mentioned. This is a great initiative that we will have this study next year. But, we have been working on MVNO cases in Greece. Our market has no MVNOs at this date, so we are also very interested in exploring this model. I strongly believe the model is very aligned to the trend of separating infrastructure from services. And the softwarisation of telecom industries. I think we need to explore and really identify the opportunities for MVNO to it be a win-win model and see what are the real market barriers. We have different regulations across Europe. So in Greece, for example, we have provisions for MVNOs through our spectrum licenses. In other countries, we have dispute resolution mechanisms. I strongly believe this is a very interesting topic to explore. This is a very good point in the agenda for the Work Programme 2022.

- Thank you Kostas. Aurélie from Orange. Could you raise your hand? Next to the camera.

- Thank you very much. Aurélie from Orange. First of all, thanks a lot for this forum. It is good to meet with people in real, compared to the last 2 years. Also I wanted to thank you for the new format of this morning, which was interesting to follow and participate. I am not going to ask a question on roaming or net neutrality, which are key for us, because I already discussed it this morning in the Working Group Chairs. I do have a question on the objective for investment. We have the digital decade objective. Commission wants 5G everywhere by 2030. My question would be the following. How can BEREC further support private investment into networks? Is there a specific stream that BEREC will develop in the remit of their competencies on spectrum policy? Smart spectrum policy at national level? And for example, on sharing agreements for mobile networks, to give the market players more legal certainty of best practices, to support the kind of scheme. Sorry for the noise.

Can you help private investment into networks? Thank you for any insight.

- Thank you, Aurélie. Who wishes to...?

Good question, because the 3 chairs want to take it!

- I will start anyway. Thank you very much for your question, Aurélie.

You mentioned the different topics. Of course, the private investment is important and the key driver for the roll out of the future networks, 5G and fibre. That's correct. And from our side as I mentioned, promoting full connectivity remains a high level strategic priorities. Not only for this year, but for the coming years. On Spectrum, you probably know, it doesn't fall within the remit of BEREC. We are not dealing with it directly. We are doing it in close cooperation with our colleagues of RSPG. We are following the peer review procedure. But, on the other hand, you also mentioned infrastructure sharing and mobile infrastructure sharing. We have adopted, in 2019, a common position, where all the potential infrastructure, mobile infrastructure schemes are developed. And basically, to make it short, this is a case-by-case approach, but in this document, you will see that we are in favour of this – passive infrastructure sharing, but also active – on different models as a whole.

You might also remember with the stakeholders, we organised a workshop at the end of last year in December to see to which extent this common position developed in 2019 is still fit for purpose. And the answer is yes. It is still fit for purpose and, of course, we also add in the conclusion that the competition law needs to be implemented for that. That's what we did. On the other hand, you have different types of potential cooperation for fixed networks and for that, I will refer to guidelines we adopted about article 76 of the code. So, that will be my answer. I can just rely on that.

- Annemarie or Kostas? How to boost investment by tweaking the regulation and making it more attractive?

- Well, I was mostly covered by Michel. On the main tools that BEREC has been working on. To incentivise investments, spectrum policy of course. But also infrastructure sharing. We have published several deliverables in this direction. Just only one thing. We clearly see today a trend of a corner case of infrastructure sharing, so wholesale only infrastructure providers. So, we see fibre companies on the fixed side, we see tower companies on the mobile side. This is a trend today. We all understand that telecom networks, 5G, capital incentives, projects require investments. This is a model that might be a trend for the following years and we should follow up with it as well.

- Thank you Kostas. Next question. Pinar. A newcomer in Brussels, but a veteran of the telecom industry. Now with ECTA.

- Thank you very much. BEREC's 2023 report on the key elements of the functioning of EECC – beyond the assessment on whether the provisions are put into place, they also assess the impact of the objectives post. In other words, will there be an assessment of whether the EECC provisions have increased or decreased the competition? What impact have they had on the end-user prices and quality and retail take-up? Or affordability, in other words?

- Thank you Pinar. So, when will we assess all the goodies promised by the code? You didn't say investment, but I add that. Some people wanted to know I guess. When will we take stock of what has been achieved? First of all, Member States should transpose it, but that's another matter

- Exactly, Philippe. 2 years ago, at the last stakeholder forum, when I was in Kostas' position, we were sure 2022 would be the year we would start the stock taking. Taking inventory of the first experience of putting the code into practice. Unfortunately, as Philippe gave away, the transposition has been delayed in a lot of Member States. Actually, what we saw was, I think, I hope we have been explicit enough in the Work Programme, is that the code asks we take stock in the coming year, there is not a lot of stock to take. Because of the lagging of the transposition. We will share experiences with those countries that have been able to put things into practice. Not everybody is at the same page. We have countries that are a bit earlier and others are quite a bit later. And in these discussions, your points are valid. We always thrive to be a fact-based regulator and to take stock and evaluate on the effectiveness, but as I said, we still have to start the work. So the stock taking that will take place in 2022 will be much more of a qualitative nature, given where we are with our instruments and our legal positions.

- Thank you very much.

- The same applies for the assessment of the guidelines, the way they are implemented. You have to start with the transposition of course.

- Thank you for this reminder. Manuel, raise your hand so the mic comes to you. It is coming from the other side. Manuel, with Vodafone now. It's like football players, sometimes you have to...

- Try again.

- Can you hear me? Great. I had a very high release clause from Telekom. I joined Vodafone last year. We are in several markets, we agree with the digital targets. Our feeling is that there is a lot of focus on Member States - the concept that is en vogue at the moment is the trace and

track – so I think a little bit of pressure on Member States, on where they are, if they are following the measures, etc., what we miss a little bit is the EU toolbox. What the Commission – there are targets, we need to achieve them, we believe it is important to achieve them, but we still don't have a BCRD, we are waiting for the RSPP, or a revised Radio Spectrum Policy Programme. What we miss a little bit are some enablers to motivate to increase the investments. I would like to ask any of you: What is your take on the digital decade policy programme and how can it be improved in the process of finalisation between the 2 institutions?

- Who wants to...?

- I can start if you like. Thank you for your questions. You asked about enablers and of course, for different topics, I think we have been useful to the Member States in helping the development of this EU connectivity toolbox. The Member States could themselves could develop their national digital agendas. That's for sure. On the other hand, it is correct that we also are waiting with a lot of excitement for different initiatives from the Commission. It is a pity the representative of the Commission has left the room. Still, BCRD it is something we have worked on, we gave our contributions. In a nutshell, in the existing BCRD there are different aspects – the dispute resolution mechanisms, that's okay, single point of contact, that's fine. What's not okay, because the aim of this directive is to lower the burden – so the red tape, I would say, and the administrative costs and general costs of the roll out of the networks – for that, there is one important hurdle: the permit procedure. For the permit procedure, not a single NRA is competent. We are really looking for the revised, the proposal to revise this instrument. The same applies for other instruments. We are waiting for the revision of these state aid guidelines, on the hand one. We are waiting – this will be discussed in the next panel – the access recommendation of the Commission. These are important tools as well. Still, we are a little bit left in the dark for the time being. And it was foreseen for this year, the possible reaction, for BEREC, this year, but I don't know if this will still be possible. Depending on the agenda.

- Yes, maybe to add to this, our contribution so far has been, where we understand the goals and the ambitions, of course, it has to be put into practice. This is where difficult dilemmas occur. This is how we approach the contribution to the debate. We understand the ambition, but if you want to put it into practice, remember you have to get your data in order. How do you get your intelligence from the market? How do you know that what you actually want to do is working? That you are pressing the right buttons? And please make sure this is aligned with all the other things, the statistics on indicators we are collecting. I think we have tried to be part of this discussion and implement it in the debate, saying whatever choices you make, make sure in the end it can be put into practice. Not overburdening sectors too much. And be aligned with things that are there and working.

- Thank you Annemarie. Kostas, maybe to bring you in. It is not exactly Manuel's question, but on this seemingly disconnect between these ambitious targets of the compass and sometimes declining revenues, perhaps because of an excessive regulation on intra-EU goals, for example, that's the perception among some stakeholders in the room. During the coffee break, Kostas, you shared with me some ideas about how you see the new business model in the telco value chain could bridge that gap. More investment needed and consumer prices are falling. I was going to say failing, but it is falling.

- Well, this is a very interesting topic, because on one hand, we have the developed networks like fibre, 5G networks, that are capital intensive. We need investments. On the other hand, this definitely affects the retail prices. We need to find the right balance. Incentivise investments, on the one hand, but also we are interested in ensuring the best quality of service at the lowest possible price for the consumers. Some of the policies we have already discussed today, Infrastructure sharing, is something we should support through our policy work at BEREC and we have done it already. We should also consider some developments in the telecoms industry, like software defined networking, a mega trend for telecom industries, as well as network function, virtualisation, that can really reduce costs on the core network side. A combination of these technologies supported by the right policies can reduce the deployment cost for network and really help us to achieve the right balance between providing incentives and securing the best possible retail prices for the consumers.

- Thank you Kostas. Any more questions from the room?

While you think of a last question, I've got one on the forefront of my mind.

In your presentation, Annemarie, the word digital kept coming. Electronic communication as well, but digital kept coming. I would like to ask you, the three Chairs, the role that you see for BEREC in the field of digital. Clearly, Michel you fought for BEREC to play a role on the DMA. Maybe you can tell how successful you have been so far. Beyond that, I am interested how the three of you see BEREC's role in this wider space – beyond the code, beyond electronic communication, is there a role for BEREC? Maybe in sustainability, we heard that as well? But on the DMA first.

- Specifically on the DMA, Philippe. I remember you that in our business statement and strategy we are talking about digital markets. This is something we have integrated even last year. More specifically on the digital platform regulations, this is not a totally new topic for BEREC. We have been working on it for several years. We have produced different reports. Of course, we had to speed up the process, since the consultation of the Commission last year. We responded to that, organised workshops with different people. We adopted last month a report, ex ante regulation of digital platforms. So, yes, it was something I personally am proud of. It was a kind of big

knowledge-building exercise and what we wanted to achieve by the end of the day is not to beg for a role for BEREC, but to make it work. So to ensure that those initiatives are really enforced. And that's where we have issued different elements. We had very good working relation with members of the Parliament, members of the Commission, the Council as well. If you look at the latest state of play, at the Council, you see that different elements we have put forward have been taken into account. I can give a few. We have always said there is a big danger to have this kind of symmetry of information between what we call the gatekeepers, on the one hand, and the other ones. You need like in the electronic communication sector. Basically, we have always referred to the experience, longstanding experience, 20 years in the electronic communication sector. This can be useful.

- Are you being heard?

- I am coming to that.

- I don't doubt the ambition.

- You need to have this kind of well-encompassing dialogue with stakeholders. This is something which is taken on board. The Commission can impose different obligations to different types of core business services. This is something we have also put forward, because there is no one size fits all. What we are missing, of course, is the dispute resolution mechanisms we have in the electronic communication sector. What we are also missing is the tailoring of remedies. There is a role for national, if you look at the Council, the competition network, there is a role for independent national authorities, which was for us the most important: to have this role for national independent authorities and even other types of authorities. In the Parliament as well, we have been heard. Precisely the point person in the Parliament, on the IMCO Committee, Andreas Schwab, and there he developed the idea of high-level advisory boards with digital regulators. And why is it necessary? Just to assist the Commission. The fear is that the Commission alone will not be able to do it. And also to collect complaints from other platforms, from business users, consumers. It is something which has been taken on board. Another point where we draw attention was the interplay between the code and the DMA on interoperability. This is a hot topic at the Parliament.

- Thank you. Quick word? Annemarie? On digital markets?

- Looking forward as Michel said, we have a strategy that has 3 pillars: promoting connectivity, open and sustainable competition on digital markets, and empowering end-users. What we see is, of course, as we are, our values of making sure that we have good end-to-end connectivity that serves the end users - be they consumers, businesses, organisations throughout Europe. And having a system of connectivity, meeting societal needs and doing it in a technology-neutral

manner, you have to take the digital world into account. There is no way you can fulfil our mission without looking at the digital. The strategy has very consciously replaced electronic communications, which are of course still very important roots we are coming from. But we have to take the digital world into account because connectivity is nothing without the digital dimension, so it would be weird to ignore it. It is at the core of what we are trying to achieve.

- It is a great conclusion for the panel. Join me in thanking our panellists.

We will now have a coffee break. I am asking you to be back shortly before 3.30. For the presentation of two studies.

Thank you. See you in 20 minutes!

- Thank you Philippe.

Welcome back. Next on the agenda is a presentation. I would like to invite one of the authors of the study. Juan Pablo Villar from Iclaves. The floor is yours.

Are you muted?

Have you switched on your mic?

- Okay? Thank you Philippe for your introduction. Dear attendants to the forum. It is a pleasure to have the opportunity to present the main results of the findings of the study on post-COVID measures to close the digital divide. In the following slides, I'll present the main conclusions on this complex phenomenon.

The study has been commissioned by BEREC and aimed analyse how the digital divide has evolved in the pandemic. What interesting initiatives have been implemented by BEREC member countries to tackle this issue and what can NRAs do to bridge the digital divide?

We have implemented 4 methodological resources. First is the summary of the most relevant literature on this. After, the analysis presents an overview of the main statistical indicators that explain the digital divide in Europe, taking into account some socio-economic variables. And the literature review has been checked with relevant stakeholders of the digital ecosystem through

interviews. The report includes a summary of these interviews. The cases studies presents interesting programmes and initiatives implemented in some BEREC countries that have contributed to closing the digital divide in these countries, and can be replicated by other countries in Europe.

The first analysis has a focus on how the digital divide is defined. According to the review, there is not a single gap. There are three main levels: digital divide in access, which refers to the lack of connectivity and high-quality digital equipment to connect to the internet – the digital divide in skills, which is related to the lack of abilities and literacy in the technologies – and recently identified divide outcomes, which refers to the benefits obtained from the use of digital technologies.

This study also pays attention to the causes and factors that contribute to increase the divide. These causes have been split into those stemming from the supply side – the lower quality of broadband connections, affordability, usability. And those stemming from the demand side, the users, factors such as the age, gender, level of income, disabilities, the lack of interest and motivation in using the digital technologies and the lack of confidence.

One key finding is that the pandemic has not created new causes for digital divides, but they have become more evident during the crisis as they have prevented specific groups from accessing essential services when there was no other way. Such as online education, e-health services etc. According to the quantitative analysis, most of the factors on the supply side have improved during and after the pandemic. Affordability, coverage and infrastructure. However, relevant divides still persist between rural and urban areas and between people with different levels of income.

The consequences of the digital divides are many and varied and in general have worsened during the pandemic. Some of them refer to a specific sector such as healthcare. It disconnected people and left people without digital skills more exposed to the coronavirus, without the possibility of accessing e-health services. And the health care systems. Based on algorithm systems. Education is another sector directly affected by digital divides, which prevent an equal access and to education and educational resources and can lead to a standstill in the educational process for digital excluded students. The effects of digital divide have also been identified in the increase of socio-economic gaps and social exclusion. Those who were able to telework and those who were not. Digital divide also contributes to widening the financial exclusion in an increasingly cashless economy. And it also prevents access to e-government services and can contribute to increasing cyber fraud or online scams.

The digital review, the quantitative analysis and the expert interviews have allowed to identify the groups most affected by digital divide. Elderly people with economic difficulties, persons with

lower education, persons with disabilities, migrants and persons from minorities. It highlights the relationship between social and digital exclusion. Both types are closely intertwined and fed by each other, creating a vicious cycle. The pandemic has allowed society and institutions, public agencies, NRAs, societal organisations, to be more aware of the issue of the digital divide. In the study, all stakeholders reacted swiftly, implementing other measures to alleviate digital divides during the worse of the pandemic. However, actions in the medium and long term are still needed.

And some of these actions are proposed as recommendations in the study.

The recommendations have been divided between groups. Specific recommendations for NRAs within the realm of their competencies and general recommendations in which NRAs can cooperate with other digital agents. Each recommendation has been described in detail in the study. The main assessment criteria were cost and benefits, how feasible it is, potential effectiveness of implementation, and the risk and future uncertainties each implementation could unleash. For each recommendation, the study describes where it comes from – from the literature review, the interviews – and the expected impacts. And the recommendations presented in the slide are aimed to accelerate the deployment of fast broadband networks in Europe, especially in underserved areas.

Another specific recommendation aims to improve the information provided to users of telecom services through public comparison tools, in order to help the users to take better informed decisions when subscribing to telecom services and to maintain the competitive pressure on prices and the quality of service in the telecom sector. Other specific recommendations propose to research into the motivations for not using the internet, in order to increase the effectiveness of programmes implemented to increase the take-up of digital technologies, to raise awareness of the benefits and safety of digital technologies, mainly between those digitally disadvantaged groups, excluded groups such as elderly people or people living in rural areas. And to promote the inclusion for persons with disabilities through the implementation of specific programs such as social tariffs to access telecom services or to acquire accessible devices through the universal service obligation.

Recommendations promoting the cooperation between NRAs and all digital stakeholders are aimed to leave space for a permanent dialogue to make progress in bridging the divide and to collaborate on the definition and implementation of public support schemes for the deployment of high quality broadband in underserved areas and for the acquisition of digital equipment for persons with economic difficulties. And to identify the disadvantaged groups with problems to access the services and to raise awareness of the measures already implemented by telco providers, such as social tariffs, to help these groups to be connected.

Other general recommendations in which NRAs can cooperate are to encourage and promote accessibility of telco and digital services, and to promote digital skills, collaborating in the skilling of persons without digital skills and students from disadvantaged backgrounds

To conclude the presentation, the study highlights the dual role the pandemic has played in the digital divide. On the one hand, digital transformation has accelerated dramatically during the pandemic. Certainly the digitalisation of many activities and sectors. And on the other hand, specific groups like elderly people, people with disabilities, persons with economic difficulties, have not been able to benefit equally from digital technologies due to pre-existing divides which have worsened during the pandemic.

In the face of such a complex phenomenon, it is important to remember that NRAs have limited powers to deal with these issues. Nevertheless, as independent actors in the digital ecosystem, they can act as promoters of initiatives for dialogue and cooperation with all digital agents in order to tackle the root causes of the digital divide.

Many thanks for your attention. I would like to thank especially BEREC for trusting us to elaborate this study and my colleagues from the business school who have helped a lot in the elaboration of the recommendations and the quantitative analysis. The study has been published on the BEREC website this week. I invite you to download and read it, and we hope it can contribute to closing the digital divide in Europe and allowing all citizens to benefit equally from the digital economy and society. Thank you very much.

[applause]

Any questions from the audience?

While you think of a question. I would like to raise a broad question, Juan Pablo. Digital divide. Once upon a time when we talked about social exclusion with the telecom audience it was pretty clear. People didn't have a phone, couldn't call. It was entirely a telecom problem. When you say digital divide, and I heard Annemarie saying we are not just telecom people, we now have ambition to play a role in the digital, but you know, it is certainly not the telecom community alone that can address all problems. When you look at e-education, which most kids had to go through in the last 2 years, it seems to me the expensive bit is the PC. Not the connection. So, my question to you is, when you did that study, did you ever feel whether the problem of digital exclusion was mainly on the traditional telecom side, or was it mainly on the, well, what shall we call it, the customer premises equipment? People who are excluded, what are they lacking? Is it because they can't afford the connection or are they illiterate or can't afford the devices? While you think of a better question.

- Okay, we have analysed that the connectivity in Europe is not a big issue compared to other divides such as skills and outcomes. By outcomes, we refer to the difference on how people use digital technologies, which is the most recently identified divide and is maybe the most important. If people use digital technologies only for leisure and not for more productive actions. Is there a problem of connectivity in specific areas such as rural areas or very remote areas? In general, according to the statistics we have consulted, there is not a big problem of connectivity. There is more a problem with the access to digital devices, equipment due to its cost for people with economic difficulties. Or accessible devices for persons with disabilities, which are more costly than normal equipment. It is more a problem of equipment than connectivity.

- For disabled people you mean now. Thank you, Juan Pablo. A question? Yes. Henk. Can we have a mic here?

Raise your hand, Henk. So we see where the mic is needed.

- Thank you very much. Henk Mannekens. As you highlighted in your presentation, of course there are multiple reasons for digital divide.

So my question was, do you see in our countries, in our approaching it, - because I can imagine there are of course access telecom-related issues, such as you mentioned, social inclusion, exclusion. Do you see different approaches between the countries? Is there some countries that take an overall approach, to address the digital divide? Or is it all a bit fragmented, area by area?

- There is big difference between European countries when addressing digital divides. Because it has its own problems. Some countries are focused on bridging the digital divide in connectivity. Less countries. Others are more focused on improving the digital skills of the population. There are very different approaches. We have analysed five case studies. And from different parts of Europe: Czech Republic, Hungary, Netherlands, Spain and Sweden. Each country has very diverse digital divides. Some in connectivity, others in skills. And the approaches to solve this digital divide are very varied. Some of them are addressed by the government, in some NGOs and civil society sector have more presence in bridging this divide. There are so many approaches across Europe to close this divide.

- Thank you. Yes?

Paolo. Please the mic on the front. Raise your hand. I know you want it.

- Thank you very much. Thank you, Pablo, for the interesting presentation. I have a question. Apologies if it is out of the scope of the study. When we talk about digital divide, we talk about coverage availability. I wanted to see if you have any comments on the shifting patterns of usage that you may have experienced in COVID – the higher use of video, of added value services – and

whether you have explored the aspect of reliability of existing networks in rural areas, if they coped well with COVID and the change in traffic patterns.

- Yes. We included in the interviews with experts, we included a question about the performance of telecom networks during the pandemic. All of them agreed that it worked perfectly during the pandemic.

I think, yes, we interviewed 23 experts. All of them agreed that the telecom performance was very good during the pandemic. Even taking into account the huge traffic due to the live streaming, teleworking. Yes. We highlighted this good performance in the study.

- Thank you.

More questions? Perhaps, mobile operators in the room didn't spot that point. That is, I wrote it down. Mobile coverage obligation for underserved areas. Can you elaborate? Who told you that? Last time I checked coverage obligation, more or less in every country it is 99 something per cent already that is foreseen in spectrum licenses.

Who dare to ask for more, is my question?

- Well, we discovered that most, some countries have implemented mobile coverage obligations where they allocated a spectrum, and we included a recommendation for those countries that have not included this provision. Because we understand that it is a good approach to accelerate the deployment of fast broadband networks in underserved networks. Because the objective of the digital compass is for 2030 and we have to accelerate.

- You want to go faster? Maybe I should review my notes whether there is a European country that doesn't request 99 per cent coverage. Maybe someone can refresh my memory. Okay. More questions? For Juan Pablo.

1, 2... 3.

And you, Juan Pablo, a final comment before we move to another topic on our agenda?

- Well, I...

- If not, no? 1, 2, 3! Thank you very much, Juan Pablo.

Your report?

- It's on the BEREC website.

- Put there yesterday. Take a look at this extension of mobile coverage obligation. You tell me what you think. Thank you so much.

I am delighted to welcome the panellists for the next panel. What did we decide to do? Are we going to bring everybody on stage? We'll have a presentation by Scott in a minute.

Please, Luc Hendrickx, Director General of ECTA. We were going to have Maarit Palovirta but she called with a small voice this morning. Not a good day for me. So, Paolo Gracia accepted to step in. Thank you for stepping in at short notice.

We have Dan Sjöblom. That's the past of BEREC. Dan, good to have you. Director General of PTS and Chair last year.

And finally, Kamila Kloc – where are you? – who is the Head of Unit of B3 in DG Connect, and all the sway on the matter that we will discuss now, which is the future of both the recommendation on NGA and the recommendation on access and non-discrimination. To pave the way for the panel, the Commission has commissioned a study, which has been carried out by Scott Marcus and my friend Christian in the corner. Scott is taking a short holiday in Wurzburg, in Germany. He can't be with us. He is there. Hello Scott. Great to have you!

So, can we... Not sure whether we will hear Scott's message pre-recorded?

Please? Launch the video.

We have no sound.

Luc is asking me whether Scott is eating to speak in time or not.

[No sound]

So the purpose of this study is clear. We have the code. Member States are painfully transposing it and this calls for an update of these recommendations that are now, what is it, 11?

In that perspective.

- I am live. I am not muted. Hello, hello?

Can people hear me?

- Yes, we can Scott.

- Ah! Okay! Brilliant.

Okay. Let's walk through. Simon, you can put the slides up? Correct?

- Yes, slides are there.

- Very good.

Let me walk through this live. It is a last-minute switch. No problem. I'd like to thank BEREC very much for having made it possible to present in this way.

Just a second.

So, now, if we can flip to the first slide, Simon? And I'm going to walk through. I am going to be talking about a study many of you have seen. It was done on behalf of the European Commission. It has been published several weeks. As Philippe told you, the goal was to provide guidance to the Commission in updating two crucial recommendations. The NGA recommendation and the Non-discrimination and costing recommendation from 2013.

We are evaluating a recommendation in the context of the European Electronic Communication Code, EECC as it is. It was not our task to evaluate the code as you heard in the previous panel. It is not practical to evaluate the code. It is not even translated into all of the Member States. It is a firm starting point for what I'll say. The study benefits from a great deal of research, a lot of desk research, the Commission public consultation, numerous interviews with stakeholders and NRAs, surveys of the NRAs and the market players and in-depth Member State case studies. It benefits from two workshops we conducted. One with the assistance of BEREC for the NRAs and another with market players and academic experts.

As Philippe said, I had the honour of formulating the recommendations supported by legal experts, such as Christian Hocepied, who is there today. And a team of staff from the Lithuanian firm Visionary Analytics.

Let's move to the material. **Slide 2.** A clear point is, it was time to do a review of these recommendations. A lot has changed. The Commission's goals have changed. This is obvious when comparing the code to the previous framework for regulatory communications. There's a shift of emphasis in the code, both as regards the relative weight of innovation versus competition, but also there are changes in the markets. Dramatic changes in some of the national markets. **I can see the slides now. Let's move to slide 3.** In the code itself, there are, among the general objectives, two crucial ones. One for innovation and investment in very high capacity networks and another in competition. In essence, those were already there in the regulatory framework, the first. But the code puts a lot more emphasis on them and shifts the weight. That is an overarching theme that I am going to talk about today. **I am going to be on slide 4 now.** Talking about four main themes. I'll be talking about price regulation and flexibility. I'll talk about non-discrimination. I'll talk about access to civil engineering infrastructure and

touching on the migration from copper to fibre. The slide should be 1 further than what I see on the screen. Slide 4.

It won't be possible to cover all of the recommendations in the study. It is a very dense study. There were 49 distinct recommendations in the study. I'll be skipping the bits on cooperative arrangements and geographic differentiation. Let's move to the largest part. One that gets the most attention. The closely interrelated areas, price regulation and pricing flexibility. I'm on slide 5 now, which is a title slide. And now slide 6. I hope that what you see on the screen follows that. I don't see it on my screen.

Within article 74 of the code, there we go. Within article 74 in the code, it is clear that pricing flexibility is the default option when certain preconditions have been met. That's the logic. If they aren't met then we have classic price controls, as always the case with the regulatory framework. Slide 7, please.

Again, in the code, it is clear the pricing flexibility is the default option. The recommendations have some fairly stringent obligations on how you get there. The code is a bit more flexible and several of our recommendations suggest aligning the recommendation, to succeed the previous ones, more closely with the code. For example, the recommendations speak about the equivalence of input. It is clear that the equivalence of input is the most effective way to get non-discrimination, but what we heard in the study, is that it is not the only way to get effective non-discrimination. We think making the precondition, more explicitly non-discrimination, is entirely appropriate. We talk about a copper anchor. Copper is still a meaningful constraint in some of the Member States, but certainly not in all of them. What the recommendations should be doing here is providing concrete guidance to the NRAs on how to choose the product to ensure a pricing constraint in Member States where it's still meaningful to speak of a pricing constraint. We'll have a meaningful product this way.

The economic replicability test is one of the most complex areas in the entire code and in the recommendations. And also what we found in our interviews and research is that it is one of the areas the NRAs most struggle with, so it lends itself to further guidance. As far as choosing flagship products for the ERT, we think that the successor recommendation should provide more concrete guidance. The NRAs would recognise better guidance here. In cases where the ERT depends on a flagship product that is a bundle product, especially that has a mix of unregulated and regulated elements, that's a very complicated project. This is what we heard from the NRAs. More concrete guidance is needed. And what the NRAs also rightly asked for is that, in cases when there is an unregulated component, the operator should have an obligation to provide the information, to conduct the ERT, even if the component of the bundle involved is itself not regulated. It is still needed to make the ERT possible. So now, over to slide 9 please. Slide 9.

The recommendations are also inconsistent in their approach to scale adjustment and to the assumption of whether an equally efficient competitor versus a recently efficient competitor should be assumed. We think the principles there should be provided. Also general competition principles on how to handle the scale adjustment. It is a complex and difficult area for the NRAs. The issue of long-term discounts, how they're handled in the ERT, we think would also benefit from more attention. In most cases, it will be appropriate to ignore the discount and do the ERT.

As far as the timing, the basic timing, 3 months after the product has been released in service, made available, must be conducted within 4 months, is basically right. BEREC indicated there are cases where they cannot complete in 4 months. The regulators and Commission should probably discuss this among themselves.

A general lengthening of the ERT should be avoided, but a more selective approach could be taken into account.

Now, transparency continues to be necessary for the ERT and this doesn't always seem to be implemented as well as it could. Also, there is one fundamental change that needs to be considered. Historically, prices for wholesale access products needed to be as low as possible to enable retail competition. The character of competition has changed. Many of the Member States, like Ireland and Italy, have wholesale providers that build out their own fibre. For those operators, the wholesale price cannot be too low or else it prejudices their ability to sell. So, it implies more complex constraints, it may imply the need to prohibit geographic discrimination on the SMP operator side. It may have other complications. It needs further guidance.

Moving on to slide 11. So, that was pricing flexibility. Let's move to price regulation now. There are a number of areas for improvement that should be considered. First off, the price band, 8-10 euro, inflation adjusted, appears in the recommendations. We think there is no need for this, its time has come and gone. Secondly, the guidance on SMP civil engineering infrastructure pricing is complex. It is basically right. What it says is, new products should be based on current prices in bottom-up modelling, existing legacy reusable civil engineering infrastructure should be priced based on the regulatory asset base with adjustments for inflation and also notably for depreciation. Fully depreciated legacy CEI shouldn't be charged for. We think it is basically right. The application in the Member States seems not always be what it should be. Clearer guidance here would be quite useful.

A key area in recommendations, in code, and we think also for the successor recommendation, is how to handle what is currently an NGA risk premium, which becomes largely a VHCCN risk premium. You'll recall the idea was that the risk associated with building out NGA is probably higher than with traditional services. Maybe not always, but often. That justifies a higher NGA

premium, which then gets added to the WACC. You see, left is the historic situation and Right is NGA or going forward VHCN.

So, the question is, in our mind, moving onto slide 14, please. So, slide 14, the concern is, are the NGA risk premiums today sufficient to compensate the SMP operators for the risks that they truly incur? There are two areas where, at least in some Member States and under some circumstances, they might not be. One of them has to do with frequent downgrades in the risk premium. The common approach of all NRAs is to frequently reassess these, in some cases even annually. But it may mean the SMP operator doesn't get compensated at the level they would have predicted at the point when they made sunk investments into NGA or VHCN deployment. The focus is really on VHCN. The successor recommendation could acknowledge the permissibility of using some form of smoothing, to make those prices stickier. The same kind of issue the UK was looking at with their "fair bet approach". It was not easy to apply in the form in which the UK described it. We think the smoothing approach deals with the same problem in a more sustainable way. **Moving to slide 15.** Another area where we think risk may not be fully compensated by the risk premium as routinely done by the NRAs is the question of real options. Often when an SMP operator chooses to make an investment in VHCN, they are effectively surrendering an option – almost like a stock option – to wait for more information and thereby reduce the risk. So, a real options approach can establish a value for that option that they are relinquishing and we think it may be necessary to compensate in order to avoid underinvestment in VHCN that would otherwise occur.

Slide 16. Now let's talk about non-discrimination. We are out of the woods with pricing. Non-discrimination occurs not only as a precondition for pricing flexibility, it is also a remedy in its own right. Equivalence of input is a pretty secure way to obtain non-discrimination. But what we heard repeatedly, strongly from ERT regulators, is that it is not the only way to get effective non-discrimination. We think the new recommendation should be clear in saying this, which by the way is consistent with the text in the code. Our belief is that the equivalence of output regime effectively enforced, with good KPIs, SLAs, SLGs, and also good and timely enforcement, can be as good or nearly as good and maybe a more proportionate, maybe proposes a more proportionate level of burden on the SMP operator and on the competitors. EOI also implies a plus for the competitors, we shouldn't forget that. Commercial agreements that enable QoS that is in excess of what the reference offers, we think is not incompatible with this procedure. There are cases where it can make sense. We don't think the recommendation should forbid it. Also, something that was always clear in the recommendations is that SMP operators should not misuse information it gets by selling wholesale products in order to compete at retail level against retail competitive operators. It is in the recommendations, not always enforced. More needs to be done in this area. **We can move to the next slide, slide 18.**

So again, KPIs, SLAs and SLGs play a really important role here. In many cases, rather than having the NRA impose from on high, a multi-stakeholder process, where the SMP operator and competitors have dialogue, perhaps monitored or moderated by the NRA, will often be a better way to identify the levels in which these things should be set. Enforcement is important. The recommendations already say the penalties have to be enough to be dissuasive. It doesn't seem to always be implemented that way. There can be problems with timing. In many cases, there is not sufficient legal certainty that the penalty in the end really will have effect. It can take a long time to get there. Again, we think more being done, especially with the KPIs where the NRAs have more control than they do with the SLGs, we think doing more there would be a good thing. I'm reminded of what the UK Prime Minister Gladstone said more than a hundred years ago: justice delayed is justice denied.

Slide 19. Civil engineering infrastructure. **Slide 20.** Three main mechanisms, as we all know. There's SMPs, civil engineering infrastructure, there's symmetric and there's also the Broadband Cost Reduction Directive, which we're not going to say anything about today – there's hardly anything about it in the report because it is being evaluated through a different work stream.

Next slide, 21. There may be cases where it is appropriate to provide access to civil engineering infrastructure that is not in an SMP product itself. We think NRAs need to look at this. The question of how to get there is harder to say. Articles 72 and 73 of the code provide mechanisms. It may not be so easy to apply those to non-SMP CEI. An alternative would be one that has already been envisioned in the recommendation on relevant markets from 2020, which would be incentive to find a market for physical infrastructure.

The SMP operator should not be allowed to deny access simply because the CEI would be used for something other than FTTP, for instance IMP. One important point, I think, is that in some of the Member States, we see that there are consistent problems with getting CEI renovated or expanded. We think in those cases the NRA enquiring or obliging the SMP operator to identify, certified third parties that can do the renovation or expansion and the process for getting it done. We think it is promising. It has been done in a few of the Member States and we think it needs more attention in the recommendation.

Moving on to the migration from the legacy infrastructure, on slide 22 and slide 23. Almost at the end. So, the Notice period. Shorter than 5 years makes sense. It is in fact rarely implemented among the Member States today. In this report, we suggest 2 years, which makes sense. We also think it is important to distinguish between commercial closure, the point at which no new orders are accepted, versus technical closure, in the point at which the location is actually shut down, which is done for example in France.

Slide 24. We don't think it is the role of the NRA or the Member State government to force the SMP operator to shut down the copper network. We know it's good for that network to be shut down, but we think the commercial operator, the SMP operator, is in a much better sense to judge when and how that should happen. We don't think it should be imposed.

Deregulation on the part of the NRA of legacy prices, once the migration is well under way, we think has merit. An approach piloted in France. It is promising.

Finally, we think much as I said with the KPIs, SLAs and SLGs, a multi-stakeholder process, driven or monitored by the NRA, can make sense in terms of managing migration. It is done in some Member States. It is a promising approach.

That was my last slide. So, with that, thanks to the BEREC staff for working me through. Thank you for your patience going through this very dense material. I thank BEREC and the BEREC Office once again for allowing me to present remotely.

In the next portion, it is for the panellists to say what they think about what the Commission ought to be doing. What we provided is hopefully an objective and neutral view, based on the code as it is, in order to prompt action from the Commission. It is really now for the Commission to decide what to do with what we put forward.

- Thank you Scott.

- Let's ask the panellists.

Thank you very much, Scott.

Let's start with you Luc. Director General of ECTA.

There is a lot to be said.

Go ahead.

- Can you hear me?

Thank you BEREC for the organisation of this panel that puts the stakeholder forum at the very core of its activities – I mean the economic regulation. Thank you for inviting me and for the full organisation of the forum. Many in the room, several in the room remember the difficult delivery of the recommendations in 2013, and particularly the last plenary of 2012 when this was discussed with the Commission. The Commission had genetically modified the embryo to such an extent that not only would the child be much less competitive, but also would have made childbirth impossible, even with the help of forceps. Fortunately, the genetic modification has been seriously mitigated by BEREC. Thank you for that. Unfortunately, not completely, and

today, we have to evaluate what to do with this preadolescent keeping the stigma of these modifications. The temptation for some is great to take back the genetic modification and make him even less competitive.

The time is too short to cover all the points. I'll limit myself to 3 or 4 points and 8 points of substance.

On the form, the first point. I wonder whether it is the Commission that gave the instruction, or whether it is the consultant who misinterpreted the wording "regulatory incentive". Because it seems that the study is so biased in favour of the incumbents, just like the workshop. Similarly, why were the last studies commissioned by ECTA not taken into account by the consultant when the 136 references in the list are full of studies and of documents founded by the incumbents and their clubs.

My second point. Regulatory incentive does not mean "how can we help the incumbent to remonopolise the market?" Nor "how can we deregulate more?" And even less, "does regulatory incentive mean deregulation?" In the same vein, the number of markets in the recommendation on the relevant market is not a KPI. You do not conclude that there is less crime after you decriminalise most crimes. The study should have been done with a holistic approach and starting with recognising the fundamental role of alternative operators as investment engines. However, it doesn't. Competition drives investment. Unfortunately, we do not see how the study outcomes will give better fuel to the investment engine. Even if the recommendations concerned the regulatory treatment of SMP operators, you can still choose to boost the competitiveness of alternative operators and hence give the investment engine better fuel.

The third point on the form. Competition drives investment. It's explained in corporate finance, that the cash flows you should be taking into account when calculating the net present value of a project. With the manner they are quoting ???, they ignore the notion of incremental cash flows, the incidental effect and the opportunity costs when calculating the NPV of a project. Cash flows with the project must be compared to cash flows without the project, as clearly explained by Brealey, Myers and Allen in their book "Principles of Corporate Finance". We can only note they are not part of the references, although seen as the reference in corporate finance. Not taking this into consideration is a major flaw of the study. This also means by closing doors too quickly, you reduce the option and by not putting the competitive seeds at the beginning of the study, it is impossible to have a more competitive harvest.

On the substance, let it be said, many ECTA members exhibit investment rates far above the incumbents. Just to mention a few: Iliad in France, Italy and Poland, Fastweb in Italy, Masmovil in Spain, Eurofiber in Germany, the Netherlands, France and Belgium. With investment rates

around or above 30% year after year. Even, for example, Iliad with 39% in 2009. From 2015 to 2025, Iliad's investment will be in total 25 billion euros. 25 billion euros.

My first point of substance on the risk premium. Compared to 2010 and 2013, the macro-economic situation of the VHCN investment has significantly changed. The uncertainties listed in Annex 1 of the engineer recommendation have been lifted. Fibre deployment activities are more mature. Companies have significantly gained in managerial and operational experience. Skills have been developed. This all over Europe. Most of all, the COVID crisis and the unstoppable trend of digitisation confirm that all expectations in terms of demand are far exceeded. Hence the notion of additional risk premium has lost its relevance.

Additionally, operators having SMP, mainly the incumbents, can reduce their risk and have economic incentive to co-invest without deregulation. The co-investment agreement between Proximus and Eurofiber in Belgium, and Telenet and Fluvius that was announced today, are real paradigm shifts. Furthermore, and then I congratulate the Hungarian NRA, there is no compelling need to introduce special other risks. Industry risks are covered by the beta, which together with the equity risks, cover the systematic risk. The telco beta reflects that investing the maturity of their CAPEX into fibre, and that the related risk is reflected in the market. Fibre investment is a reality – financial markets have integrated that, and stock markets even more.

My second point. Equivalence of input versus output. We do not understand why the study puts so much emphasis on convincing about the equivalence of output. It has demonstrated the inability to prevent discrimination. Lack of proper enforcement and non-discrimination of obligations has led to severe process failure, inferior installation and repair performance for alternative operators, causing several market exits. Several alternative operators have been confronted to the ultimate punishment, meaning market exit. Has any incumbent ever been put out of the market? Not to my knowledge. In a VHCN context, equivalence of input must be the norm.

My third point, the transition from copper to fibre. ECTA supports a quick and voluntary transition under the following condition.

First, clear and transparent processes discussed and agreed with the access taker, including KPIs, SLAs and penalties in case of breach, that allow smooth customer transfer with the appropriate fibre products and the services to put in place the copper-based product.

The second point. The copper-to-fibre transition requires stable wholesale prices and adequate quality of service and wholesale products and processes.

Third, copper switch off – commercial or operational – means for everybody. Even more for the incumbent. If alternative operators cannot use copper anymore, whatever the product or services are, the incumbent should not be allowed to use it either.

Four. price control and non-discrimination are two fundamental and different dimensions.

Five. it's too early to move away from cost-based regulation. Moreover, there is no evidence that the reduction in ex ante regulation would encourage incumbents to invest. I invite everybody to look at the French situation. The investment cycle requires long-term vision of the industry and does not match stock market expectation. Equity investors in telecom stock want still significant short-term cash generation. I invite you to read the post of Thomas Reynaud, the CEO of Iliad, where he explains why they are getting out of the stock market.

Six. An economic replicability test is not a substitute for cost orientation of SMP operators. It is a verification mechanism for the economic part of the non-discrimination obligation. Cost orientation is inherently more appropriate to enabling innovation and protecting users' interests. Economic replicability test is a necessary complement to cost orientation.

Seven. Contrary to what was put on the slide, what is said on article 7. It is not something that is a default position. It is an option. In the English text it says "shall consider". You have to read it in the different languages and you will clearly understand that it is not a default position. It is an option.

Eight. Most of us can certainly remember the time in secondary school when we made a calculation error at the beginning of a maths test. The teacher didn't mark it with a zero, but checked the reasoning, and if it was right, we were likely to pass anyway. Here can we conclude that they passed the test? For us it would be very difficult to justify. However, we still would give some good points on some of the recommendations on access to civil infrastructure.

My final remark is on a call to the Commission. Something we have made. I know that with all the recommendations coming out of the study, democracy, transparency and good governance require a full public consultation on the drafting. Thank you very much. (applause)

Paolo. You can stay in the chair.

Thank you for taking over from Maarit.

- Maarit is sorry for not being able to be here. In this period, we can never be too prudent. It was actually really an effort for her not to be here. I feel like the new kid on the block. Maarit and I agree on the assessment of the study. We would like to thank Mark and the team for this assessment. It is based on a wide assessment and involvement of the stakeholders. Various

members and operators. It is a good starting point to assess the state of the art of where we are now.

We also welcome, of course, the review of the two recommendations. For us it is an opportunity to make sure that we take stock of the situation, we streamline the regulatory environment and match it up with the market dynamics. This is a key point. We do think the revised recommendations should indeed take into account the new market dynamics and needs. Present and for the next decades. For us the next 10 years should be the time horizon for the recommendation. It is essential to see what has worked and what has not worked in the past 10 years. It is more important to take into account what's going to happen, and I would like to put here the European Commission official that was present in one of the recent events a few days ago, that said that the recommendations should be forward looking and accommodating to the dynamics of the market. It is what we should bear in mind. When you talk about the current context, there are a few elements that come into play – very high capacity networks investment hub, forecast 150 billion, coupled with faster technological development and faster technological cycles, which means that it is also coupled with increased data traffic, make all the more pressing a need for permanent investment.

Then also, large-scale fibre roll out by multiple operators with public funding and increased infrastructure-based competition. As we have discussed up to now, ongoing copper fibre switch off and fibre migration. And also, commercial agreements and co-vestment efforts being put into market. Last but not least, the new connectivity toolbox that paved the way for more efficient implementation and a new VCR?. So, this is the context we have to take into account, which means that for the recommendations, we would really need a framework that supports the connectivity cause, so very high capacity networks. And also, that moves away from the conservative approach of service-based competition and looks at investment, infrastructure-based competition and investment.

There are several avenues for this to take place and to be achieved. For us, the cornerstone of the new approach is pricing. From the study, we have seen a lot of emphasis on pricing, and actually, I would like to briefly comment on the effort and product that Mark presented to us, because on pricing, we do believe that the study is not forward looking or future oriented enough. I would like to mention 4 points up for discussion, and feedback of course. One is price flexibility and the need to give a fresh approach and fresh look to the ERT. We do think that some of the recommendations would also lead to stifling pricing flexibility and incentive for investment rather than promoting that. This is the first point. But, having said that, we do also agree with the broader scope of equivalence in line with the code. Second point, some elements that should be more embraced and taken more into account by the study and by the recommendation. Also, the recognition of wholesale collaborative and co-investment models that are on top of what is

foreseen by article 76. These are an interesting signal of the investment commitment in the market and for us they should be taken into account as part of the framework for pricing flexibility.

Equally, in the same vein, another element to be taken into account is the long-term commitment discounts and volume discounts because they are, as such, intrinsically a signal of a longstanding commitment of investment of very high capacity networks. They should be taken into account as a basis for ERT, of course on a non-discriminatory basis. And the last point would be the approach on cost capital. We do think the current legacy cost-based regulation is not fit for new investments. We would encourage everyone to look more interesting and more appealing approach to new investors. These are just 4 of the elements we would like to bring to the table. Because price flexibility is the cornerstone for us. Of investment in using recommendations.

There are of course other key pillars that have been discussed – physical infrastructure, copper fibre migration, non-discrimination. On this, the timeline we would like to use is flexibility, proportionality. Flexibility on physical infrastructure access, and we would encourage NRAs to of course take the framework and use it to model their approaches to the national circumstances. There are also important measures to promote new investment that could be recommended as part of that. For example, an exemption for new infrastructure investment during the first market analysis cycle. And on the copper fibre migration, there again, the decision rests ultimately on the network owner so flexibility and economic viability of the approaches are something we call for, but also we would encourage NRAs to provide for a faster migration rate and a shorter notification period of 1-2 years to encourage the process. And to this extent, we have to actually complement Mark, one of the last recommendations, number 48, that they made. We think is really useful to provide some clarity on the process for migration.

All in all, I would like to pause here. I think there are a lot of elements to be discussed in a short time. We are probably running ahead of time.

Just, we thank again BEREC, Philippe and Mark.

- Scott.

- Scott Marcus. We do look forward to the revision of the recommendations. And keep the dialogue open.

- Thank you. We had the views of ECTA and ETNO. Let's now go to a national regulator.

Dan, what is PTS making of the study?

- There we go.

Thank you for the invitation to come here.

The presentation we got from Scott was in a lot of detail and technical. I won't be going into that level. It will be difficult for me.

I'd say at the higher level, access regulation and investment. Both are very central to BEREC's ambitions of participating and ensuring that we get to close the digital divide, as we heard in the previous presentation, but also for users to have a choice in the market.

My comments here today. You introduced me as PTS. And that's good. BEREC has not adopted a position on the study. So I will basically speak as the national regulator. Maybe some personal thoughts here as well, because we haven't really discussed the study at the national level either. We have neither commissioned the study nor conducted a study, so in a sense it's nice to comment on the work of others. We do agree with what several speakers have said, about this being timely. There have been a lot of changes in the marketplace since the current recommendations were issued. We have a new code, which has introduced new objectives, as was mentioned earlier on, of connectivity and of take-up. This should be reflected in the recommendation.

Some key points. I will come back a couple of times to flexibility. Flexibility is a key point for us as regulators. We should recognise that the market situation is far from the same in all of the Member States. We are in different stages of development. We have come, we have our history, legacy. Things are happening at different speeds. Flexibility is important and that comes to the set of remedies that can be used. We hope the flexibility will not be reduced by the recommendation. Also for non-discrimination, we heard the discussion about the equivalence of input, and output. Also there it is important to maintain flexibility where possible, but to focus really on effective non-discrimination for markets to be able to develop in a good way for users and for closing that digital divide.

I wanted to say a few words about the copper anchor that was mentioned. My country is one where the copper anchor seems to have lost its hold. We believe that the copper market is now a separate product market probably from the fibre market. All over the market. There is interest about finding other anchor products. That might be interesting. Not sure what those other anchor products might be. It might be quite challenging. That is certainly what we think when we look towards the future. The future is not necessarily going to be simpler. We have diminished the number of markets we regulate, but remaining ones may not be necessarily be easy ones for us as we look into the future, but if there is indeed a new anchor product, that might be a good idea.

Non-price-related discrimination is also in the study. This is a very interesting concept. It may well become more prevalent as we see more and more telcos becoming vertically integrated. There might be new opportunities, incentives, temptations. And non-price discrimination is another challenge that is going to be more difficult to act on than price discrimination. It is not so easy to investigate and it's actually an area where our role as ex ante regulators is becoming a little bit more like the competition authorities' role as ex post regulators. To spot the non-priced discrimination, you will find yourself in the ex post scenario. To predict that and have the effective regulation will be tricky.

I won't go on very much longer. I have a couple of points before I finish.

One of them was on cooperative or sharing agreements. I think, Luc mentioned that. I think that is important to take into account. Are they becoming more prevalent in the future? I don't know. Maybe. There are some signs of that maybe. We do have to take into account that we are moving to a 5-year cycle rather than a 3-year cycle, which makes it more important to factor in along the way, or maybe review our regulation when big things happen in the market place such as important sharing agreements or cooperative agreements. On the other hand, we don't want to create regulatory uncertainty, because then I think we would get less of the investment we so much want. Finding a good balance between those two interests is going to be important.

I think the last point I will make is back to what I mentioned about the regulating of our markets, the few remaining ones and it's on the geographic scope of markets. I think this is going to be a key issue for us. We are in the midst of reviewing market 1 in Sweden. We see that if you really look at a situation where either you have one SMP operator that has different kinds of competitive pressure in different areas of your market, or if you have very many or many at least – it depends on which country you are in - operators that have a monopoly on the retail customers in a small area, this is a new set of issues. I think they come very much from what you said about the copper anchor no longer being there, fibre becoming its own market, networks potentially having to be seen as their own markets. I think it is important that we get to terms with how to deal with this in a good way to continue to benefit investments, continue to benefit digital inclusion.

- Excellent point I think. Thank you very much.

I am looking at my watch.

We have time for a few questions. Who would like to ask the first question?

While you think, you sharpen your pencil.

Perhaps, I will pick up a topic that is in Kamila's portfolio, the WACC. I heard different views.

You know, we heard Scott saying, looks as if the risk premium on the top of the legacy for fibre is on the low side. We heard Luc saying, well, maybe it was true 10 years ago. Now it is more the new normal. Where is the risk? I don't know.

And Dan, Sweden being in the lead. You tell us what you think. Whether we deserve...

Luc, can you elaborate more, if I heard you correctly, the absence of risk premium?

Rolling out fibre...

Can we switch on Luc's mic?

Is that a good question, guys?

Think of a better one, okay?

- Can you hear me? Yes?

Okay, thank you Philippe. The WACC is an important topic and even more with the recent comment letter issued on the German case. I will not comment on this one. First of all, in the slides that were presented and the way that Scott presented it, I would strongly disagree with the presentation. By default, they consider that operating new networks would be more expensive than a legacy one. Because at the end, there are huge benefits of migrating from copper to fibre. There are strong benefits out of it, the CO2 consumption is much lower. That's the first point. The cost base, to start, I would totally disagree that you can prima facie say that it's ?? That needs to be analysed. That's the first fundamental point.

Then on the WACC, when we think about the risk premium. I said it in my comments. So, is it credible today to consider that it is an extra risk compared to further investment to deploy fibre, knowing that, as I said, all companies have gained significant experience? There are fibre deployments everywhere. You know what the cost will be, the techniques. You know how the administration will react. You know what your management and deployment team will do. 5 years ago when I was discussing with investors, one of the main risks in companies that started fibre deployment was the manager risks, because they said they didn't know if they would be able to deliver. Today, look at all the companies that deploy fibre. They are professionals. They have the skills. 10 years ago when I was discussing as Chairman of BIPT, the CEO told me, deploying fibre will take years to do it and the skills are not available. Today the skills are there. The demand side. We all say "yeah, but we don't know if people will use fibre", this must be a joke. How can we everywhere communicate from Europe with the big targets, digital and so on and say that's the future and so on, and then say, we don't know if the people will buy it? Come on, look at what the market says. Do you think you can still sell a copper product in Spain? If you

have no choice maybe. Where there is fibre. Your kids would kill you. My son, 16 years old, is a gamer. Every day he asks me “when will we have fibre?” Every day. So, at the end...

- May I play the devil's advocate? I have no dogs in the fight.

- You like to do that.

- We'll come to Sweden in a minute. They love the fibre.

But, is it not that when you look at where Member States stand today, in half of the Member States, telcos have rolled out 100 mBit/sec, using a combination of fibre and fast VDSL. In half of the Member States, the industry is rolled out to satisfy 80% of the population. But then, you look at the take-up, where the consumers, like your son, reach for their wallet and decide to buy the product. Yes, you have Switzerland, Sweden, Spain doing well. Then you have a bunch of countries – some of them rich, not poor countries – not taking. If you allow me, just looking at that graph showing the take-up of the 100 mBit, I wonder whether we can say that there is no commercial risk.

- There are multiple dimensions. Let's look at it. I would like to compare two countries. France. Why France? France is probably the most competitive country in Europe on the retail side. You just have to compare the prices in Belgium with those of France. Many debates in Belgium about it because the French medias are well penetrated in Belgium. There you see that investments are higher year after year. Year after year. For 5-6 years. In 2020, I think, they invested 10.4 billion. More than the year before, more than before. Very competitive. Then look at the opposite. Look at Germany. Where does Germany stand? I could give the example of UK. I will not do it. Because of the Brexit. Also because it is something, well documented in the report, but you cannot generalise or draw any conclusions from open reach. It is a particular case. Look at Germany. Germany: Deutsche Telekom has not invested in fibre. They could have done. What happens? You see alternative operators. New companies. Eurofiber. That begin to invest in fibre. What you see now suddenly is that Deutsche Telekom wakes up. Same in the UK.

So no, taking these countries as an example and saying, yes, the risk was high and so on and saying we need higher prices and so on. Give me a break.

- No, no, we heard you. Thank you. You made your point clearly.

Let's move to Paolo. Do you wish to comment?

Okay.

Dan, would you say. Sweden is... Would you say that, well, is there an extra risk in laying out fibre rather than exploiting new traditional telecom network. Is there a risk? Is it more on the

supply side? The risk of any... Or more on the demand side? The fact that in some countries, consumers are not that eager to buy fibre...

- This could be a session of its own, Philippe. Not sure if we have time.

I can tell you a few facts. We regulate Telia, the ex incumbent, at wholesale level. They have maybe barely 40% market share, and that's the old regulation. We have 170 or so network operators that provide their own network. Most of them, it is market-based roll out, and currently, not price regulated. This means we don't have to regulate the premium of anything, but access works, there is a model with open networks. We can switch between service suppliers, and the future is a little more complex. What will we do moving forward? We are in the middle of investigating that. That's a short summary of where we are.

- Thank you, Dan. I will hand over to you, Kamila. What do you take away from this short debate?

It didn't do justice to the study, nor to the subject itself. What do you take, from the study itself and from this conversation?

Remind us of the process. What is your calendar, the path to the new recommendation?

- Thank you very much. Can you hear me?

Perfect. Thanks a lot. I think, by definition the stakeholders forum is a forum for stakeholders to express their views. What I can say, from the Commission's point of view, is indeed we are reviewing both access recommendations. I don't know if you want me to comment on WACC?

- Please, if you could.

Make a quick decision on this. Much appreciated.

- My intervention is in between the drinks. Just before the drinks.

I will be relatively short. I think, on the important aspects. As you see from the discussion before, it raises a lot of attention and a lot of conscience. Also from Luc and Paolo. They go into opposite directions. Let's put it this way.

What I see, and I would like to thank Scott and Christian, the authors of the study, is that I think they were really trying to do a good job, looking into the application of the recommendations throughout the last decade.

They were also looking into evidence coming from different markets. Each market is a bit different. Evidence is different. And they came with several recommendations, which I think are very much worth looking into.

We had a brief overview of the main elements of the recommendations, of the study. But the study is much, much larger with a lot of interesting evidence to which I would like to refer.

I think they were also trying to take into account the market changes, and importantly, to take into account that the code is now in place. I disagree with some of the comments before. I think we should cooperate on the basis of the code. The fact it is postponed or delayed in some Member States, it is a very unfortunate coincidence. We are not benefitting from what is coming from the code for the incentives for very high capacity networks. That is also our big plea from the Commission, that transposition should be as quickly as possible and as close to the provisions of the code as possible.

For me, the starting position, if I look at the access recommendation for the next 10 years, this is what we are looking at. There are several elements to take into account when we will be issuing it. The first one is, we are in a completely different world than 10 years ago. We have completely different market developments. Dan referred to Sweden with fibre deployment, that is absolutely amazing. Interesting to follow. We had very interesting discussions with our colleagues from Denmark, looking at their market with the fibre take-up and fibre deployment. This is unprecedented. Not every market is the same. There are so many differences in Europe. We need to take them into account when writing the recommendations.

But the starting point, especially that we are looking into forward-looking approaches, not where we are standing now but needed for the next 10 years, is to guide the regulators on how to apply access remedies to the market. It needs to be based on the code provisions. The starting point is the code right now. It is the starting point. We have to see how the code provisions will be implemented.

I think this is the most important and I think something that nobody questions in the room – it was questioned neither by Luc or Paolo and for sure not by Dan – is that we simply need to change the recommendations. The recommendations adopted in 2010 and 2013 are not up to the different markets, the current situation. And they are not up to the provisions of the code. They are not up to the regulatory framework and will not sustain the next 10 years. It is a super difficult exercise. You see it on the basis of this discussion. There are diverse views. There are different markets, different market situations we have to take into account. A recommendation from the Commission should give guidance that can be more universally used, reflecting the common ground and be able to provide guidelines that could be useful for the market stability, the regulatory stability, but also for the work of the NRAs.

As I said, I agree fully with Scott that the starting point, and many of you before, should be the code. We need to really look forward. And to look forward, there are several things to take into account. First of all, the way you are regulating the market. First look into the problem of the

retail level. How can this problem be remedied? I see from the practice, much more focus by regulators on what already Dan mentioned, both the contact market definition and the geographic market definition. It is interesting we are meeting here, Dan, because I started looking into competition law provisions with you under your direction, and I see we are now back to the same. We really need to base our assessment on very proper competition analysis. With the definitions. Dan mentioned the differences between copper and fibre product markets currently seen in the Swedish context, and geographic market analysis. We are going much more deeper into the geographic market analysis of local or regional markets.

And finally, the access recommendation is based on the provision we are talking about the SMP operators. This is a starting point of view. The way until the access regulation can be imposed, is quite long. We have several aspects that need to be taken into account in very sophisticated analyses that are done currently by regulators and we see.

Starting from the SMP regulation, there are several other aspects we are also looking into. When we are reviewing the recommendations, we are looking into what is happening with the Broadband Cost Reduction Directive, working closely with my colleagues from the policy unit that are currently reviewing the BCRD. We want to make sure – now talking about the big timeline – that both reviews are meeting each other in terms of the timeline. The timeline. I could say that it very much depends on the colleagues in this room. It is the same team that is reviewing the different notifications coming from the national authorities. Currently it is a high season, a big wave of notifications coming to us. We need room for reflection and internal discussions. Not to disincentivise anyone in this room not to notify us or incentivise to notify more. We have to take it into account, not only because of the amount of work, but also because of what is currently happening on the market and how different regulatory approaches are already showing how regulation might look in the future. What is important to mention is that the study by Visionary Analytics is a very important element for our assessment, but we are also looking into the results of the public consultation that we did. And many of you participated. We are looking into regulatory practice. So we are very much looking into different decisions that were analysed by us and prepared by regulators within the last 10-year timeframe and in particular now, because this is a big changing point.

In terms of timeline, we are planning to ask for BEREC's opinion in quarter 1 of next year. This will come back to regulators. We are open to discussions. We make a new plea for transparency, we always respect the transparency when we consult with BEREC, we always publish it for information purposes, for other comments. And as Luc knows very well, our colleagues at ETNO too, our door for discussions is very much open. We might have, in fact, quite a few meetings with colleagues from ETNO and ECTA too.

That's my take. The recommendation will be most likely issued by half way through next year, depending on the work done and the BEREC opinion. That's our timing. The focus would be, as I said, the starting point will be the code. We will look into all interesting elements that are recognised by the code that are happening on the markets, which is the issues mentioned by colleagues from ETNO on commercial agreements, co-investments, on all initiatives on the market. That needs to be recognised in the context of the recommendation. We should look into these developments when we are proposing, specifically access recommendation.

Then, the second big topic would be indeed price flexibility. Under which circumstances this should be recommended. Very important if no price flexibility, how the pricing of fibre should be done, on what it should be based. That's a very important topic that gets a lot of attention. Civil engineering, very important chapter for us, because this is, under the code, the main access remedy recommended for NRAs to look in the first place when they think of regulation. And there are a lot of very interesting questions, for example about how to price the access to civil engineering, depending if we are talking about ?? that are already in place or the new built ??, how to take into account depreciation. This is very important. Migration would be super important for us to cover in this recommendation. And something that was mentioned by Dan, geographic segmentation of the remedies. We put a lot of emphasis on them when we were discussing it the relevant market recommendation, when we look at the geographic market dimension. Here it would be very much taken into account in the proposed recommendation. That's a bit, very quick overview. Many, many topics, very complex. And we are looking forward to having a discussion with all of you.

- Thank you very much, Kamila. Thank you all. Please join me in thanking our panellists.

I am sorry about the timekeeping. I would like to invite Annemarie. Thank you very much, Luc. To join me on stage for a few closing remarks.

- As you already said, Philippe, regulators are sometimes funny people. The fact that we really relish content-rich discussions like we just had.

Thank you so much for attending this stakeholder forum. Thank you on behalf of BEREC for joining us in two stakeholder forums in one year. One digital and today, finally, physical. Let me just mention and express my gratitude to the BEREC Office for making this possible in physical form. And my master of ceremony who thought of this programme and invited all these guests. I am looking forward to sharing a drink with you somewhere outside. See you again somewhere next year, I'm looking forward to it. I think we have our work cut out for us. There's a lot of work to do and it will be fun, I assure you. I look forward to meeting you in doing that.

Thank you so much!

(applause)