Body of European Regulators for Electronic Communications



10th BEREC Stakeholder Forum

23 March 2022

DoubleTree by Hilton Brussels City, Brussels

#BERECforum

Transcription of the event



Could you please take your seat? Michel, you lead by example. Aurelie, take a seat. Christian. Thank you. We are going to make a start in one minute.

Good afternoon, everyone. My name is Philippe Defraigne and I'll be your master of ceremony for this afternoon. I heard you had a great meeting this morning. Good input for 2023. I would like first to talk to people in the room. Then I'll talk to you sitting at home or in the offices. People in the room, please take out your phone. I want to see phones. Select the camera. And point to the QR code on the table. Very important that you do that. Because this is just a test. Because this afternoon, we will ask you important questions. People at home it is easier - you look at the right side of the screen and it is there. While you do that, I'll go quickly through the programme. We'll first have Kostas Masselos, BEREC Chair 2023, talking about the outline of the work programme and the process that will lead to the option of the programme at end of the year. Then we'll have a Q&A with Kostas and Annemarie Sipkes, the standing BEREC Chair, so get your questions ready. I am not going to ask the questions, that's your job. After that, we'll have Roberto Viola to discuss the digital decade. He will keep it short. The onus is on you to ask the questions. Then a session on AI. With vice president Eva Kaili from the parliament. Then you'll have a well-deserved coffee break. Then we'll continue with a fascinating panel on DMA. Then sustainability with Ilsa from WIK. And a wrap up by Kostas. And then your well-deserved cocktail.

Among the things I need to tell you, is that I hope you'll walk away this evening with new ideas, food for thought. But also more tangible goods. If you open the white box, you will find stroopwafels from the Netherlands, which I understand are made of caramel and other good stuff. If you are gluten free, I suggest you go for the Greek candy, which is a mix of sesame seeds and other good stuff. There is also a nice metaphor for our debate, a 3D puzzle. Try it. It is good to play it. I didn't manage to put it back. But Ilsa from BEREC knows how to do it, so if you catch her she can explain it to you.

I hope I am not forgetting anything fundamental. Let's look at the results of the Slido. No? Not on screen? Nobody has answered or what?

Where do you come from? Belgium. So everybody is from Belgium here? Ah, it's coming. Germany, Portugal, France. Munich. So Munich is a country! I always knew there was something about Bavaria. Scotland. That is a more serious one. I'll let you discover. While we complete, Romania. The BEREC office. You would expect a few people from Riga with us today. I'll let you discover the rest of the participants. With further ado, I will introduce Kostas Masselos, BEREC chair 2023. The BEREC Chair always organises the forum the previous year. And the EETT chairman.

Kostas, ladies and gentlemen. (applause)

Kostas Masselos:

Thank you, Philippe, for the thorough introduction. And for making our participants familiar with how we will interact. Good afternoon. Welcome to BEREC Stakeholder Forum 2022. It is great to be among you today. And many thanks for your interest in the stakeholder forum. For BEREC, the stakeholder forum is a key event. Because it's strongly linked to a launch of a call for input for the work programme of next year. It is a great opportunity to deepen the dialogue with our stakeholders. We count a lot on this dialogue because we expect to receive input, ideas, proposals, food for thought in order to set up a work programme that is ambitious, relevant and well balanced for next year.

It is really nice that we manage to have this event today. This forum today, physically in Brussels. We of course support remote participation. But we have been working a lot with digital media the last two years to cope with the pandemic and the challenges we faced, to make sure smooth collaboration continues and the work is done. When we came back in October 2021 for the stakeholder forum in this same room, we realised how valuable it is to have this close contact and exchange and discussions. So it is really great that we managed to do this forum physically again today. Back to the main topic – work programme 2023 of BEREC. The work has already started and the outline of the work programme has been adopted by the board of regulators. In the next slides I'll explain the process and the different steps we will use in order to reach the final adoption of the work programme in December. And also explain what we expect from our stakeholders – from you.

The main input for designing the work programme 2023 is of course the BEREC strategy. Back in 2021, we adopted a strategy for the period 2021-2025. And this strategy includes three main strategic priorities. First, to promote full connectivity; second, to support sustainable and open digital markets; and third, the empowerment of end users. These are the three directions across which our work programme will be structured.

With regards to the first priority, promoting full connectivity, BEREC has to contribute to the speed up of the deployment of fibre networks, of 5G and support the European digital decade 2030, with the objective of reaching 1 Gbit/sec for each European household by 2030, and 100% population coverage with 5G by 2030.

Second priority, supporting sustainable and open digital markets. BEREC prioritises work that relates to the good functioning of digital markets. The digital economy brings both opportunities and challenges. We want to contribute to ensure the relevant regulatory framework integrates the required economic, legal and user protection perspectives.

And then, the third priority of empowering the end users. In a fast-evolving eco system, digital innovation and competition among digital service providers has improved consumer empowerment. However, there is still an important role for regulators to play in ensuring consumer transparency and digital skills.

Our work programme for 2023, as also happened in previous years, will be structured along four different elements. First element: mandatory projects. Projects stemming from the regulatory framework, from legislation. For example, the European Electronic Communication Code calls for, in certain cases, opinion and guidelines from BEREC. We will have eight such projects in work programme 2023. Second element: carry-over projects. We have projects started in 2022 that will continue in 2023. We will have eight such projects in work programme 2023. Third: projects that contribute to the work of our members in terms of quality and efficiency. These are projects we expect to undertake to contribute to the harmonisation of regulations in Europe and to the quality of work. We expect to have four such projects in work programme 2023. For all these projects we can consider different types of work: reports, workshops, studies, depending on the topic.

Then there is the fourth element of the work programme, which I call future work. Or maybe additional projects. But, in my opinion in the design of the work programme this is maybe the most important part. Because this is quite open. So, we can consider different proposals in any direction, of course under the constraint that it is in line with the strategic priorities. We can allocate, as in previous years, up to 30% of resources for these types of projects. But if we want to address future challenges, this is the part of the work programme we can use to prioritise what we want to address, looking at the future. The telecoms sector continues to make progress in augmenting network capacity. With additional wired and wireless deployments to meet the constant demand for higher speed networks. We see an emerging set of issues, presented by a regulatory, technological and competitive environment that may influence the sector's progress in the following years. At the same time, we see information and communication technologies converging more and more. And the lines between the I and the C of ICT blurring more and more. Our role as regulators is to identify and timely address relevant challenges – future work projects; the fourth element will cover this direction.

Now, with regards to the process of receiving your input. We expect to have your input by email, by 15th April. If you want to help us, please submit your contribution in a 4-point format you can see on the slide. When you send your contribution, make sure you include the title, the strategic priority addressed, a short description and of course your contact details. This would help us quite a lot to process your input.

Our main message to you while expecting your input: be innovative and look at the future.

Now, the next steps, with regards to the work programme 2023 preparations.

We will collect your input by 15th April and we will start processing and analysing them. At the same time, we will do the same for the inputs we will receive from BEREC members and from BEREC experts of course.

The aim is to prepare a draft work programme that will be adopted for consultation at the beginning of October.

This is going to be another chance for our stakeholders to give our input in a more mature phase of the work programme. Then we will receive again inputs, analyse and prepare the final version of the work programme to be adopted in December 2022 and start working on it. I would like to repeat that for us, our stakeholders play a critical role in saving a high-quality programme. And we look forward to receiving your ideas and proposals and being in a kind of continuous interaction towards the final adoption of the work programme.

I think that's all from me at this stage. Thank you so much for your attention. And now, I would like to invite BEREC's chairwoman 2022, Annemarie Sipkes of ACM, the data regulator, and Philippe, our moderator, on stage for the Q&A part of this session, which is in my opinion the most interesting one and I am looking forward to it. Thank you. (applause)

Annemarie Sipkes: Thank you.

Philippe - This is the part where you do the heavy lifting. I want to see hands in the air. And people asking. I can even see you, actually. Who wants to break the ice and ask the first question

- Thank you very much. Good afternoon. Bridget Cosgrave, I am here in my capacity as non-executive director of Sinch, the Swedish global customer engagement platform. My question for the existing chairman, and for the incoming chairwoman, is how will the BEREC work programme for 2023 take into consideration the new world order in which we are as a result of the Ukraine-Russian war?

Annemarie: Is it OK if I first reflect on Ukraine. Thank you for that question. I am also with Kostas happy and excited to be together. But it is good to mention the world outside and the situation and war in Ukraine.

I can tell you at present we have of course seen huge steps towards action by the operators to make sure that we restore connectivity with Ukraine. And we have from our BEREC side been involved in reaching out to both our Ukrainian partner and the CEC, with whom we already had intensive working relations with the Commission, but also with the operator associations. I think that as a telecoms community we are really rising to the occasion in helping roaming. And we

are preparing an analysis to make sure we help and support to the people who had to flee Ukraine, to make sure they can reach out to their loved ones. That's just to recognise the important role we can play. And thinking all of you in this room who have been with us in coordinating and discussing. Because of course the situation is really horrific. I didn't expect to be a witness to these events. But as I said, I am happy to be part of a connectivity community that helps do what they can to restore communications between people, because that is vital, also in times of war. Regarding the work programme, I'll now pass to Kostas

Kostas: To add on this. As I said, so far, we have the outline of the work programme 2023. With regards to mandatory carry-over projects and quality-related projects, we have already identified the projects for work programme 2023, but we have the 30% future work projects that is still open.

And there, depending on the situation, we will evaluate, we will see whether we need to add extra work related also to this situation with Ukraine.

Philippe: Thank you Kostas and Annemarie. Who wants to be next?

Otherwise I ask about zero rating. So you choose. Don't be shy.

Also I could designate speakers. Luc Hindryckx.

Thank you, Luc.

- I am Luc Hindryckx, director general of ECTA. Thank you very much for organising this stakeholder forum. And thank you for the morning session. Because the morning session is about the core activities of what defines BEREC's reason to exist. That was quite very important. We also understood from the discussion this morning that there are important topics that will be addressed in the work programme this and next year. For example, the workstreams on the regulatory treatment of business services, the study on business services and all those kinds of things. We will also have the opinion on the review of the access recommendation. The copper switch off becomes the most relevant topic as we really enter into the real substance. All those subjects are subjects we cannot discuss in a few minutes, they necessitate grand reflection and profound debate with the stakeholders. My question to BEREC is: in which forum will we organise those kinds of discussions? To make sure we look forward. And the second point I would like to mention is that the list of relevant markets is not a KPI, as some would like to present it. It's not because we come from 80 markets to two markets, that's not a sign that the regulatory framework has worked well, because we do not conclude that there are no crimes when decriminalising in the law.

We also really invite, when you look at the workstream, BEREC ought to look at markets that are not in the list anymore. The second question I have on that is, when there would be phase 2 cases of what we recently had, could BEREC avoid that we arrive at a phase 2 where there is in fact a BEREC opinion that agrees or disagrees with the Commission and disagrees with the regulator. And can BEREC not work upstream to make sure that we create, at the very beginning, results where the regulators notifies, he already knows that his opinion, his analysis is shared by BEREC?

Philippe: So, will there be a mini forum on specific issues? Two markets: does it mean you have done your job, regulators? And how can we improve market analysis? I think these are three questions. Who wants to answer?

Annemarie: Maybe to start, first, there is a sound tradition of public consultations.

But that is often, as Kostas also mentioned, that is often depending on the topic. Depending on the phase of the analysis. The expert working groups often organise separate sessions, open workshops, they have a whole set of instruments depending on the topic at hand. To make sure that we continue the involvement with stakeholders. That is this year and next year as well. It depends very much on the topic and also on what is practically feasible and physically possible, to make sure we have that interaction. We are still committed to doing that. On the last part, I think BEREC, the way we work together in BEREC, is we try to reach a coherent system of regulation where we all work under the same electronic communications code, to make sure we all contribute to the workings of the European single market. Having said that, we all work as separate national markets. With different starting points. Be it on geography, the topology of the networks, and the market situation.

And in that respect the rules of the game are simple. An NRA assesses its own market and it uses the code and the guidelines, practices and the measurements that we have developed. In addition to this we have the working groups and we have the reach out and internal dialogue to help each other, to learn and to develop best practices. All that collective action, explicit or implicit is offered and used by an NRA, which assesses its own market and gets into a discussion with the Commission. So yes, we are working upstream. Sometimes there is a difference of opinion between an NRA and the Commission. That's healthy, and sometimes that results in a phase 2. I personally don't see it as a flaw in the system but as a logical next step. That we as BEREC not only upstream but also along the way can give an opinion.

Kostas: With regards to discussing the core issues of our work. Those may be already discussed this morning. Of course, we cannot cover the whole, all topics in adequate detail in a single day event. But as I said in my presentation, we are always open to interaction with our stakeholders at any point. So if we feel, if you feel, we should discuss certain points, certain issues in more

detail, we can always consider organising, for example, a special workshop to discuss or have a special meeting to discuss a topic. We cannot cover everything in a single day. What we tried to do today was to have more detailed discussion on core topics this morning in the meet and greet sessions, and have some more forward-looking future issues, discussion this afternoon in the forum itself. But of course we cannot cover everything in a single day event. But we are always open and committed to interaction with our stakeholders.

Philippe: Thank you. Next question please.

Yes. Aurelie from Orange. You have a mic? Could we bring a mic to Aurelie?

- Thank you for your presentation and for this forum, which is very interesting, including this morning's session with the BEREC chair in the working group. I saw on your slide that there was an item for next year on the WAC methodology, which is a very important parameter for regulated products. Could you tell us more on what you intend to do? It is a review of the methodology? Is it a review to better take into account the current inflation rate that is impacting the outcome of the methodology? Thank you.

Kostas: I believe this is a carry-over project of this year or a mandatory one for next year. It will require preparation at working group level, exactly, to see what is going to be addressed in this context for next year. So, I think I cannot give further details for this one at this stage.

Philippe: I think she's still in the room. Thank you for the question. Aurelie. Thank you, Kostas.

In the corridors I met people with questions on sustainability. Ah, Anton from Deutsche Telekom.

- Indeed, we are looking forward to the dedicated session on sustainability today in the afternoon. It is becoming increasingly clear that from a standalone topic that's slowly but steadily migrating towards becoming a component part of the core regulatory agenda. Access questions, symmetric access, SMP and so on. Nevertheless, we have a good impression of the draft report. At least that's how we read it at the moment. It is still talking or indicating more carrots than sticks. In terms of how the sustainability will be promoted. More encouraging, motivating and so on, rather than introducing, constraining and so on. My question, from your internal discussions to the extent you feel it is possible to share within this forum: what is your feeling even mid-term, is that that could likely stay? That you'll see more encouragement, best practices, rather than some sort of hard intervention? Or would it gradually shift towards more remedies of some sort?

Annemarie: Is telecoms asking for imposing sticks towards sustainability? I would be happy to take that suggestion on board. I think you're right, this is a preliminary discussion. We are having a debate who to answer. Sustainability is close to our heart on both sides. But as you

said, this is a first study presented today and the work is very much ongoing. We are very aware we are at the beginning of a learning curve. Do you want to add?

Kostas: Exactly. Today we present the results of the first actions of BEREC towards sustainability, we will present our report, our study. And we have also a relevant report. So this is a starting point. For us it is early to say whether we go for an enforcement, oriented approach or for an incentives approach. We believe sustainability is part of electronic communication. It is something that is quite relevant for BEREC, the electronic communications regulators. So we will keep our work towards this and maybe we will identify a right approach in the future.

But we know of course, ICT sectors' contribution to sustainability, CO2 emissions and also energy dissipation is important. So it is quite relevant and it will be ongoing, continuous work for BEREC.

Philippe: Thank you Kostas. Who wants to be next? There are three minutes left and Roberto will be there. So it's now or never. It's alright, you have time, but do it now!

Yes? There is a hand. Okay, yes. Henk, go ahead.

- Good afternoon. Henk Mannekes. The Commission has a big programme for cross border corridors and connectivity, which are international challenges. And my question is to what extent, how will BEREC be involved in possibly facilitating the deployment of these services? In case of cross border problems?

Annemarie: I think the corridors are part and parcel of the Commission's work promoting the rollout of high-capacity networks, as I understand. But, as Philippe said, Roberto will be with us in a minute. So can ask him yourself. And also part on the state aid and recovery funds that are being distributed to the Member States. And sometimes you would have to make sure you have the corridors, multiple countries working together to ensure such a corridor is created. What we at BEREC can do is, we envisage to have a role in the mapping when it comes to the state aid guidelines. We of course, a lot of NRAs have within their remit the spectrum assignment, spectrum distribution. And sometimes coupled with that coverage obligations they monitor and enforce. So what is necessary here is, at the national level and sometimes at multinational level this is all coordinated. And this is also why we as BEREC said in our position, our opinion on the state aid guidelines, that it is very important the NRA has a role in all the national roll out projects. To make sure all these ambitions are aligned. We do understand the implications on corridors. And it is important that the incentivising of investments that is needed is aligned with our regulatory approach. So this is how we try to help to make sure all these programmes are working towards the same direction, taking into account the market dynamics.

Philippe: Thank you.

Kostas: Just to add on this. We all know the projects by the European Commission on 5G corridors. And there are, I would say, two main issues: spectrum availability across the countries that will be connected through these cross-border corridors. Plus a regulatory framework to allow fast roll out of the network has to do with base station licensing etc. So, these are issues that BEREC has also been looking at in the past. So, from that point of view, many issues, many problems concerning these cross-border corridors have already been addressed by our studies and work in the previous years.

Philippe: Thank you. That will be the final word for this Q&A. Thank you very much. Annemarie and Kostas. (applause)

I'm delighted to introduce Roberto Viola, whom you know very well. Director general of DG CNECT, who will talk about the digital decade programme. Thank you for being with us.

Roberto: I hope you can see and hear me well. It is a pleasure to be with you, albeit virtually in the stakeholder forum. You were so kind to invite me in the past and repeat the invitation, so I draw from this that I'm a welcome speaker. The first thing I would like to do is to of course thank BEREC for the invitation. Thank Annemarie, Kostas and the BEREC members, for the initiative which I think is very important with the stakeholders. But also thank BEREC and the telecoms operators which are represented in the room for their engagement in this very difficult situation, resulting from the invasion of the Ukraine.

We have seen what it means in terms of the tragedy. And the commitment of telecom operators, of BEREC, to alleviate, to keep networks running, to alleviate many people suffering, at least to have the possibility to be connected with their loved ones. It is really appreciated. And we will really continue this effort together, to help the people of Ukraine and whatever you can do, it will be highly appreciated by everyone.

Today, I am going to take you a little bit on a helicopter view of digital policies in Europe.

So not just about communication, telecommunication and communication services. There will be plenty of discussions at the Forum. Questions and answers, many questions and also details. But I'd like to now, to invite you to be on board with me on this plane that flies above Europe and sees what's going to happen in the next 10 years. The first thing I must say is that we used to start every speech in the last few years with 'the pandemic has changed everything'. We thought this was a kind of unprecedented event that changed our lives. And now we have another one. So just to say, we have in front of us a future that needs to be carefully evaluated. What are the futures, what are the things that will happen? In any case it comes to the point that when it comes to our future, very much depends on society

which builds on connectivity, on exchange of data. And data for good. For keeping our citizens safer. To have the possibility to be free when we express what we want to say. And respect human beings. And in this, of course, also a greener and a society that is prosperous. It is important to repeat this also in these difficult times. These difficult times should not also obfuscate what is the objective of this path, which is said to be a 10-year path. We are already at the second year of the path. That should get Europe in a place which we think is better than where we started. Better in many respects. Of course, the acceleration of COVID is a decisive factor. So the digital programme is, in a way, the consequence of what we see in the pandemic. And also a unique feature which you don't find in previous policy programmes about digital. The digital agenda. And then, the digital single market. The digital decade is completely different. And there is one essential element that makes it different: this time, Europe walks the talk. We are talking about an investment in digital from the public side which is unprecedented.

Digital programmes in the recovery plan amount to nearly 30% of the spending in the programme. Which is really a very significant amount. An unprecedented amount of public spending in digital programmes. So, that makes, in all what we say committing to a digital policy programme very real and very concrete. When it comes to national investment, from the European budget, prior investment. Then we talk of an investment which exceeds trillions of euros. Which of course is very much needed. Because we need to grow our digital society in many different respects. And that's the other element that is very important of the digital policy programme. That's why I invited you to take an helicopter view of the digital policies. We would like to cover the core components of what the society and economy needs for digital advancement: a better skilled population, so basic digital skills, but also specialists. More than ever we need specialists everywhere in artificial intelligence, in cyber security, in networks. And data specialists. Not only engineers. We also need doctors that can use big data and Al. This transformation needs a workforce. It's a priority and is one of the fundamental elements of the policy programme. We need better infrastructure. For us, there was no willingness to micromanage this point. We could have imagined, as in the past, very sophisticated targets. We prefer to have clear-cut targets. For us, it is 100% of coverage of 5G. For all citizens the possibility to use 5G or more if possible. And fibre, or the equivalent of fibre, everywhere. No more, no less.. And this to be absolutely clear cut about the objective. Because of course this objective has many consequences in the way we set milestones in the recovery programmes of the Member States. In the way we modernise our state aid. And in the way we want to land Europe, in terms of a modern and interconnected infrastructure. The other element is to invest in the computing continuum. The computing continuum starts with the fact that [indecipherable], so telecoms networks. But then, more and more with the software-defined network, you cannot distinguish. Then you get to the cloud, and then you get to the processing. That's for us the continuum. And we want to invest in very advanced processing, we want to invest in very advanced factories to process the most advanced microchips. The work that has

been announced four weeks ago. We want to make sure Europe is at the forefront on edge computing and cloud. So that is for us the technical infrastructure – connectivity has to be there. And the businesses have to transform. To transform to become more savvy in using digital, and when they use digital. For traditional SME's, they need to start using digital tools. And then, last but not least, healthcare, public administration. This needs also to be digitised. It is probably one of the most important elements of the recovery programmes in every Member State. We saw what it means to have a digital COVID certificate. That kept us moving, it kept businesses open. It was a fundamental digital tool to keep society going. So if someone wanted proof of how digital impacts everything else, you have the proof in your pocket.

This is the objective. So, deliberately we have chosen very simple targets, targets that can be understood. And targets that frankly can be attained as well. And also, we devoted significant amount of money public money, European money, Member States' money to get there. Which will hopefully will attract investments. It is already the case. After the announcement of the Chips Act, the global player announced investments in Europe. So I think it's also working. In the way that we would like to see things.

The policy programme has another characteristic, which is the political responsibility for the programme. In the past digital decade was monitored by the Commission [indecipherable], the digital single market. Now, we move with the digital policy programme into shared responsibility with the Member States. We want to continue measuring the progress to the index, to which BEREC contributes and we are grateful for this. Into monitoring these high-level objectives into national trajectories. So how each Member State could get there. And the political responsibility to get there. And also, we want a collective mechanism to assess the deviation from the trajectories each Member State will have set. Because of course one size fits all doesn't work. There are some more advanced Member States on connectivity and some less advanced, so the trajectories are different. That is set by the Member States. But then, if the Member State deviates of what has been a kind of self-imposed trajectory. Something promised to the citizens. Then, collectively there will a mechanism of intervention. By a recommendation, the Member State would be asked to take measures, in order to be aligned with the programme. The programme of course is more of a collective political commitment, than a regulatory commitment, if you compare it with normal regulatory tools. But it is a very very important step into collective responsibility. Vis a vis the society of citizens. Too many times in the past, politicians have promised to do things in digital and then maybe there were other elected politicians. And things were not done. And now we have a track for 10 years and the record stays. Promises, where we are getting and the objectives. Also, some of these objectives can only be obtained if we work together, these are so-called multi country projects. I heard someone mentioning the corridors, the 5G connected corridors. Those projects, they need specific governance. They need the Member States, the companies, to invest together and the

leadership and of course the responsibility for it. We have proposed a special construction, called [indecipherable] a consortia to realise digital construction. Take, for example, the public blockchain. To run public services on the blockchain. If you want public services to be certified and work on a blockchain, the blockchain should be a public infrastructure. That can be done through a multi-country project with the governance that can rest on it.

And then, to conclude, all of this should have a tipping point. Which is what we want to be as Europeans, as citizen when we look at digital. Which are the digital principles? Even more today, when we see this tragedy, when we see democracy really being attacked. In this case, it is even more important that we re-affirm that all we do has a very integrated technical nature, has a complexity in terms of policy and politics, but really leads to the European vision, a human-centred vision. Where citizens are the centre of the project and their freedom of choice must be respected. Even more vibrantly, in a very forceful way we need to affirm those principles. That's why we make this proposal as a very high priority, as the governing principle of the digital decade. One of those principles is of course that the digital safety of the citizens must be guaranteed. Many thanks for your attention.

(applause)

Philippe: Thank you very much Roberto.

Now, it is time for your questions to Roberto. Who wants to start?

While you think of a question, I don't see any – we have only a few minutes. If you wait too much. I would like to give the floor to other people.

Perhaps a question, Roberto, which I'd like to ask.

The first time I heard about digital autonomy is when you came to speak to us for the 10th anniversary of BEREC in Riga. And you said something like we have to produce more with semiconductors. I couldn't believe it. I said: are you sure? Of course, now we see in the digital decade programme, objectives, clear objectives. And Roberto I wanted to ask you, what are the fields where you think Europe is doing fine in this goal of achieving greater autonomy and what are the fields where you believe we should do more?

Roberto: Thank you very much. I don't want to sound like a grumpy old man that comes and says 'I said it'. But I said it, I said it before the pandemic. And I said it in a festive moment. At that time, the word digital autonomy was seen as a kind of very bad expression about protectionism. Now, unfortunately, after the pandemic and after what we are seeing happening these days, it is a reality we have to face. I mean, it is a reality that if we don't help ourselves, nobody will help us.

And when I say ourselves, it's not only Europe. But Europe and the like-minded countries. In microelectronics, in raw materials, in security matters, we need to be the masters of the game. And we owe it to the citizens. And we owe it to our industries.

And of course, open and absolutely fine to work with like-minded partners that think alike. But also very determined not to be dependent on others that don't think like us. Democracy is the most important value for a society.

We have a problem these days. When I look at many of the supply chains which are disrupted. Why? Because of the COVID and the war. We are facing problems we thought they were not something in Europe. They are. So if you ask me what is next, I have only one answer. We have to quickly step up when it comes to our capacity to protect our critical infrastructure, how to work together, how to make sure that the old eco system, the digital system in Europe is more resilient and more robust.

Philippe: Thank you Roberto.

Please, I know Roberto is a bit intimidating but he's only there by video! You should take your chance.

Okay, Bridget? No, sorry. Aurelie? There are more hands. Okay. Yes. You spoke. So the gentleman there. I'm giving the floor to people who haven't asked a question yet. Many hands all of a sudden.

- Tim, I'm an independent analyst and advisor. On the autonomy side for semi-conductors, things like cloud and edge. That's great, but how do you convince device creators and software developers to use those platforms, rather than alternatives?

Roberto: Thanks for the question. I don't think we are in the business of convincing people. I mean, they do whatever they like. That's the rule of an open and interconnected society.

When it comes to chips, I mean our objectives are very clear: 20% [indecipherable] should be in Europe. Those are the most advanced chips. And we want open architecture for those chips. That means, all of the creators, all of the start-ups that would like to do chip architecture, if they have ideas, they can come and do what they like. Same for cloud. Our mantra for cloud is open cloud system. Where you have multiple vendors, multiple possibilities to offer your products and services. Throughout what I call the computing continuum, our real objective is diversity of supply – more than one supplier, no gate keeping. That is the way we see a Europe thriving in this computing continuum.

And the more we have ingenious minds, the more they are welcome in Europe. One part of the new chip fund is dedicated to a new chip fund for start-ups and entrepreneurs. So I hope this openness will bear fruits.

Philippe: Thank you Roberto. Aurelie? Can we have a mic there?

Thank you.

- Good afternoon, Roberto. Aurelie from Orange.

I have a question regarding, without surprise, private investment. When we looked at the digital decade, we saw ambitious objectives [indecipherable]. We also see, as you were saying, new cooperation and partnership between Member States and the Commission. But to achieve them we need private investments into networks to achieve this. There we have seen the digital principle draft declaration an interesting statement, according to which all market actors should contribute to infrastructure. So my question is the following: how to ensure that all big data emitters contribute fairly to the cost of use of the networks and how the Commission intends to make the draft principle of the digital principle declaration a concrete realisation? Thank you.

Roberto?

I think your question seemed to have... Roberto looks flabbergasted!

(laughter)

Well, I think... (applause)

Look, thank you for your attempt. We have a couple of minutes left with Roberto. I suggest, okay, he is back. Roberto is back.

Aurelie can you just... Not sure, Roberto, welcome back.

Can you hear us?

Roberto? Can you hear us? Yes, we can hear you. Can you hear us?

Can you hear us?

- Now, yes.
- Did you hear Aurelie's question?
- Half of it, but the other half I can guess.

- Go for it then.

Thank you.

Roberto: If I understand about the need for private investment. And now, how it should be realised, the digital decade objective. Is it correct?

Philippe: Hang on. Just recap quickly, Aurelie?

Aurelie: My question was, when looking at the digital principle draft declaration, where there is a sentence according to which all market actors should be contribute to infrastructure. What would be the next step forward for the Commission? How to achieve it?

Philippe: The fair share.

Roberto: When drafting this particular sentence, we knew that this was an important point for the telecoms sector. And we believe, let's see what the final declaration will be. That was the proposal from the Commission. I think this sentence applies throughout. Not just about connectivity, it applies throughout the chain. And this is what we want to do with the digital market act, by the way. And with fair taxation. Fair renumeration, [indecipherable] participation of digital actors.

As it happens in the real world, the bigger you are, the more responsibility you have. The same applies to the digital world. That's the underlying principle.

On connectivity, clearly, there should be a fair balance. Between those investing in networks and those profiting from investments. What is the fair balance? Of course, one would say, those investing in networks get the reward by having access fees. And those investing in connecting in content get rewarded by the streaming fees or other fees. This is the fair part. So the guestion I think you are posing is, is this balance fair enough? It is a complex question that we are not shying away from. And what is the first step? First of all, to understand from market participants how things are structured and what can be done if there is imbalance. The first step is clearly, first of all to understand what is going on. To guarantee a fair renumeration of investment in the network. This should be guaranteed independently of the content on the net. This is because we believe in neutrality as a principle, this is the principle of the digital decade, it is the principle and there to stay. In this respect, when looking at the investors in the network, there is a lot of respect for this investment. They are essential to keeping our democratic life going. Gone are the times when the objective of the regulator was to open up networks from monopoly. This is a different world, this is a world that should reward those taking the risk to invest in networks. That will be very clear in our upcoming access recommendation. That for us, investment in networks needs to be rewarded. This is one of the elements that makes the fair balance.

The other one of course, we have to see if there are particular actors arbitrating on this. Arbitrage is never a good thing. On this, we want to collect as much evidence as possible.

Philippe: Thank you. We'll have the opportunity to come back to this issue in 2023. Join me in thanking Roberto. (applause)

Thank you for your questions.

I am delighted to welcome on the stage the panellists for the session on AI.

I introduce them. François Candelon is senior director of the Boston Consulting Group thinktank institute.

Patricia Neumann, who is VP of AI for IBM.

Kilian Gross, who needs no introduction. He is head of unit and author of the Al act. Great to have you.

And we are being joined online by Ieva Martinkenaite, who is VP AI at Telenor and is chairing the GSMA-ETNO working group. Welcome to Brussels.

On the programme, we were privileged to have the vice president of the parliament, Eva Kaili. She is slightly delayed. We hope she will appear a bit later in the session. She should appear a bit later.

Patricia, I was hoping that perhaps for this session, if Kilian agrees, we would first talk about AI and the economy and then move into telecom and have a debate with you, Kilian, on the regulatory aspect. Starting with you, Patricia, from your vantage point at IBM.

How do you see the impact of AI on the economy? How will it change the lives of society in the coming years?

- Thank you very much for the invitation and wonderful afternoon. I am representing IBM, which for more than 100 years had had a strong focus on artificial intelligence. Not just from technology perspective, but with the conviction that it's something that will help us when we do business, with things like sustainability and in the consumer area. I believe that the big trends, and let me answer the question this way, the big trends we see in the future coming from technology: it's cloud computing, it's quantum and it's artificial intelligence. Those are the three things that will change going forward and we invest in as a company. Within AI, the big, top discipline within AI is everything around natural language understanding. That is really the top. If we do have a computer that can join us on the panel and we don't realise it is a computer, we are

really there. That's where the heavy investment goes to. I believe in the consumer industry we're not even aware where AI is. And if we were to pull out of AI, we'd all have trouble as consumers. However, I am here representing very much the AI piece when it comes to business to business. When it comes to critical workloads and infrastructure. I think that is a different discussion here and also a different type of technology we need to apply. The IT industry, I am very pleased to be here with the telco industry, because we know data needs hardware, but without the network we would be nowhere.

Philippe: Moving to you Francois, from past discussion, there is something that surprises me. You suggested, but I am paraphrasing, so correct me if I'm wrong, that perhaps European operators are shy to embrace AI. While from the many years you spent in Asia, you got the feeling Asian operators were more keen to embrace AI and really go got. Why – I don't know whether people in the room agree – why do you see this?

Francois: This is my experience, as you said, I spent around 10 years in Asia, mostly in China. And I think that there are maybe two reasons. One is, because it is very difficult to change in Europe. I think that may be regulation. I'm not just talking about let's AI or tech regulations, and so on. But it makes it very difficult to change. The second thing is maybe a question about the appetite and the representation that telco's have of themselves. And I think that is a pity. On the one hand AI can be a real source of revenue enhancement, cost saving, on the one hand. And on the other hand it's an opportunity for telcos to move from telcos maybe to techcos, to use fancy names. And in my experience with Asian telcos, for instance, they were using data. And when you compare data at telcos, you have as much data as the Googles and the likes. I had an example with an Asian telco – we did the analysis in terms of demographics and process, transactions, and they were as good as Google. The only thing was about geolocation, not because they didn't have the app, because this app was less activated than Google Maps. So you have that. If you want to really embrace AI, you have a fantastic opportunity to get data scientists. Because you are dealing with the most prominent topics. And you can be a real alternative to AI native or tech native companies. With all of that, that's great. And on top of that, you are trusted. I think that for telcos, the trust that people, your consumers, customers have in you. And the way you can address these issues is absolutely great. And it is a basis. If we all know that if want to operate AI, we need what we'd call a social licence. There is of course responsible Al. There are many other things. The trust of the companies operating Al is one of the best advantages.

Philippe: Let's go to you leva. I'm sure you want to jump on what Francois said. But before you do that, I was wondering if you can say a few words, AI and telco is all about network management. But it's is more than that, I understand. So can you explain in simple words why AI is important for telcos? For you at Telenor?

With the sound, leva, that would be better. I hope it is not you.

Can you put the sound on? Can you do a sound check? leva? Say something?

(no sound) No, not working.

What do I do, David? Try again? Try again leva. Let's see?

Guys, if we had AI on this panel, this would not happen.

Francois: But for sure, there are many other things. Personalisation, for instance, which is the next way to get churn.

Philippe: Before we go to you Kilian when we enter what a lot of these people want to talk about, which is [indecipherable] in Al. But not before the end. If we discuss it too soon we'll get to the coffee break. Patricia, you work in Europe for IBM. But you discuss with your colleagues in Asia and in the US. Do you share Francois' perception that we are a little shy to embrace Al in Europe? And your counterparts in other regions are luckier in pushing IBM Al products?

Patricia: On the big scale I would agree. What we are losing by being shy is the opportunity to innovate. We must not lose the opportunity to innovate, and innovation comes with taking risks. It is a risk of being faster. On the point of why we need AI in telco. What I see on an AI, or let me say BAI use case is automation. Automation is big time when it comes to IT and the network. That is the use case we live on a daily basis, it's about the prediction but it's really about resource. How we can cut resources, in terms of not needing that much infrastructure in what we're doing with our applications side.

I think there's a huge use case when it comes to the network and that's what is connecting us.

We see it very much like, we should not refrain from trying things out and starting to do things. I really am convinced in the B2B context, we are underutilising AI, because we think there is something that could go wrong or because the investment is not paying off. I believe to calculate the proper return on investment, we are sometimes far too much only in the area of infrastructure rather than the business outcome. In that sense, we could learn from the pure consumer industries, how they use it. But again, in the industry we are in, and I liked what you said on the trusted piece. At a company like IBM, working for more than 100 years with the most critical workloads around the globe, telco industries, banking and financial industries. A lot you are clients of us and vice versa. It would be a missed opportunity if we don't build on this trust and reputation as an industry. That is a great foundation. Coming back to the network, I think automation is the use case beyond anything around customer care, customer centricity. The network on automation is everything we should start with.

Philippe: Ieva, can we make another attempt to connect with you up there in the north?

Ieva: Can you hear me now? (echo)

Philippe: Wow. So cool. That was my ultimate dream.

Ieva: Yes, so if you can hear me well?

- Perfect.

leva: Let me say, for us AI is the future of building a digital telco.

There is no other choice but using analytics and data at scale. And we're doing it, as said already, to optimise the own network operations, to optimise our customer care, to personalise our offerings. I would like to touch on this trust position because it is very important. I want to give you three examples where we use AI analytics for social good.

The first example is, together with our partners, we are building the green radio. We are greening our network operations. And we are doing it by using advanced analytics.

So that's one concrete example where we are reducing CO2 emissions, we're moving Europe to a next level and at the same time we are optimising it for ourselves.

The second example, I think very much forgotten, is that we are sharing the data and putting analytics on top. For curing some of the big diseases – COVID 19 is a good example. So we are able to predict the movement of people and in that way help companies and governments to manage the big diseases such as epidemics, such as COVID. And the third example I want to add is automatic speech recognition. There has been said a lot about natural language processing. What we can do and what we're doing for Europe, we are actually developing machine learning applications for small languages, for small European languages. Because we have access to our customer service. We have access to spoken languages. And we are able to provide services for people with hearing disabilities, for people with dialects. For small languages that Europe is built on. I think we should never forget that, in addition to building our business for the future, we are also enabling the future of Europe. This will be my three cents on why AI and how AI is basically a survival game for us.

Philippe: While we've got you and you are loud and clear. Can you please react to Francois' suggestion that perhaps European telcos are not as brave as their Asian counterparts in embracing Al. Is that an opinion you share?

Ieva: Well, I can say we are on a journey. We are certainly brave. And we are seeing the value. But you should never forget that we should also deliver on our core business, on our connectivity

service as we go. And at the same time we need to basically build the new services on top. So I would say, yes I agree, we need to be braver. We need to be bolder. But we also need to make sure that everything we invest into, the new networks, the new capabilities, we have a return on investment. This is about being pragmatic. Bold and pragmatic and visionary. So I don't know if I agree with you guys, but we are onto something very bold in the future.

Francois: You need to be very bold. We talked about networks. I'd like to have one word about personalisation, for offers, because I think it drastically changes the way you operate. Personalisation as you know, it helps reduce churn, and upselling and so on. By giving to an individual the right offer at the right moment. Which means that you don't need campaigns anymore. You are always on a campaign. This means that the work your marketers are doing is drastically changing. They need to experiment all the time, while all the rest will be automised or autonomise, in a sense, by AI. And I think this is where I have seen in Europe, compared to Asia, more difficulties in making and operating this change. To have a more 360 perception of their customers, something really to the point. So, I know and I appreciate the fact you are on the move. And that's great. But I think there is a question of speed to be at par with your counterparts.

Patricia: I remember it was a telco client who told me, I don't need a website anymore. I was looking at him like, you need a website. But back to your point. What do the clients want? They don't want to go onto a website and search for something, they want to talk to someone. Talk doesn't need to be reading a website. Talk needs to be a chat, a digital assistant conversation or whatever. But I remember myself, I was biased years ago, I would say come on, without a website it is impossible. But what do you go there for? You want a conversation with the provider and a service with the client. That can be handled completely differently today than with a normal website.

Philippe: We heard Ieva mention the return on investment. The ROI. You sit with clients regularly. Is it something you experience? A willingness to move onto AI, but when you do the calculation, the bottom line is not...

Patricia: Every day. We did research. What is the main reason why AI projects are failing? The reason we figured out was because we targeted the wrong issue or problem. Prior to the AI project, it's about understanding what is the problem to solve and is it moving the needle on what we want to achieve, cost saving or revenue. Targeting the right thing is one thing. And the other thing on AI, which many clients are underestimating, is there is a lot of work to do on getting data digitised. In the telco industry, maybe a lot of data is digitised already. But many of our clients come from a history with legacy and analogue data. It takes roughly 80% investment to get things standardised, digitised. And then we can apply with analytics and AI. This basic

piece of work has to be done. Many clients underestimate, are frustrated and say the business case is not working.

Philippe: I'll let Ieva reply.

Francois: Al is at the beginning. We are not in the position to quantify everything. I think that we need to maybe expand the way we think about benefits and the way we think about risks on both sides. I'll give you one example. I did a study with MIT where we identified cultural benefits of using Al. Because people think that the decisions taken are better and therefore they enter into a virtuous circle because they dare more. This is something that is very difficult to quantify today.

So I think that AI to a certain extent is not a choice. You need to identify the big use cases, but then you need to go, and to go big. One of the issues we face in telcos is we don't do end to end enough. And AI doesn't like silos. You need to use AI to break your silos.

Philippe: The known unknowns.

Your turn, leva?

leva: Let me say it clearly. What we are super happy about in the telcos is that finally we are starting to dehype Al. I am absolutely happy about it. Because it brings very concrete business questions, very concrete technology questions. Where can we use Al and analytics to solve some of the most difficult problems, the problems we have been sitting on for many years. That cannot be solved by manual work or humans, and the problems that would require more investment, but also new types of capabilities.

Let me say very concretely that I agree. The basic layer has to be in place. But you should remember that telcos have been in operation and successful for many years. We have actually delivered one of the best connectivity in the world. And now we have to cope with that and see what the opportunities are we can build on top.

So I am absolutely happy that finally we start dehyping AI. We start asking ourselves where is our data? What can we build on top of the data? What are the returns on investments? What use cases do we need to prioritise? What people do we need to hire? How can we scale across? This is getting into the board of directors' agenda in the telcos that I know. The life is brighter than a year ago, where everyone talked about it. I have to say, the most profitable investments into AI so far have been not on fancy machine learning systems. But the opposite. On very simple analytics. Where you can combine and compile our data sets for solving some of the most prominent problems for our customers or for our networks. So that's my response to that – we need to continue building data capabilities and leadership competence on AI. And finally start

thinking of data as a strategic asset as we have never done before. When I say data is a strategic asset, it is similar to a financial asset or a human. That's what we are embarking on. I am happy the telcos start investing very programmatically in things that will give them returns on investment.

Philippe: Data is infrastructure, says OECD, but that's another...

Patricia: I agree. I would go a step further. I am also glad the hype is going out. There is an obligation for our industries that we take out the hype. Then we take out fear, the worry of people that this is something we need to be scared of. And also your point on the silos. That's one of the main reasons when things do not go wrong, because companies work in silos. Because if you're a CFO you don't give away your data, you're a procurement guy you don't give away the data, and that's where we break the silos.

Philippe: Before we talk about hardcore regulation. On removing fear. That exists in some parts. On the social licence to do Al. When you, a few years ago when you started to work on Al. From the Commission point of view you look at the great opportunity, to boost the competitiveness of Europe. But you were also conscious of the possible social backlash. How did you strike that balance? What representation did you have of EU citizens picturing that dreadful technology coming along?

Kilian: Thanks for that question. I really appreciate, not only to come in as a regulator, not only as the one who destroys the party. But on the Commission side, we always had from the beginning, a twofold objective – a two pillar approach since we started to have a more systematic policy on AI.

On the one hand we need to support AI. We think AI is really a ground-breaking technology where Europe needs to catch up. We have an objective of 20 billion private and public investment in Europe, in AI per year. We're now roughly at half of it, but that's our objective for this decade. To achieve this, we have a coordinated plan on AI, we adopted together with the AI proposal 70 actions with members on how to boost AI. For instance skills is one of them. We asked Member States to draft national strategies on AI, which we coordinate together to see what works well, to exchange, focus, strengthen what we are good at. To map and understand where there are weaknesses. We have in the work programme we have new schemes. We want to have real life testing possibilities. We want to have in each Member State a hub specialised on AI. It was proved, as the other speakers said, by reality. Because if you look at the COVID crisis, we would not be sitting here without masks without AI. Because AI was crucial in developing vaccines, CT scans for lung diseases. It's not only an economic issue, but also a societal issue.

Of course, in Europe, what the [indecipherable] vice president put it best. We like to do the things the European way. So there is a certain fear of technology. We cannot completely deny, not a lot, that certain AI use is maybe problematic. That's why we want to do it the safe way. We don't want to discriminate the technology, on the contrary we want to boost it. But we need to have safeguards to rely on it. One thing we can see that is relevant for you, is that in Europe not only the development could be reinforced, but also but we would still like to bring it to the market, but also the uptake. So there are two sides and we want to overcome that fear with this framework.

Philippe: Kilian, a quick question on the investment. I'm sure you'll say, happy to accept more money, but when I compare your 10 billion today, 20 billion investment in AI by the end of the decade. And when you compare this to, I've no idea if it is true, but what some Chinese provinces are doing. You see in the newspapers staggering prices, places you've never heard of, and they spend that per year. Or you look at CapEx by big tech. I know it's not just on AI. It is on cloud and many things. It looks a small number to me. 10 billion for us per year now. Is that enough?

Kilian: If you ask someone of DG CNECT if it is enough, you'll never get a fully satisfactory answer. It is a very important step, let's say. We need to be realistic. What you point out is very valuable. Because we are in a competitive situation. We cannot ignore what other blocs in the world are doing, what the US is doing with more private-driven investment, what China is doing with more state-run investment. We can't allow ourselves to lose the contest to the frontrunners that are really developing cutting edge technology. We need to catch up. We have a lot of constraints, a lot of brilliant researchers and companies. We need to bring out there and to focus more on this. So that's one step we do. We have the recovery and resilience facility as an important part now. We think it is important Member States that use this to boost technology and not to cover old industries, but really to bring industries forward.

All in all, it indicates something. But it is difficult to be completely precise on how much you invest in Al, because Al is in reality everywhere. In a lot of companies you invest in Al you don't know it is Al because it's part of your technology development. So, I wouldn't take the figures as absolute. It is an indicator that we have to reinforce our efforts. And we as a union need to contribute more to these reinforced efforts.

Philippe: We may invest more without knowing it, let's hope this is true.

Francois: You said two words that were important. First about fear. The less we know, the more scared we are. I think that what Finland is doing is trying to understand with their Moocs, in trying to help people understand what AI is and is not is critical. And the second thing you said, the European way. Because I think, it is very cultural. And what you see in China or in the US and the way it is approached, I am not a specialist, in Europe more about. product safety, in US

customer understanding and China it is seen is societal question, that is important. We need to understand that regulations won't be global. So, I think these two elements were very important.

Philippe: We'll come back to this important part. Well, is our world increasingly globalised? I can no longer say that. So before we go back to this question, Francois. Patricia. What would you do, before we leave this question of social acceptance of AI. What would be your top list of things to do to boost social acceptance of AI in Europe? The simple steps you would take to remove the fear that you describe?

Patricia: One is on the obligation of companies like I am representing here, that we provide tools. And we provide also thoughts on how we can make Al transparent, how we can make it explainable and open. We've already heard from Roberto that it mustn't be closed technology, it must be open technology. So that we can build on whatever we have to build on. That is something that can take out fear. That we don't say it is something secret that happens somewhere. It has to be transparent in how it works. One thing on how to get there is how to apply AI for a certain purpose. Not for generally we are doing something, but what do we want to solve here? To give an example: face recognition software. IBM was one of the companies that pulled the software from the market, but why. And the software can be given to anyone, because it is being applied for use cases that most of the case was negative. So let's use AI for a certain purpose that has a sense and brings us as an industry or us as a society forward. That said, we believe very much in trustworthy AI, in transparency in what we are doing. And trying to explain things. Providing technology that helps you to figure out where there is bias. We are all human beings. We are all biased, so we cannot declare that someone is not. But we can help. With technology also, to take out bias and to try to be fair as possible when it comes to Al. And transparency, so I am giving away something and my competitor learns from me because I'm transparent in what I'm doing. But taking out fear and trying out something is a fundamental basis.

Philippe: Before we move with you as well, Ieva, on the assessment of Kilian's proposal, the AI act. Can I ask you Ieva, Patricia and Kilian to respond to Francois' provocative suggestion that perhaps there will not be such a thing as a global regulation for AI. Because of different social acceptance, different situations, different challenges, shortages.

Who wants to volunteer? Maybe you, Kilian? You are a professional regulator. Do we need something, not harmonised of course, every region will have its own cooking. But would it be desirable that around the world we move to a broadly common scheme? Or is it not really needed? Basically everybody can do their cooking?

Kilian: It is certainly the first. We know technology doesn't know frontiers. A lot of things are developed in other parts of the world. We will want to use these technologies, and we don't want

to increase trustworthiness to protect our markets, that's not our interest. We want to have a level playing field. We want to make sure those systems used in Europe are complying with our rules. But we would like to invite as many as possible. Here we are perhaps more advanced than other parts in the world. But there is a lot of interest in other parts of the world in this topic. I wouldn't underestimate it. The European approach is perhaps a little bit different. In the US, you have the bill of digital rights. In some states, they are not horizontal but there are sectorial legislations. We see that UNESCO is working on it, the Council of Europe, OECD [indecipherable]. There are a number of international fora. The ethical issues are gaining momentum. There are still divergences. Do we need a binding framework? Should it be soft law or codes? Recommendations? But what I would see is more and more there is more or less among what we call likeminded countries an understanding that certain principles need to be respected. I would not see an overwhelming divergence in these principles — that data must be correct, transparent, you have to have certain documentation, you have to ensure human oversight. Those things. Those are getting common ground.

Philippe: Ieva, on this notion that we need a broader connection of countries, broader than the European Union, adopting likeminded principles to regulate AI. Is this important? Or unnecessary?

leva: Let me put it this way. Let's stop fantasising about AI. All of us, not only in Europe but elsewhere in the world. All is not uniform term that we should start regulating on. There is a lot of valuable AI which carries zero risk, but carries enormous impact to society. Let me give a concrete example we in Telenor and the telco are using. We are calculating simple averages of data usages on our base stations. And based on the statistical averages we are reducing CO2 emissions to society.

So this is such a small example, showing that there is so much analytics and data used for low risk. That I would always start on dehyping, defantasising AI. At the same time, there are high-risk AI applications. Probably a minuscule part that will be used in Europe and that will need to be regulated. There are of course also cases on technology improvements that will not ever be possible to regulate. Technology will always go advanced and one step ahead of the regulation. So we need some ethical guidelines to be able to talk the same language. So I would agree with Killian and everyone that we are building that ethical framework. But I will repeat again, we should start the discussion in Europe, dehyping, defantasising AI. Showing use cases of applications that create benefit to society.

Philippe: Words of wisdom. Brussels has a tendency to focus on what goes wrong and what should be regulated. Most AI will not require regulation because often there is no impact on fundamental...

Patricia, on this question of the need for...an international...

Not uniformity, but commonalities of use across regions. Is that something dear to your heart, at IBM. Would you be selling more or less of the same solution around the world. Or could you cope with different... Forgive me Patricia, keep that question in mind.

We have Eva Kaili, vice president of the Parliament online. And after that we'll talk about highrisk AI systems and telecoms.

The floor is yours, Eva

Eva: I'm sorry for intervening like that, but we had the plenary today. We have the president addressing the plenary in a bit.

First of all, I would like to thank you for the interesting event you invited me to. And Professor Masselos for asking me to participate. I heard what you said, that too much regulation is not what we expect. Or be it always overprotective could perhaps hold back innovation. In regards to regulation, the AI act is very interesting as the first legal framework that is globally being introduced. And I think it is important that it raises this debate of deciding what kind of AI we want. Because you can define AI in several different ways, but in the end it is being complementary technology that can offer solutions to problems. Easy and faster access. And making fairer and more transparent decisions. In the end you can also take decisions and implement if embedded in hardware. It is hard to understand how and when this is deployed. So, we need to control and understand this technology and to see how we are going to use it.

So I think, we can speak, and I can start by saying some positive things. We had deepmine predict the 3D structure of hundreds and thousands of proteins, including every one made by humans.

At the same time, the trained a system to control for unlocking the potential of a nuclear fusion.

So this is an important example of how AI can enhance our capacity of discovering innovation.

It is of course, if designed in a human centric way, it can also by design help us and create more opportunities and fair opportunities for all.

But with the pandemic being an accelerator, we realise we are more interconnected, between us, and the physical with the digital world. And we have more challenges in the digital world that we need to prepare for.

I think also the algorithms are now being more understood, by more people.

Now we have more people knowledgeable of how we can act by design. And what we should be aware of. We understand the positive potential, the value that the estimation changes, it usually changes up. But it's been valued at 15 trillion by 2030, just 2 trillion in Europe alone, and we try to understand how by providing legal certainty we can unleash this potential. I think creating trust and legal certainty is actually a key to do it. So the AI act has a few things we still have to discuss. How to proceed with biometrics. And decide this index of risks. How it is going to change. What are the metrics that would identify an application as unacceptable or as high risk... And what are the obligations that the high-risk applications should follow.

I think, also it is very important to understand that in Europe, harmful AI is mainly identified in health and in transportation. Anything that could undermine our fundamental rights and values. So, I think we need to find a methodology to be able to measure that. Because again, I believe we need to be creating legal certainty and not uncertainty. But the good thing is that low-risk AI is actually the majority of the applications that we need to regulate. So, finally, I am talking about an ethical framework. I think it is important. Because Europe, with the GDPR, showed that we want to have the principles, and we also need to influence like-minded and non-like-minded countries. Because this technology goes beyond physical borders.

Just by setting global benchmarks in these achievements. Still I am happy and interested to listen to you. You have excellent speakers today with you. Extremely knowledgeable. Our obligation is to protect citizens but also listen to and understand the potential of the technology. And not to create more barriers for this technology that could save lives and provide us with solutions. It is not a vaccine, but it could lead us to find the vaccine that could let us get back to normal.

Philippe: You answered number of questions that were raised during the panel. So you did very well in catching up. She is gone.

One question I would like to ask you. What is the mood in the parliament? When you speak to your colleagues? Are they like you, more in the vein of most AI applications will have no negative impact on humans, so let's embrace the technology. Or are they more in the technophobic mood? What is the mood when you speak to colleagues at the coffee machine at the Parliament?

It sounded, by the smile it sounded a good question but.

Okay...

Eva: After the pandemic, I believe that everybody is expecting to find solutions in the technology. And the perceptions change and we consider we have the positive approach. So I think this would be the way that our prism has changed on technologies.

Philippe: Thank you vice president Kaili. I'm looking at my watch and I think it's time we talked about regulation, Killian, and you were hoping to chitchat out of it.

You know, before asking people. I think I'll ask a question myself. You have all the same question. You know which one I mean.

You know, the Slovenian presidency. Apparently, the French presidency is supporting the idea. It has suddenly moved digital infrastructures, which include our bill of telecom networks, has moved them into the category of high-risk AI systems.

I know it was not your idea. It was not in the Commission proposal. I'm sure Ieva will explain there is nothing to worry about.

Let's give you the floor, Kilian. And see whether you can talk the Council out of this strange idea.

Kilian: Well, usually we don't comment what the Council and Presidency has done. But I don't want to be the cliff-hanger and invite you to come back next year when I can tell you what is the outcome.

The truth is of course that I don't know. This is ongoing negotiations. What I can tell you, is what we had in the Commission in mind is really a narrow system. What we think should be regulated is about 10% of AI systems. And it should also be the clear message from this regulation that the other 90% is safe and don't need any other intervention. That is as important as regulating the other 10%, which may be critical. In order to be clear, we wanted that the legislator undergoes the test of what should be high risk or not. It is not helpful for regulators to give an abstract risk assessment then leave everybody alone with this risk assessment. It is difficult. The legal consequences would be unfair. That's why we came to area 3. Here we have areas. If you're out of an area, you are out completely. It cannot be amended. In those areas we have use cases. And the use cases are those which are decisive and as precise as possible. In order to keep up the pace with the technological development we foresee that over time we can amend. It should really be fact-based. We should put things on the list where we are convinced we have enough evidence that today there is a problem, and not at some point in time there may be a problem. That should allow this adaptation. What we put in the annex as a Commission as one area is critical infrastructure. We added one use case on energy, water and road management. Another use case, which is of course a very fair point. And we will see how they continue to discuss this. It is important to note what they added is Al used to control or as a safety component. It is important for us that we are precise in what we design. Because Al in a car is not per se dangerous because you can use AI to choose your music or the best temperature. It's only if it has a safety function in that car and if it decides how the car drives. And that should hold true for the other AI systems. What is there in the end, we will try to make sure the use cases are

sufficiently precise. Because the overall objective to distinguish what is risky and what is not risky is then achieved.

Philippe: Going to you leva and seeing how you react to Kilian's response? Are you worried about the possible inclusion of digital infrastructures in annex 3?

Ieva: Absolutely. We are reading every single word and comma on the Slovenian presidency text. I have to say that we are concerned. And we are concerned with the fact that the current inclusion, what the Slovenian presidency made expands the scope of high-risk areas. And suddenly, the electronic communications networks, the telco networks, are part of the digital infrastructure. More than that, it adds not only the digital infrastructure, but also the wording becomes guite concerning for us. When you say control or as a safety component, well our concern gets to every type of analytics we use to make our networks better served, to use optimisation to get our networks served at the lower cost. We all know our investment in 5G technologies are not going to be lower, but bigger. If we suddenly become part of a category where any control or management of telco networks becomes a high-risk area and we are suddenly part of this process, on the high-risk area, we are suddenly very much concerned. So what we are doing now in the GSMA-ETNO Al taskforce, we have already prepared our position. We are absolutely clear that we need to look at it as a proportionate approach. Preferably take out digital infrastructure from the equation. And if not, then be extremely clear on what we mean by saying a control and/or safety component. I have to remind you that the AI we use on our electronic communications networks are made for good. An example I used with green radio: the only risk in this example is that we are actually using more energy. Because in this example we never cut the coverage layer. So we have to be extremely clear, extremely precise, as Kilian says, on what we mean. In order not to expand this area for the bad of our society. This will be my approach. We have a position. We have very good connection to the Parliament, the Commission and the presidencies. We want to really explain, give concrete examples of how we only improve the wellbeing of the citizens. As Kilian said, we have to be extremely clear if highrisk Al impacts fundamental rights, the safety and security of citizens. And if it does it has to go under the regulation. But so much of AI, 90% as Kilian says, doesn't do that. If we suddenly put the digital infrastructure as a control, then we are absolutely concerned.

Philippe: Thank you leva. Is there a question from the room?

I don't see it. You are really shy today.

A quick comment on that. I would have thought if AI posed some sort of security issues it would be covered by the security provision of the code. And in the directive. So I'd look into that.

Something I'd like, looking at the AI act more positively. I would perhaps ask you, Patricia, and you Francois, if you have any thoughts. It is a difficult question. I remember the GDPR was adopted in 2015 and for years companies are scratching their heads about what they should have been doing.

What could companies do to pave the way, to be proactive, to be Al act-compliant? I am talking of course only about those companies, 10%, that do Al applications that are high risk?

Patricia: I appreciate the work that has been done. And the distinction that we don't want to regulate on the technology itself. But we really put the risk and associated risk in focus and regulate these things. That's very much what we appreciate.

The thing that I want to add is to distinguish, is that the AI is not there and decides and makes mistakes. It is us humans that are interacting and deciding when we do allow AI to take a decision. Let's not forget we are not in a black box where something happens and no one can explain anymore. And if we are, it's because we allow it to be. So I'd like to bring humans who need to decide what is the right thing to apply AI. We can learn from GDPR. In the end the world was looking at us and saying it was not so bad what we did. What we learned was not to wait until everything is finalised and negotiated. Let's start today and be prepared. And then learn as we go. That would be my learning from GDPR.

Francois: What I would like to add, because Killian and I agree with what you said and trying to have things that are based on evidence. It is difficult to think about all the issues we might face. I fear that, telcos, you have a lot to get from AI. But then you might be too much focused on how to limit risks instead of innovating. You mentioned leva about the hype and I know Telenor is very limiting the hype because you're very innovative. But Telcos, I am old enough to remember when I was working with France Telecom in 2001, someone from the executive committee telling me, instant messaging is useless. It doesn't bring 1 euro. Or at that time Voila, the search engine from France Telecom was better than Google, at least in French. So it's good to limit the hype. And make it concrete. But not to limit imagination on what you can do with it.

Philippe: Ieva, a quick word on whether telcos should get ready now to comply with the AI act? Or do nothing? Because frankly they don't do AI application that are high risk?

leva: I think, first of all, I have to be crystal clear. We are supporting the regulation. Especially evidence-based high-risk AI. This is needed. We see that's the way of doing business in Europe. It actually carries value. What we want to bring along, we want to bring the telco perspective, the use cases, the arguments and the evidence, showing that what we are bringing to the table is AI for social good, for improving the ability to have high-quality connectivity. Our ability to innovate. We are doing the hard work internally. It is not a walk in the park. It is absolutely difficult. My

take on that, number 1: regulation is needed, it creates legal certainty and brings Europe to the next level. But It has to be evidence based. It has to provide and give impetus to innovation boost in Europe.

In order to do that, we have to make it proportionate, listen to the experts, to the biggest and smallest industries. Listening to them is important because they give you their pain points but also a better view of what it takes and what they deliver. Our telco perspective on that, I will repeat myself. I think we need to revisit this digital infrastructure piece in the annex on high-risk AI. And we need to bring use cases and explanations on why and what exactly goes under high-risk digital infrastructure. If it is only 10% of uses considered high risk by the Commission, we need to stick to that. That will be my call for listening, for continuous discussion and debate. And I absolutely agree with the speakers on being brave, being bold and being pragmatic.

Philippe: Thank you Ieva. Kilian? A few concluding words?

I am looking at the watch and it's almost 4. On this point by leva, industry should do its part in explaining more what they do and regulators should listen. Is that dialogue taking place?

This afternoon it proves it does take place.

Kilian: The purpose of us getting here together. Indeed, a number of speakers mentioned we should demystify AI. That's why we need to talk about it. We need to be transparent. Lack of transparency. We have seen it for other technologies that suffered from that for years, like nuclear.

Industry should engage. We want to prepare for the entry into force of the AI regulation, so we're starting to develop the standard. We will base it on standards. I can invite you to engage with standardisation organisations. We want to hear society as well. We will have at the end an expert group where industry will be heard. To participate in the process can be of benefit. And never be underestimated. So I wouldn't wait until things fall from heaven, but to continue to influence how it will be shaped.

Philippe: I would like to quote you. Al should be dehyped and telco can do a lot of things which are not even low risk Al systems.

Please join me in thanking the great panellists. It was a fascinating panel.

(applause)

We'll be back in half an hour for a great session on the DMA.

Philippe: Could you please take your seats? We will make a start soon.

With news from the front. On an important topic. So please take your seat.

Thank you.

Anne. Sandrine.

Welcome back for the final leg of the BEREC stakeholder forum. With a session on the DMA. A timely session. Congratulations to the organisers. Tomorrow there is the trialogue, the second meeting on the DMA. We have a wonderful line-up of speakers. Andreas Schwab. Member of the European Parliament and rapporteur on the DMA. Michel van Bellinghen, who hardly needs an introduction, for this audience, BEREC chair 2021.

And we should have I hope soon Alexandre De Streel directly from New York city.

Let's start with you, Michel. You have been leading BEREC's efforts on the DMA ever since the proposal was put on the proposal by the Commission. Give us a recap of BEREC foray into this field so far.

Michel: Good afternoon, everyone. Yes, indeed. We have done a lot of work during the last 1.5 years on the DMA. To start with our response to the public consultation. I see Alexandre is joining. Of course an opinion for a swift, effective and future-oriented intervention. But also a report on regulation. And different papers on different topics, such as the tailormade remedies, an advisory board. And lastly the interplay between the electronic communications code and the DMA on NIICS. I'll come to this later. We had a lot of outreach with stakeholders, to start with, with co-legislators, Mr Schwab, of course. With other members of the Parliament, the Commission. The cabinet of Mr Breton, DG CNECT, DG Comm. Counterparts from other bodies and regulators. EDPS on data protection. We have organised two workshops – one on markets contestability and another one on consumer protection. So a lot of interaction with stakeholders too. So the question could be, so why have we done that as BEREC? Well, if you look at our vision statement, our high-level strategy, the priorities, the answer is quite obvious. Through this work, what we think is important is promoting contestability by actually entering this inter-platform competition. We want to also ensure fairness for business users, by this open digital market. And last but not least, consumer protection - consumer protection from what? From potential abuses due to the intermediation power of gatekeepers.

So this is mainly the reason why it was important for us to have this work done. Of course we also know, based on our longstanding experience in the field of electronic communications for the last 20 years, that when DMA will finally be adopted, and I wish Mr Schwab all the best of luck for his trialogue tomorrow, the game will not be over. It is only the beginning. Like we had for telcos. We know that it will still be a long journey with difficult discussions. I should say, some battles. We will score victories, we will also lose battles. But that's the way it is. And for us, in this, the main important thing, and I think we can totally be on the same line as the European Parliament, is the effective implementation, the enforcement. That's the reason why we think that the European Commission cannot do the job alone. It's a question of resources, of course. You know about these 18 FTEs. But what we see is that we are lacking a little bit this local touch. It will concern mainly SME business users. And about 10,000 in Europe, and we need to speak the same language. We need to lower the threshold. That's why we have put forward this idea to involve the national independent authorities, to assist the Commission. So don't get me wrong, we are very supportive of this DMA initiative. But we think the European Commission could be helped and needs some help for different reasons. Just data gathering or market monitoring. Also to see to what extent there is compliance with the obligations put in place. And also collect complaints, to play a role in the dispute resolution mechanism. So, those are the main reasons. And that's the reason why we are delighted to see that the European Parliament has put this idea forward of a high-level group of digital regulators, be it competition authorities and data protection, whatever. This is the way to ensure a harmonised implementation, to ensure coherence and in this implementation. And this is based also on the experience we have within BEREC.

So, that's certainly a good way forward. Of course, what we miss a little bit, and based again on our experience, is the tailormade approach. We think that's a question of flexibility, proportionality and also to be future proof. Otherwise you need to revise the regulation after some years.

Okay, that's where we stand. I will not avoid the hot topic of interoperability. And what do we understand by this? Well, if you like, it's the possibility for two different systems to exchange information. And as we see, what we call the horizontal interoperability is about getting people connected to using different platforms, different messaging systems. And the question is, is this the right place in the DMA to foresee that kind of interoperability – yes or no? For that I can refer to our report about the interplay between the code, on the one hand, and the DMA on the other hand. You probably remember in the code, Article 61 states that if end-to-end connectivity is in danger, based on the assessment, then the European Commission may trigger a mechanism allowing NRAs to impose interoperability. We think this is a very complex mechanism, which needs a thorough analysis. And we are ready to kickstart this exercise together with the

Commission of course. And so, I think we better avoid what we'd call regulatory overlap between two regulatory frameworks.

Just to finish with the work done so far, I would like to thank the stakeholders for their involvement during this past 18 months. All the work we have done is due to, of course, the excellent team we had within BEREC, to start with the co-chairs and the members of the group, and our colleagues within BEREC. Also the interaction we had with our stakeholders, it helped us a lot, the response we had to our public consultation. And it is not over yet. As you probably know, this year on the work programme we will publish a draft report on Internet eco systems. To have a holistic approach. Which is relevant for telco operators, on the one hand, but also for digital platforms on the other hand. And this will be published in June after P2. And this will be my final word – we are happy to assist the Commission with the implementation of the DMA from the very beginning. Thank you.

Philippe: Thank you Michel. Before diving into the subject of this session, the enforcement of the DMA. What everybody wants to know are your views on how things might go tomorrow? The convergence between the Council and Parliament. I am not saying there are just a few minor problems to solve. Frankly, Council and Parliament you agree on 90-95% of the text?

What is your forecast on the remaining sticking points? On the wrinkles to be ironed out? Will you do that tomorrow? Or will there be a third meeting?

- It is the 4th meeting already. We have needed a lot of time to meet. We have met in person. I am happy first of all that you have been able, Mr President, to convey this meeting in person again. It is my pleasure to be here as your guest at the stakeholder forum of BEREC. I am happy to see you all again in good health and good shape. And full of ambition for further work.

And there will be further work for everyone.

So, these trialogues have been extremely constructive so far. Tomorrow is the last one, the 4th. There is for sure some ambition on the side of the policymakers. Not only on BEREC side. We want to show that that law we have been waiting for for such a long time, we want to close it soon. So it can be in force in this parliamentary term, not only in the next one. Therefore there is a lot of support from other colleagues to make sure we can get it done tomorrow. I can't promise that here, but I believe it is very likely to happen. I can't promise it here.

You have already touched on a few key concerns that will be discussed tomorrow. And that is for sure that idea that came into the DMA at a late stage on interoperability. Which is not really part of the DMA DNA, if I may say it like that. Because the DMA is rather a regulatory competition and an internal market-related piece of legislation. And interoperability comes rather from the standardisation technical part of input. But for sure the effect in the market might be similar.

Therefore we have been pushing for that. The European Commission has been helpful. Has always said that this is possible to be done. Therefore now it is a bit unfortunate that we don't have a concrete proposal on how this can be done concretely. Because the key driver for this to happen was always that the group chats were an element where the gatekeeping, the dominance is strongest. That was the key reason we wanted to intervene. There apparently, we face the biggest problems. We won't be able to deliver immediately on interoperability if the Commission sticks to what they have been writing down. That is a bit unfortunate. We have to say we start with a limited approach on interoperability in the communication services. And we will try to bring in group chats as quickly as possible afterwards.

From my perspective, all the other elements look rather weird. The Commission is very clear they won't be able to make them interoperable quickly. The Council says they don't want to put it in the DMA. Therefore I think with interoperability and with number independent communication services.

That would be for sure a strong tool. In the end, however, it will remain to be seen how concrete the users will be able to use it. That is something we'll have to check.

The second element is something on which you have some knowledge. There is that concern, which is not only a concern, which is even proven, that tracking data and using personal data is something which is done in a much broader manner than normal users are aware of. And secondly, it is even done against GDPR. It is even done in an unlawful, illegal manner. Have users the choice? Yes. Do they exercise it? Not really. We want with the DMA to not only care about the combination effects of data with the gate keeper lock-in effects and multiplication possibilities. But we also want to make sure the GDPR principles are again brought into respect on that basis.

Is it because of the gatekeepers having most of the data? No, because of the combination effect most important with gatekeepers. We have to make sure GDPR rules are finally respected. That will be important. We don't want it to be an ongoing story. We want it limited in time. The concept can only be asked once per year. We'll see what the Council will propose. But not every day. That's for sure the trigger of gatekeepers. If you ask too much consent, they will say no. We have said, there will be a limit. They are not so happy about that. But it is important step to make sure the consumers can think about when taking the decision. And the third element is a bit around governance, future proofing and making the DMA a tool that is also fit for purpose in competition policy terms. On the governance which you are most interested in – you know that when I have introduced the high-level group of experts. That for sure we need competition policy enforcement. But competition policy enforcement is not the only reflection that we need here. We need a very strong set of European authorities that oversees the market, or even the

markets. And that can contribute to make it an interconnected regulation, the DMA, that really fixes the problems where they arise as soon as possible.

For that reason I think it is very good that more or less this is accepted. This has been an important, with all the modesty I have for my own work, an important enlargement of the DMA. It is a broader acceptance within the existing schemes. And therefore I am happy this has been accepted. Therefore, coming back on your question of what it looks like. It is true that in the European Union there is a strong commitment of the Parliament, Commission and Council to make the DMA work.

And I just had a phone call with the commissioner, and in the end, no one will be able to be against the DMA. Is it easy? No, the DMA has to be fit for purpose. It has to be a tool that can easily be used. Secondly, it has to be a tool that remains in place even if challenged more quickly in court than a lot of people think. And also a bit open for the future.

I have always been arguing that we should focus at the beginning on the biggest problems in the markets. The biggest gatekeepers. Even though some may mislead that argument by saying this is anti whatever. It is just a focus with a number of people with disposal on the key problems. I have the idea this will be accepted, and I'll fight for it. And be able to use all the tools that are theoretically in our hands. Not to threaten anyone but to be clear, that when we want to enforce European law, we will use all the tools we have to do so. There will be no one excluded from it. I believe structural behavioural measures, also the ban on acquisitions for a given time, will be in the toolbox if there is systematic non-compliance.

With that, the cooperation with the French presidency has been professional and competent. Very good. And they have to look from majorities in between 27 Member States, which is not always easy. You know it yourself that also in BEREC you don't always have the same positions. We have to look for a majority in the Parliament. I think the Commission will have a majority. No, this is a joke. That's our task. We will fulfil and manage it. Therefore, I think it is more interesting for you to ask specific questions that I will not outline here. It might be too general...

Philippe: We'll come back to you on the DMA as an easy-to-use tool. Let's now go to New York. Good morning, Alexandre. You know Alexandre who has been doing a lot of work on the DMA. Let's move a little bit more into what you think of the enforcement of the DMA. Will it be easy to enforce?

Alexandre: No. It will not be. Good afternoon, everyone. I am in New York. I wanted to understand the US strategy. You demystify a bit, as in Europe you have a clear strategy but here in the US we don't have a clear strategy. That's why I am not with you unfortunately.

I think it is important to see that on a global stage. The DMA will be difficult to enforce. Probably one of the most difficult laws the EU has adopted, to enforce for different reasons. First it is a new law, a new field. For those old enough to remember the liberalisation of telecom, it was not easy. It is also a new road for the Commission. The first time the Commission will become a regulatory authority. The second thing is, it is a complex sector. Some things are understood, other less understood. And the rules themselves are not easy. They are complex because the sector is complex. They go sometimes at the heart of the business model of the big tech. You can expect strong resistance. It goes against some of the core of the business models. I think selfexecution, we speak a lot about it, for me it is a myth, it doesn't exist. It does not exist in digital. If you want to be convinced, you have to look at how the laws have been enforced. It is a complex process. Sometimes it takes two years of negotiations of discussions between the big tech and the consumer protection agencies to enforce rules that should be self-enforcing. I think it will be complex. I also think that the DMA will probably lead to a constant and deep oversight of some big tech. The tech regulation, which is about to be adopted, will evolve to a kind of banking regulation. I think this will not be in competition law, hit and run strategy of the agents. When there is a problem and then you leave. You need a constant and deep oversight. It is putting us in the regulatory environment and not the competition environment, an environment BEREC knows very well. What does it mean in practice? The Commission will have a key role. The Commission will need to orchestrate an eco-system of enforcement. In a way the Commission will develop a kind of eco system. The commission will be in the centre. It is important we have a good cooperation between the two services. DG Comm and DG CNECT. It is important there is enough people. And also that those people have a key culture. Every administration, that's normal and that's good. The Commission will have to evolve like less bureaucratic. That is a cultural revolution which won't be easy. And the Commission will not be able to do that alone as the previous speakers have said. It will have to evolve and have a close dialogue with the gatekeeper, the complementor and competitor of those regulatory gatekeepers. And it is important they are involved in particular in the design. And sometimes more than what has been the case in some anti-trust cases. There have been cases against big tech. One of the weak points beyond there was a law. Often the remedies have not been effective enough. Why have they not been effective enough? There are several reasons. One of them is that the discussion with all the complementor and competitor in the remedy design was not deep enough. I think it will be important in implementing the DMA that that discussion is deep enough. And then the national authorities. I fully agree with what Andreas and Michel have said. It is very important that not only the competition authorities are involved, but also the regulatory authorities. They have experience in regulation. BEREC has a very important role to play and plays an important role already. But on two things. One is on the number independent communication services, because there is a clear overlap independently in the interoperability discussion between the DMA and the electronic communication code. But I think beyond. Because beyond the services

under the competence of the national regulatory authority. Also for the other digital services, not directly on the competence of the telecom regulators, but for which they have experience in ensuring interoperability, in ensuring access to platform and data. So I really hope that the European Commission will take the invitation that Michel gave of using the expertise which is a round to design the remedy. The Commission will be under strong pressure to deliver in a short timeframe. I think it is a bit too tight. Which are extremely complicated. It is better to discuss it at the beginning. And then having a lot of problems revisiting the remedy. As with the Google shopping case, as with the Google Android case. There have been integrations in the remedies. It is better to discuss deeply first instead of waiting for the second iteration of the remedy. Thank you.

Philippe: Thank you, Alexandre. Andreas, you heard Alexandre. Don't dream of self-execution. That big tech is going to become some kind of banking regulation. Very complicated. Is this strengthening your resolve to push for the digital regulators you proposed? Are you ready to fight?

Andreas: We are ready to fight and we have already been fighting. I think we also have to be realistic. If this law will be voted, there will be let's say some 10-15 elements for gatekeepers to be respected, enacted and implemented. And given the variety of directions, that is not something you do in a minute. You have to prepare this. You have to get it right. Because the penalties associated with it are very tough. Therefore I think we should also give credit for the enactment and for the implementation and look with some sort of when it is done, satisfaction of what has been achieved. That is not an easy fruit to be used. It is a tool that really needs attention. For that reason, I think it is very helpful if all the regulatory authorities in the area work together. No one is pushing too much. Everyone is reflecting on how it can be done best. It is clear that we need a very strong cooperation in between authorities and we need more people in the authority that have to implement the rules, which is the European Commission.

And therefore the first fight for a good law is just about to finish. The next fight will be how this will be enforced. And that cannot be done with only 20 persons. We need at the Commission data analysts, lawyers, economists to make it a reality. We want to enforce it in time. And avoid the consequences that Alexandre has mentioned that we had been facing with competition policy cases that had taken too long. It is a real challenge. And we should try our best to face the challenge.

Philippe: Is there a question from the room? I have to do my best to spot them.

Yes. Please. Paolo from Etno.

Can we have a mic here please?

- We are not used to in-person meetings.
- The gentleman. Raise your hand.
- Thank you very much. Thanks a lot for the update and also considerations. I would like to go back to maybe one point that was raised by Michel on interoperability. And it is a question maybe for Alexandre, who has long experience in analysing in the tech sector. This push on interoperability as a way to promote alternatives and shift to customers to smaller alternatives and European alternatives. Is it going, in your views, to only have a positive impact? Or is there a risk that more interoperability, more portability, may also give way for big tech to find strategies to cannibalise customers and leverage more interoperability to in fact undermine their competitors, which is the unintended effect. Thank you.

Philippe: For Alexandre?

Alexandre: Thank you very much. As I have the screen in the way. To come back on a point that Andreas made about cooperation. I think it is very important. In banking regulation we have the joint investigation team. Which are setup between the ECB, the equivalent of the Commission for the DMA and the national financial supervisory authority. It seems to work relatively well. It could be an inspiration for the next steps. On interoperability. Yes, overall it is good to open the platform and ensure this interoperability. Whether it will benefit only the big and not the small. I think about the GDPR. I am not sure. The GDPR is a rule which is symmetric. So which applies to big and small. Here it only applies to the big ones. The obligations are on the big ones and the rights are for the small one. This is a way to alleviate the problems we had with the GDPR.

Andreas: We are very concerned on how digital markets have been jeopardised by the market dominance of the gatekeepers. That is something we want to fix. But at the same time we also have to see that in the last 10 years telecom markets in the US have been going up by 30%, and in Europe minus, I think, 29. I don't know. It is more or less a figure which has exactly the same development upwards in the US that we have in Europe downwards. Now is it useful for consumers how we have been creating the markets? Yes. Is it attractive for companies to invest? No. So we have to rethink what we can do better to create incentives to invest in Europe. In the telecom market I would say again, in digital market finally. We need regulation and rules, but also a lot of flexibility that investment is done in Europe. And on that I think we have not given enough thought in the last time. That to be added.

Philippe: On this business of number of independent ICS. We had a number at coffee breaks, informal conversations among economists, on whether it was pro competition or whether it would reinforce the dominant position of those in place. Opinions varied. On the one hand, on the

other. In your opinion or of the Parliament, is it clear that mandating interoperability, and ICS would boost competition, create more competition to the gatekeeper platform?

Andreas: We haven't done impact assessment. This is an amendment of political groups and colleagues. Obviously, there is a fair concern with, in the Kindergarten, the parents' group, on the same company, I won't mention it now. The football clubs, it is always the same. If you are not part of the eco system, you cannot access it. You have to be there. Is it a gatekeeping position, is it a bottleneck? Absolutely. Will there be other companies wanting to use the open APIs of the company? I doubt it. Trema has its own business model. They won't do it. They have no interest. Will Signal try to do it? Probably not. They will lose attraction for people to change. So what is the most likely outcome? That a newcomer ICS will want to come into that market and absorb the possibility that regulation offers. I think it is fair but it is linking to the point I made. That will be rather again a one curb that goes down for investment in Europe and another one going up in the US. We should not complain. There is an issue to be fixed here. But this sort of interoperability can only be done if there is a market failure. And on these group chats there is a market failure. For that reason it is sad that the Commission about that point doesn't seem to be able to deliver at the moment.

Philippe: Andreas, there is a question from Anna. She asked the following question. TF1, the French TV channel. You had an interesting amendment. Whereby social networks would have to validate the audience numbers by an independent third party. By Neilson or whatever. So that the audience figure they communicate to advertisers is true. Is that something you will be standing by?

Andreas: Absolutely. What we want to do. It was a personal concern for me. To make these markets again competitive. And that can only work if there is a much better insight in these markets. For that reason, especially on the market of advertisement, we need more transparency. That I think is Article 6.1G. We will create it. We will also place in Article 5A the combination effects. There will be a need for more transparency. And if we manage then also to have some stuff on fair reasonable and non-discrimination, Article 61K there is a set of rules that can have massive effect. Can it be done automatically? Probably not that easy. There is guidance of the Commission needed. If it is done, for sure there will be an opening of a market that so far is closed. Those companies that are there from the US, Europe and from wherever in the world they invest the opening there in the future.

Philippe: Thank you for your time. Good luck tomorrow. Please join me in thanking our great panellists.

(applause)

Philippe: I am delighted to introduce Ilsa Godlovitch, from WIK from Bonn. Who will present a report she prepared for BEREC on sustainability? The floor is yours Ilsa.

Ilsa: Good afternoon. I am just waiting for the slide to appear.

Here we go. This is a study we were asked to prepare by BEREC on the environmental impact of electronic communications.

I'll start with some facts and figures. We reviewed a range of literature and found from this overarching review the ICT sector is responsible for around 2-4% of global greenhouse gas emissions. Within that, the part that is primarily in the remit of telecoms regulators, highlighted in this slide in grey, accounts for less than one quarter of the emissions from the ICT sector as a while. If we look into that box more deeply, a lot of the impact, the majority, appears to come from the operation, as supposed to the deployment of those networks. And there is an equal from fixed and mobile networks with potentially a growing contribution from the mobile side. If you look at the other areas. Data centres we estimate account for 15% of global greenhouse green emissions. And terminal equipment is 60-80%. A lot of the effects come from larger equipment such as TVs and computers.

An important point here, where is this heading? This is the picture today. We reviewed literature about where emissions are going. And this very much depends on what is known as the rebound effect. To what extent will improvements in energy efficiency outweigh the trend towards increased consumption of data. We see different estimates here. Ranging from a stable consumption of electricity and greenhouse gas emissions within the sector to a situation where the ICT sector could account for as much as 14-24% of global emissions by 2030-40. We didn't look closely in this study about the knock-on effects in other sectors in transport and buildings. But we have prepared other studies which look at that in more detail.

We looked at the telecommunication of the different stages of the lifecycle. A graphic from the study. We can divide it roughly between the deployment phase, the manufacturing of cables and equipment. The upgrading, construction. To the operation phase. We were talking about using power of the maintenance of the networks. As I mentioned before, industry estimates suggest the greatest environmental impacts are linked to network operations, about 90%.

And within that, the largest portion probably stems from the access network. There are also some impacts from the deployment phase. I should highlight here that these don't only relate to greenhouse gas emissions, but also other impacts. The consumption of raw materials, the effects on land and water and so on. During the decommissioning phase, again, most impacts relate to resources – soil pollution, waste management and so on.

As part of the study, we interviewed a number of telecoms operators as well as equipment manufacturer to understand what strategies they had put in place to limit their impact on the environment. What I should point out is that several operators we interviewed, in fact quite a few of them, had set targets to achieve net zero emissions. And the target range came between 2030 and 2050. There were also a number that made commitments to use renewable energy, reduce waste and limit toxic substances. I have to say that actions taken by electronic communications operators to limit their environmental footprint are very much consistent and dovetail with their economic interests. In a sense, a lot of these activities serve to reduce costs by reducing energy consumption, particularly important in this day and age with the rising cost of energy. And reduced duplication digging. As you can see from this diagram and the report, the different actions that telecoms operators reported taking in the different phases – deployment, operation and de-commissioning.

Here is a somewhat interesting point. I think it was the most interesting aspect of the study, and that was what might be the potential trade-offs between achieving greater, or limiting environmental impact and potentially some of the other objectives that regulators need to achieve in the context of electronic communications code, for example.

It struck us that if regulators seek to reflect environmental concerns, this might create tensions or trade-offs with existing regulatory objectives. I listed a few of them here. One is, what about the trade-off between energy efficiency and technological neutrality. We know that fibre to the home is more energy efficient, in particular per gigabit, than other legacy technology including cable and FTTC.

The framework requires regulators to be technologically neutral. So how does it fit with the concept that if you want to be energy efficient it would be better to promote more advanced technologies such as FTTH? There are other potential trade-offs between objectives such as infrastructure competition and network sharing. We know that it is more energy efficient and more efficient in the use of resources to share physical infrastructure and even active infrastructure in some cases. What about the effects on competition and innovation? Are there trade-offs there? Strategies to reduce energy consumption might affect quality. Is it necessary to have objectives to achieve complete coverage of certain mobile technologies when you know they won't be used in certain parts of the country. Perhaps there could be trade-offs between one and the other. Another interesting point: what about content? Is there a trade-off between having ever-higher digital resolution or trade-off between bitcoin or other digital services which might consume a lot of energy, and environmental objectives, and what is truly required or needed by consumers? And also what about the trade-offs between the environment and costs? More environmentally efficient technologies like fibre might cost more than alternative technologies you could deploy, for example in rural areas. What about upfront costs to deploy

self-powering stations, which are perhaps more costly in the initial phase than using an alternative approach. What are the ways in which those trade-offs can be made? It struck us that if and when regulators take it into account, they might need to do it by using a cost-benefit analysis approach.

Here is the final part of our study. We were asked: what role could NRAs potentially play in this field if it is of interest for them? First of all, some open questions. What should be the role of the NRA? Versus the environmental agency. What should be the role of horizontal measures, covering all sectors, in limiting the emissions and other environmental impacts from telecom versus measures targeted at specific sectors. There were, however, a number of agreements. We need global action which covers the whole lifecycle. We need consistent data, this is very important. It is rather difficult to compare some of the data we received. And in general that the collaboration with the environmental agency is important.

On the righthand side, we summarise some potential avenues that NRAs could look at if they want to be more closely involved in promoting sustainability. They could, for example, engage in data gathering and benchmarking exercises. They could build awareness amongst consumers or indeed telecoms operators. They could promote the deployment of new technologies, support the switch off of legacy technologies. They could promote the use of existing infrastructure. They could also look at potential incentives or even conditions in the context of certain tools such as spectrum awards, state aid, and I know this has been discussed in the review of the state aid guidelines. They could also get involved in other elements, beyond electronic communication networks, such as in customer premise equipment, which is responsible for a large proportion of emissions in this sector. But there are important constraints. What about the remit, the budget. And, as I mentioned, what about how this fits in with existing objectives under the telecoms legislation, under which NRAs apply the rules. The code and notably the broadband cost reduction directive.

Our last comment was that even if NRAs don't get involved in sustainability efforts in the context of telecoms regulation, there are other initiatives through which they could get engaged. That includes the UN sustainability goals. The European green deal. And national sustainability plans. I would encourage you to read our study, available on the BEREC website for more information. Thank you.

(applause)

Philippe: Thank you very much Ilsa. While you prepare your first question to Ilsa, BEREC is asking me to remind you to respond to the public consultation on sustainability, which is open until April. Who wishes to ask the first question? Please. Gentleman in the front here. Can you bring a mic? Could you please stand up? Otherwise the camera cannot catch you, I am told.

- Thank you. Really interesting subject and presentation. It's Matthew Howett from Assembly Research. What you were looking at in terms of the NRA's role, do you foresee any kind of role in monitoring the compliance with the various targets and commitments that operators have made? Particularly if they become a sort of differentiation when selling to consumers. Who is keeping checks on whether or not they are hitting the targets they are making. Is there a role for the NRA in that exercise?

Ilsa: Interesting question indeed. It is up to individual NRAs and perhaps even more importantly Member States to consider who should be involved in monitoring these commitments and how.

Philippe: Thank you. Another question for Ilsa?

While you think of one. I know one scenario. You need a crystal ball to look into the future. In one scenario I was staggered by the possible energy consumption of the ICT sector. 14-24% you said. That is in spite of sector adopting new technologies like 5G. Do you think that sooner or later we will have to promote digital sobriety? In other words, convince consumers that they need to consume less data? By perhaps limiting the quality of the video they watch? Is that a path to go down?

In our sector, because we are telecoms professionals, it is all about more efficient networks. But is there also something to be done on the consumer side, of consuming less? I am asking the question.

Ilsa: Another very interesting question. I don't have a concrete answer. That could probably be another area for debate. What is the extra value of very high-resolution video on a small screen? Are there services out there like cryptocurrencies or bitcoin out there consuming more data than is warranted from an economic or environmental perspective. I can't answer those questions, I think it's something that needs to be considered rather carefully. Interesting, though, that there were some limitations on the resolution during the COVID period for other reasons. I wonder if consumers noticed the difference.

Philippe: Annemarie is confirming. No question?

Then just a comment from me. Great presentation, Ilsa. I particularly enjoyed the trade-off between sustainability and you didn't say neutrality, when you talked about quality of service.

Competition, coverage, and so on. Really an excellent point.

Our time is up, Ilsa. This is a topic to which BEREC will return often in the future. I am speculating but I think I am probably right. Thank you again, Ilsa.

Before handing over to Kostas for the final remarks, I am asking you to please grab your phone. You will see that BEREC is a truly transparent organisation. Grab your phone. I know you are tired. Thank you, Luc. Grab the QR code. And answer this question.

The response will appear on screen.

Will you dare to do that, Bernardo? Go ahead. Respond.

You can come on stage. It is not too bad. It is pretty good.

Thank you very much. Thank you also people attending online for your response.

How interesting was BEREC stakeholder forum? It's not for me to decide.

I wish I could organise conferences with such good ratings. That's really great.

Thank you. Thank you very much.

On this I'll give the floor to Kostas for some concluding remarks. Thank you.

Well done, Kostas. Show the results.

Kostas: I haven't seen the results, but anyhow. Now I can see.

Thank you, Philippe. I think it has been a very interesting day. We started early in the morning with the meet and greet sessions and continued in the forum in the afternoon with very interesting discussions, fruitful discussions and important topics.

Well, many thanks for these results. This is a great result. This means our programme, our agenda has fulfilled your expectations. I would like to, before closing the event, the forum and moving to the well-deserved evening reception. I would like to thank all those that contributed to the forum. First our speakers who provided us with very useful information in the field of expertise.

Secondly, I would like to thank BEREC office. In particular our director Laszlo and the communication team for organising everything, for setting up everything. Taking care of the details and collaborating with my team at the EETT for today's event. I would like to thank our co-chairs. Not only because they got involved in the meet and greet this morning but also for the work they do in BEREC. Of course I would like to thank our moderator, Philippe. He has been once more an excellent moderator. Amazing.

And last but not least I would like to thank all of you, all the participants for being a very interactive and amazing audience.

So, once more, thank you very much. And see you in the reception in a few minutes. (applause)