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Welcoming words by IIC President Chris Chapman and BEREC Chair Michel Van Bellinghen (BIPT, Belgium)

CHRIS CHAPMAN: Chris Chapman here, President of the IIC, and a very good morning to everyone and to you in particular Michel. Well for me here in Sidney it's actually goodnight, but for most of those participating, it's good morning.

The collaboration we're about to benefit from over the next two days follows the great success of the conference jointly held by BEREC and the IIC in Riga back in what I call BC, it was actually in July 2019, being the year that the IIC was celebrating its 50th anniversary and BEREC was celebrating its 10th anniversary. Shortly after that Riga conference, the two organisations agreed to continue collaborating, biennially. We're therefore delighted to be co-hosting the IIC/BEREC Telecommunications and Media Forum 2021, albeit as an online conference this year. As tough and as deadly and as gut-wrenching, and as destructive of norms as the ongoing COVID-19 pandemic has been, another reality is it has underpinned TMF's, not just its key, not just its necessary, but absolutely vital role in societal resilience, digital transformation and the revitalising of economies over and above being also a stark reminder of the indisputable necessity for digital connectivity, for all. The long anticipated, much debated shockwaves of digital technology and climate change, and a global viral pandemic are being felt all around the world, and indeed across all levels of societies. This has brought a significant range of policy questions, that have been bubbling away for years. It's brought them to the fore, into the mainstream, and it's imperative that this moment not be wasted, that the

opportunity to reset for the future is harnessed. This collaboration with BEREC has attracted close to 400 attendees, not just from across Europe but also from North and South America, Africa, Asia and Australasia. I am really looking forward to hearing from our terrific line-up of speakers representing, regulators, industry and civil society as they use this global platform to debate and discuss and advance our understanding of key areas in public policy in this post-digital age, and to seize the moment to ensure that the opportunity for expedited discussion, policy direction, and action does not flounder.

Before we whet your appetite on the specifics of the agenda, I wanted to say how grateful we are for the support from the terrific team at BEREC and BIPT, who have helped make all this happen, in particular Ilze, Mieke, Vera, Charlotte and Yannick. Now, I would like to hand over to my great friend Michel Van Bellinghen, who is of course Chairperson of BEREC, the Body of European Regulators for Electronic Communication in 2021, a fitting tribute to the exceptional work Michel has done for many years as Chairman of the Council of the Belgian Institute for Postal Services and Telecommunications. Michel and BIPT have themselves been great supporters of the IIC and as so far back as I can remember we have always had the most stimulating TMFs in Brussels.

I know that Michel is looking forward to welcoming you all and explaining more about the sessions that we have planned for today and tomorrow. Over to you Michel.

MICHEL VAN BELLINGHEN: Well, thank you very much Chris for your kind words and good afternoon everyone, and welcome to this IIC/BEREC event. Having a longstanding tradition of hosting the IIC TMF Brussels here at BIPT, needless to say Chris I would have loved to welcome you and all participants in Belgium today, but I am optimistic that this will be the case next year.

Well, speaking this year on behalf of BEREC, I am delighted of course to introduce the sessions that we have planned today and tomorrow with so many outstanding speakers, moderators and panellists. But before doing so, please allow me to say a few words on our priorities based on the BEREC Strategy 2021-2025 and on our Work Programme 2021, and first is to promote full connectivity and by doing so incentivise investments and EU leadership in 5G and fibre. This means prioritising the work that improves the general

conditions for the expansion and the take up of secure, reliable and competitive very high-capacity networks, both fixed and wireless across Europe. In the backdrop of the connectivity recommendation of the Commission, BEREC and the NRAs have been involved in the establishment of the connectivity toolbox that Member States are implementing. We also very much welcome the agreement on the recovery and resilience facility, and the other initiatives of the EU Commission's suggested Digital Compass.

The second priority is to make sure that BEREC is widely acknowledged as a trustworthy partner for the EU institutions in the backdrop of the European Digital Policy and BEREC has already issued some opinions this year, an opinion on the DMA, and an opinion on roaming regulation, an opinion on NIS2 directive, and we also contributed to the preparatory work for the review of the Broadcast Cost Reduction Directive, and depending on the topic we have also reached out to the European Commission, the European Parliament, their representatives of the Member States, and/or counterparts in charge of services, privacy and media.

The first priority is to upskill the organisation fit for the digital age and the related challenges of the technology's march for the benefit of Europe and its citizens. Because of the increasing cross-border nature of digital services, it is necessary for BEREC to expand its knowledge in new areas at digital age. That's what we have done so far for the regulation of digital platforms, but also for the Green Transition.

Regarding sustainability, we still need to further expand our know-how in line with the upcoming Green Deal and the 2030 targets, and we need to develop a better understanding on how to reduce the carbon footprint of providing digital and electronic communications services. As you can see Chris, those items are well aligned with the TMF agenda for today and tomorrow. We'll have first session on Recovery, Resilience, and Delivering the Digital Decade, followed by a second one on Digital Markets Act, DMA, and Digital Services Act, DSA. Tomorrow we will start with a session on Green Growth, Sustainability, and ICT's role in the climate change agenda, to line up with the secure connectivity and critical infrastructure provision session. So, with that it is my pleasure to hand over to my esteemed BIPT colleague Jack Hamande who is the moderator of our

first panel first speaker on the theme of recovery, resilience and delivering the Digital Decade. Over to you Jack.

Panel 1 - Recovery, resilience and delivering the Digital Decade

JACK HAMANDE: Hello everybody, I hope that you can all hear me. Thank you, Michel, thank you Chris, for the wonderful introduction and thank you very much to IIC and BEREC for organising this conference today.

First of all, I will be happy of course to inform everybody that we have a wonderful panel and participants to this session, which it's called Recovery, Resilience and Delivery in the Digital Decade. I am happy to tell you that we will have an introduction from our keynote speaker Rita Wezenbeek that you know and is Director of Connectivity in DG CONNECT. Then we will have Bouthheina Guermazi, from the World Bank, Lisa Felton from Vodafone Group, and Manuel Kohnstamm from Liberty Global.

Good morning everybody, good midday and good evening, because I think we have a session which is covering participants from all over the world. Then welcome to everybody, and before we will move to discuss of course the panel, I would like to do a short introduction then if you can show the slides, please.

Just to remember that we're talking about recovery, resilience and delivering the Digital Decade. Next slide please. In just a hundred days, last days, all over the world we were facing the same challenge. Next slide please. We changed the way we live; we work and we communicate. A good example today we are participating, of course, in this session. What was changing was just introducing a new normal, taking shape and made of a number of uncertainty and opportunities by changing the society, which had to reshape all the way we were doing, but also affecting supply chain fragility and showing that it was a serious issue, for example getting primary needs, components, of electronic communication services, but also for healthcare and so on and so on, but what we saw also in society was changes in behaviours of users and we will discuss that later on. Next slide please.

Following the President von der Leyen, there was a proposal for a Common Digital Plan towards 2030. The communication set up by the Commission, it's a vision of what is a successful digital transformation and what it will mean for Europeans by 2030. If you have looked to the plans we have on the table, and we will be happy to listen Rita in one

moment, is that we are talking about recovery and resilience plans, but at the same time, we are discussing about a Digital Decade, bringing us in a new world of digital services in 2030.

Next slide please. But of course those digital services is also connecting a number of expectations linked to the green and digital transitions, and we will discuss that of course during this time. What means digital transition in green transition and digital transition, it means touching innovation of buildings, touching energy production, infrastructure, and on the digital side making sure that we invest in secure networks, infrastructure and so on and so on.

Welcome Rita, it's a pleasure to welcome you today. Of course, you know I will give you the floor just in one second and let me allow for the audience which is from all over the world today to introduce you for the very few who does not know you already. You are Director of Connectivity through DG CONNECT, which is the Directorate in charge of the Commission to ensure widespread access and take up of very high-capacity networks for all citizens and businesses of the European Union, but before joining the DG CONNECT, you were having an important role at DG Competition where you were Head of Anti-Trust and Telecommunication Unit. Which I strongly believe that you were very touching sensitive and transversal issues within the Commission and Europe. Of course Rita, we will be happy to listen to you, afterwards we will exchange a few questions with you from the panellists and of course we are all listening to the Commission and what we would like to understand it that what exactly is the Digital Decade, the recovery plan, the resilience and so and to be honest, maybe I should not disclose that but, we are between us, I'm a bit lost. Then I hope that we will all understand better where we have to connect the dots, from the previous and past plans and so on and of course the new plans for the Digital Decade. Then I am happy to give you the floor, Rita, and it is a pleasure to welcome you today.

RITA WEZENBEEK: So thank you very much for this wonderful and teasing introduction, also thank you very much for the BEREC Chair and the IIC Chair for inviting me to speak on this very topical subject for today. So the recovery, resilience and the Digital Decade.

So, I should perhaps mention that we have worked very pleasantly and closely together with BEREC over the past year on issues concerning the COVID pandemic and connectivity, and we look forward for instance to the report that is now being prepared by BEREC on the lessons learned from the COVID pandemic for electronic communications networks.

So, you have already wonderfully illustrated that with your slide presentation, that the COVID pandemic and its impact on the economy and society have enormously underlined the crucial role of digital technologies for people, and it acted as a catalyst of major geopolitical developments. So, we also see that on the other hand, the COVID pandemic has exposed the vulnerabilities of our digital space and Europe's dependencies on non-European technologies and the impact of disinformation on democrat societies. So that means that, also since the European economy was hit harder than by any economic other shock during its existence by the COVID pandemic, it has become obvious that we need to adjust our thinking and we need to strengthen the resilience of our internal market. We need to analyse and address strategic dependencies. We need to, of course, as you already mentioned, to accelerate the twin transition and we need to ensure that the digital transformation of the next Digital Decade is coherent with our rules and our economic interests and our human values.

So, this is also the rationale, the coherence with our human values behind the concept of digital sovereignty. If we want to determine our own destiny, we need to also become digitally autonomous and resilient. That means that we should focus on enhancing our capacities in key technological areas, notably connectivity, data, cloud, microeconomics. So we need to carefully address our strengths and weaknesses and we feel that currently the pace of Europe in digitisation and the convergence of Member States are not yet sufficient and the success of Europe's digital future as a global actor is not yet assured without taking further strong, proactive measures. So then we focus on what does this Digital Decade communication now propose in order to get there?

So the Commission has announced that it will propose a policy programme by autumn this year which is a very ambitious calendar for me and for my colleagues. That aims to provide

greater coherence and visibility with respect to the digital goals for a digital transformation and it does that in four dimensions. It does it in education and skills, which is of course key to bring the benefits of full digitisation to everybody in Europe. In infrastructures, in transformation of businesses and in government.

So the Digital Compass Policy Programme that we are preparing now is, will intend to operationalise the Digital Decade ambition by establishing first of all clear targets along the four cardinal points. By also establishing a robust governance, in close corporation with the Member States including reporting and monitoring mechanism and a framework for what we call multi-country projects.

So in this context it is, of course, good for me to take the opportunity as Director of Connectivity to underline the importance of connectivity in this whole landscape. We feel connectivity is not only important for citizens and businesses as it has always been, but the deployment of very high-capacity networks and 5G infrastructures, will be the basis for the development of the whole array of smart applications based on that connectivity.

So we feel that a European approach to building digital capacities is indispensable, so cutting edge European capacities require critical mass of funding and alignment of all the actors it and also requires joining efforts and pooling resources across the Commission, Member States and private stakeholders only that we feel will lead to the impacts and scale we are looking for.

Now in this context, multi-country projects are an important aspect of the Digital Decade framework. We feel indeed as I was saying, we will not get there if every Member State will only look at itself but, we feel that in Europe, with the huge market it has and the huge asset it has already in the context of digital transformation, it is of key importance that the Member States bundle their efforts together with the Commission, together with private stakeholders, multi-country projects and in this context, the Digital Policy Programme will intend to propose a framework that will make it easy and fast to create such multi-country projects.

Also in terms of the governance, I mean, I can indeed reveal a little bit more of our thoughts, but you will also find them in the communication. I mean, the governance to us would be

based on a system of annual reporting, which will be actually very much a revamped version of the DESI report, which will have a lot of added features which allow us to report on an annual basis, whether we are on track with the digital trajectory towards the targets that we have identified.

This reporting will take place on the basis of a traffic light system where we say, things are going well, so, Europe is in the green. Or things are going less well, maybe Europe would be yellow. Or on this specific topic we would be in red.

If we would be in red or yellow, that would trigger a collaborative process with the Member States in order to examine what is needed and in order to get back on track. This is what we have in mind with respect to the Digital Policy Programme. Of course it is very important to note that in the communication we have also announced that we would like to come to the solemn declaration that would establish the digital principles. So basically the principles that should govern people's and individuals' rights in a digital context and it should also guide the European Union and Member States when developing further regulation and legislation in a digital context. We intend that this would be a solemn declaration by the three institutions of the European Union, that would indeed list those principles for the benefit of European citizens. We have recently launched a consultation already in that concept, the development of the principles.

Now, I am happy to signal that the Digital Decade Communication, or the Digital Decade Compass as we also call it, had a very warm welcome by the Member States in Council and actually the responses we have received until now by Member States are that they are happy with what the Commission has proposed and that they are asking us to sometimes be even more ambitious or even accelerate our efforts, which is a of course a very comfortable position for us within the Commission.

In this context, it's also perhaps relevant to mention that recently we updated the 2020 Industrial Strategy and also in that context, we are focusing on establishing let's say the vulnerabilities and weaknesses in supply chains that are crucial, I mean in the Industrial Strategy for a wide series of products and services, but also in the context of digital, on the vulnerabilities for elements that are crucial for our digital transformation. So, in particular

also in this updated Industrial Strategy, we identify clearly the support for new industrial alliances in strategic areas where such alliances are the best tool to accelerate activities that would otherwise not develop.

In this context you can, for instance, you think see about the Alliance on Processors and Semiconductor Technologies that is in development and also the Alliance on Industrial Data and Cloud. This is another, let's say, perspective through which we are working on the digital transformation and addressing also the dependencies that we have in Europe currently.

Also, externally, our ambition is to build a stronger Europe in the world. So this doesn't mean protectionism, it means that the EU's starting point for the international perspective is an open digital economy based on the flow of investment and innovation as an engine for prosperity. That means that we want to be an equal partner in the areas of the digital transformation, and we want to also strongly promote our core interests and values through having a level playing field in digital markets, having of course a secure cyberspace and also upholding European values and fundamental rights online. So these will be the keys of our international approach in the context of the Digital Compass.

So this is done, what I wanted to say about the Digital Compass. Then may be some words about the recovery and resilience facility that of course also plays a key role in this whole landscape of transformation in the digital area. So, as the Europeans knows, maybe not all the non-Europeans know, the European Member States have dedicated a recovery package of no less than €750 billion for the recovery of Europe from the pandemic crisis, this is historic both in terms of its volume and its architecture. Right now, the Member States and the Commission are in full process to make this recovery and resilience package work. It offers us the opportunity to leverage the recovery into a transformative process and in that sense, it is also for Europe, an opportunity that we cannot miss.

So, Member States can now develop and deploy reforms and investment. It is important to distinguish the two and build two key digital capacities, which are crucial enablers for Europeans, for Europe's rapid recovery and long-term resilience.

Now, a few words about the RRF national plans, there we are actually now in a very

relevant and important time because by the end of April, the Member States were required to hand in their national recovery plans in which they lay out how they intend to make use of the RRF facility in order to orchestrate their own, let's say, recovery from the crisis. So it is a little bit early but right now, I can say that 17 Member States have already submitted their plans. Some perhaps need a few more weeks to finalise the plans. We, in the Commission, are currently assessing the plans that have already been submitted. Of course these plans do not come out of the blue, already since October last year, there was a very intense process, in which we worked together with the Member States to develop the plans to the standard that the Council had established when the Recovery Fund was established.

So based on what we see now, most plans consider fortunately, include fortunately, a considerable amount of measures and investments in the digital domain and you may know that the Member States have committed to spend at least 20% of the national endowments on digital. Now, our first indication showed that Member States are meeting, and sometimes even largely exceed, the 20% digital target. So, the reforms and investments cover digital public services, but also implementation of electronic identification, for instance, in the area of digital administrative procedures and also human capital. Basic and advanced digital skills, development of digital skills in education and a whole series of goals.

Here I could ask our BEREC colleague who is managing the slides, I have sent only one slide and that is also because I am always of the conviction that it's good to see something else than a talking head, so this is actually the cover slide but I also thought that today's audience might be interested in the first assessment of what do these RRP plans now say. If you look at this slide, it's a slide that comes from a presentation of my colleagues from DG Recover who are working with the Member States on the RRP plans. This has been shown last week to the European Parliament, to give the Parliament a first impression of where in the digital plans, under the RRP plans, the RRPs.

Here you see, for those who are interested, how currently the division is in the budget that is allocated to digital. You see that a big chunk of the money that is currently allocated

actually goes to e-Government which we think is certainly not bad and in this context I think it's very important also to remind, or to point to the role of the Governments as the entity that can very well trigger the demand and also be at the forefront of digitisation. Now, it is also good to see that we see a lot of resourcing being allocated to human capital, also to digitalisation of businesses and fortunately also to connectivity. So in that context I am happy to note that two-thirds of the Member States are currently dedicating funds to connectivity, so to the rollout of very high-capacity networks and half of those also dedicate money to 5G networks.

So, also I am happy to know that in a number of plans, the investments are accompanied by proposed reforms and in this context, I find very important that in DG CONNECT we were able to help the Member States by at the same time as the plans were being submitted, also submitting roadmaps with respect to how they plan on accelerating the rollout of very high-capacity networks. This was an exercise undertaken by the Member States in the context of the recommendation on connectivity.

So also by the end of April, Member States have submitted their plans on how they intend to take away obstacles, and how they intend to facilitate the rollout of networks, for instance, by very down-to-earth elements as having information points where the rollout of networks is planned to make place. Also, having an acceleration or digitalisation of permit procedures but also on procedures how to facilitate and accelerate the handing out of spectrum. So these plans are also, to a certain extent, reiterated in the recovery plans which we welcome very much.

Now, I am coming to the end of my presentation. Another element that I really find important to highlight in the recovery plans is the fact that fortunately also a number of Member States are proposing what we indeed called multi-country projects. So Member States are making use of the possibility to obtain funding under the RRF for joint projects that may concern cross-border corridors, but also may concern co-operation on what you could call the 'big tickets', so working on cloud infrastructure, on quantum computing, also the big alliances that we have signalled.

So to conclude I find in order to speed up the transformation process, right now, it is very,

very important that all of us, so businesses as well as the public sector, as well as regulators, are delivering on this digital transition. We need to set and stand for our standards, and to collectively project ourselves and build on our strength. We need to pool resources and create critical mass. So, we count on everyone's support, for delivering on this digital transformation. Thank you very much.

JACK HAMANDE: Thank you Rita, I think that you were delivering so dense information and I hope it's not a secret for everybody, but nevertheless I would like to invite the audience if you have questions, please use the chat and we will be happy of course to raise the questions to Rita. I will also invite our panellists to engage immediately with you on some questions, but just for the warm-up, you know, something and you were clarifying, I just want to know what is mind of the Commission for the moment, you were showing a very interesting slide on the national recovery plans. You said 17 Members were submitting their plans, you were touching about e-Gov, human capital, digital companies and so on. What is, for you, the best price, based on what you saw. Oh this is one which is really different is it you know something which is something you say this is not of course comparing countries but just to say this is a good initiative and we can leverage the maximum of capabilities to move to the Digital Decade. Is this something that you would like to share with us which was between us of course Rita, just something to inspire the audience.

RITA WEZENBEEK: Well, maybe two things to highlight. I think one general element is important and already, I already mentioned it is the energy with which governments are also investing or proposing to invest in e-governance, or, and that has a whole wide series of activities so it is e-identification, it is health data, it can be work of universities for instance, where I think indeed this is really important. That can also have, how do you now… I mean, can be an enormous pulling factor for the digital transformation. So that is very important. I personally am also quite happy to see that actually quite many Member States have picked up this element of the roadmaps on connectivity, so we feel that indeed this is a very down-to-earth exercise but it's very important, and I hope also that the people from the industry will endorse that. To facilitate the rollout, we know that there are Member States where actually the need for civil engineering, the question how

can you actually speedily rollout, is of key importance for the transition. So it's very good that the Member States have also made the connection between what they are proposing in order to do, based on their own toolbox, and doing that in the framework of the reforms that are asked for in the context of the recovery.

JACK HAMANDE: Thank you Rita and just, you know before I give the floor to the panellists, just a quick question. You said something interesting, at the beginning of your speech by saying, "We had to adjust our thinking." You said, "We had to address dependencies", and you said of course, no protectionism and so on, we have people here from all the world and it might be a certain concern if the Commission is pushing for digitally autonomy. Can you please help to us understand what is the process ongoing about that, and you know, if you allow me, I will say, was it new? Did we discover that just because of COVID? Thank you Rita.

RITA WEZENBEEK: Well, I don't know, is there anything that is ever really new, no? But to explain I think where this thinking comes from, I think there is a renewed focus at least, or new focus on what we could call the 'European way'. So Europe I think can be seen globally as being at the forefront in certain actions that we would consider, certain policies we would consider ourselves as being typically European. These are, for instance, elements that focus on human values, where we want to put the individuals at the centre, and if you depart from that thought, that you want to know, to develop the European transition, on the European way, on the basis of our own values you have to have ownership of the technologies and the elements that you are using. That doesn't mean that everything needs to be produced in Europe, but it does mean that you need to be an equal partner with others who are producing or delivering such technologies. So, that means certainly we're not looking for a protectionist agenda, but we're looking for an agenda that gives ownership to Europe on the key crucial technologies, to deliver this digital transition. So, we feel that there's a natural link between the digital principles that we're proposing in the Compass, and the need to also work on, you know getting more ownership on the technologies that are needed to underpin those principles.

JACK HAMANDE: Thank you very much Rita. I would like to invite Mrs Boutheina

Guermazi, you know we have had the perspective from the European Commission, we are in Europe today but we have friends from all over the world. We have also the World Bank, which is of course focusing on digital transformation and development and welcome Boutheina, you are Director of Digital Development at the World Bank and also specifically looking to infrastructure, practise, all over the world. Do you have a burning question for Rita?

BOUTHEINA GUERMAZI: I have definitely a burning question. I think first I really want to say thank you for the great overview of the Compass and I have to admit that the first time I heard about it I fell in love. You mentioned it really nicely. It's based on this ecosystem approach where you need foundations around connectivity, but skills, the human dimension and the physical infrastructure are important. But it's important as it changes government and it's important as it changes business, so it's a really nice approach and later I will have the opportunity to show how the Bank is thinking about it and it's really striking to see the alignment on the approach.

My question to you Rita, is how much of, you know, the opportunities around the multi-country approach, is something you know based on the experience of Europe, is something that would be very useful for other countries, as we work with a number of countries in other regions in the world and thinking digital means thinking big by the very nature of the topic, so these regional solutions from the EU perspective, how much of it you think is very, very relevant to countries outside Europe?

RITA WEZENBEEK: Yeah well, I think, so one, the international element of the Digital Compass is that we would look for partnerships also with countries outside Europe, also based on these shared values, on the importance that we attach for instance to a common approach to connectivity, to 5G. So we look for forward to working together with other countries on the basis of such partnerships. I think that nothing would withhold the use of the multi-country projects as we have them in mind under the Digital Compass, also in other parts of the world to facilitate and to accelerate and mobilise co-operation across countries. Because indeed we are talking about development and projects that are too big to carry for one country, certainly within Europe but possibly also outside Europe.

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JACK HAMANDE: I understand that you know the World Bank is just telling you Rita that they are seduced by the Compass. I'm not sure if the audience is seduced or having some questions, then let's have a look to the sector and I would like to invite Lisa Felton from Vodaphone. You know the Compass I understand, and we went quite quickly, it's about skills and but also infrastructure and you know I don't know, but if we talk about infrastructure, new KPIs, Lisa is not bringing additional question for Rita?

LISA FELTON: I do have a question, first of all thank you Rita for your presentation, and we also as industry, really welcome the Digital Decade targets and the Compass approach and the ecosystem approach. I just wanted to pick up on your points around the connectivity reforms in the national plans. Having looked at those do you feel that they are ambitious, and specific enough as measured against your own Commission guidance, which was very good, very clear, and also what kind of policy reforms do you envisage in the upcoming Digital Policy Programme you mentioned, which really help crowd in that private investment which is so necessary.

JACK HAMANDE: Wow Rita, we want to know what is in your mind, please.

RITA WEZENBEEK: Well so let me, maybe first of all issue a word of caution, so currently we are in the process of analysing the plans and, to my knowledge, there is no systematic publication by the Commission of the plans. So I would certainly not want to highlight individual plans but, I can maybe broadly say that the picture is varied. We see very ambitious and very convincing plans where Member States have taken a thorough approach and come with solid views, also ready to implement and sometimes, this has been a little bit less ambitious but I should also say that of course this is the concept of the recovery facility. It is supposed to be a collaboration between the Member States and the Commission and so, Member States are very much in the driving seat and they can overlook based on their national situation, what is feasible and what is desirable. So in that sense, I do not think we can complain. I must say, certainly from the digital perspective I am quite happy with what I see.

Now then, you were asking about the whether there is a specific regulatory agenda? What I would like to say there is that what we have in mind is very much what is written already

in the communication. So, for the Digital Policy Programme, we would see that in particular, as a governance structure, that is intended to implement this communication and so the annual reporting, the collaboration with the Member States, the targets and also the multi-country projects and the vehicle for those projects, these will be crucial elements.

I would personally not think that the Digital Policy Programme is the place to come with you know, specific draft legislation. What I would think is that if we find that in a certain area, Europe is lagging behind, that's the moment to sit together with the Member States and to see what can we do?

LISA FELTON: Thank you.

JACK HAMANDE: Rita you are looking very serious there, then looks like you have maybe in mind that, if I try to translate correct me if I am wrong, it means, 'Please do it, if not, watch out! I will make sure it will be happening'. But just wait a moment, Manuel -

RITA WEZENBEEK: Let me interrupt you there because you left that hanging in the air -

JACK HAMANDE: Okay sorry.

RITA WEZENBEEK: The word is collaboration.

JACK HAMANDE: The word is collaboration, we will come back on that. Thank you so much. Manuel Kohnstamm, welcome, you are from Liberty Global. Of course, you have probably a question for Rita too. I invite also the audience in the minutes we have, with Rita today, if you have questions, please bring them into the chat. Manuel, you have the floor.

MANUEL KOHNSTAMM: For my question, right? Yes.

JACK HAMANDE: Yes please, you know between us.

MANUEL KOHNSTAMM: Rita, thank you very much for that presentation, it was very thoughtful and very thought provoking. I had a question which is perhaps less related to the recovery fund itself, in terms of connectivity funding. You know, looking at back in the past year and indeed the Corona pandemic and everything it caused, within the industry for a long time we were wondering how to stimulate demand for very high-end broadband services. For all the horrible consequences of the COVID pandemic, one thing it definitely

did, it created an instant and massive demand for high-end connectivity in education, the workplace, commerce and science and literally the whole world population recognises the value of high-end connectivity and we should definitely take advantage of that situation.

What do you think and what would you think, is there a role for the Commission in this in further demand stimulation? Because it is such an important element of actually kind of creating the right business cases to further investments in this space.

RITA WEZENBEEK: Well, also here, I would say, it is a good question. I think indeed to me, also, with my competition background, it is always very important to also look at the demand side because in the end you don't want to create something that the market, or consumers, or businesses are not really looking for.

But this being said also there, certainly in the context of the recovery plans, I would primarily look at the Member States to see what they have in mind but we should for instance not forget that even if you look at that from the State aid angle there are possibilities to take measures by the Member States which focus on for instance, providing vouchers to consumers who are then in a position to afford more easily connectivity, and I think also if you talk about demand, what I find then an important element this time not of the, of the recovery fund but also of what we are doing in CEF Digital, is the fact that we would be ready to finance under CEF Digital, this is the Connecting Europe Facility, it's another fund. We would be ready to finance what we call 5G communities. So this is, this would be intended to have a project of general economic interest that would set up by communes, or by universities, or by hospitals that are indeed in the public interest and that would be eligible for financing and that would in itself as we see it, also be able to fulfil a multiplier role and could be an element with which we can precisely incentivise demand.

JACK HAMANDE: Thank you Rita, sorry, I think the panellists have more questions. Do you want to react to that Manuel? I thought? Okay. Lisa, you are on the starting block, you would like to come back on the discussion please?

LISA FELTON: Yes, just a quick question. Another thing you mentioned, revamping the DESI Index and using that as a way of measuring success. I wondered within that revamp, are you incorporating a green element to see how much digital drives green and assessing

that within the overall context?

RITA WEZENBEEK: I know also the sensitivity of that discussion, and I also welcome the alliance and that has been created by the operators to map this area, but one thing to note is that in the Communication on Digital Compass, we have said that we wanted to explore whether we can also introduce a benchmark and a measure for the greenness of networks and data centres in particular. So we are thinking about it. But, of course, knowing the difficulty of the topic, it's not a given yet that we will succeed or succeed to the satisfaction of Member States and industry in that context.

LISA FELTON: Thank you.

JACK HAMANDE: Thank you Lisa. Of course, you were discussing about the Compass, maybe can you just Rita clarify, where do we stand, because with so impressive targets by 2030, like having 20 million ICT specialists in Europe achieving 100% of governments online, with 100% availability of medical records and so on. Can you tell us, is it finished? Or is it still in discussion ongoing with the Member States? Can we negotiate a bit?

RITA WEZENBEEK: Depends on what you, what you would like. So, what I can say is that we have already published the consultation on the digital principles and we would hope to publish a targeted consultation soon also on the Digital Compass. So with a list of questions, where everybody, the public authorities, being the industry, can react.

So, I would personally say that I, this is really a personal note, so, I find if we do such a consultation we have to of course welcome any kind of reaction. Everybody should feel free to say what he or she likes. I mean, as regards the targets, the way I see them is that they have been formulated in a serious intention to be ambitious. So we feel that we should not put the bar too low. We feel also that it is very important to put a dot at the horizon, to know what should be the itinerary, where we are going but if I would talk about the debate to be currently had, I would much more welcome a debate where industry, public entities, industry associations, reflect on what can I contribute to get to the end result. Then have we really identified the right target? So of course, that debate we should not, we should not avoid. But it is to me, more important to know what can everybody, individually or collectively contribute to get to where we want to be?

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JACK HAMANDE: Thank you, then of course I want to read in the glass, what do we want to be? I am sure there will be discussion and what is the timing of the consultation, just to record that to all the participants today?

RITA WEZENBEEK: We hope soon to publish a roadmap and a consultation. I would hope that that could be done within the next three weeks and then it will be a relatively short time to react.

JACK HAMANDE: In other words, not too much holidays for the stakeholders. They will have to work.

RITA WEZENBEEK: And the Commission!

JACK HAMANDE: Just because, and of course I didn't prepare this question and feel free not to answer, but just for the audience, at the time at the Commission we are discussing of course the Digital Decade plans, the Compass on and some on. There is the resilience plans and I tried to connect the things. At the same time there are other initiatives, because your agenda at DG CONNECT and the Commission is very heavy, with a lot of ambition. You have also the review of number of directives, which for example, the NIS2 as we call it and then you know, don't you see and maybe just a question also, is that is it not potentially increasing the burden on the market players with a number of initiatives in all directions? They have to meet new KPI's, they have to fulfil now obligations through new directive reviews and so on. What is currently the situation, how do you see it? Thank you.

RITA WEZENBEEK: NIS is very much about security. To me, security is not something where you can say, I will wait for the next 5 years. If we find now there is a problem with elevators we have to make sure that we repair them now. We cannot say, let's say we invest and then in 5, or 10 years see what we need to do. So this is an issue that is now very relevant that we need to prepare also for a solid future in order to have secure networks and have secure technologies and so, I don't think that we can afford to, to not do that and the only comfort that one could signal is that it will apply industry wide. So there will not be one or two players in industry who will have an advantage. Everybody will have to adjust.

JACK HAMANDE: Then I understand, because you were very straightforward there. This is the menu to have and to take, and we will continue on top of the Digital Decade targets. Is it a good way to translate this message?

RITA WEZENBEEK: Erm, well, that is a question of what is the alternative?

JACK HAMANDE: Yes, okay I understand. We have still few minutes and of course I am happy to receive more questions. It seems that you were underlining the multi-countries initiatives and you were mentioning a few of them. Looks like from a perspective it looks like a very interesting project, you were mentioning the corridors like 5G like we saw in different communications. You were talking about the cloud. How do we stand with those discussions on multi-country projects?

RITA WEZENBEEK: Well, what we said in the Digital Compass Communication, is that we were going to explore whether it will be possible to create, what you could call, easy to mobilise vehicle. So that, for the very important multi-country projects, it will not be necessary to negotiate for 2 years every time again in order to get a proper governance and proper structure in place. We are actively exploring that, that's where we are. Of course in the consultation we look for, we look for input and also by industry on what works and what doesn't work and what are their views, also certainly by the Member States and by other public stakeholders, but, this is where we are. We are in the process of exploring. So, it is too early for me to say whether we can, we can already identify what would be the features.

JACK HAMANDE: In your exploration, what did you see? Did you see something bubbling? I mean if you can share something?

RITA WEZENBEEK: Well to me, the only thing I can say is that it is something that I feel is very necessary. So, in a way, the signal to us and to also the Member States, all of us is, you better make it work. But, but that is the only thing one can safely say right now.

JACK HAMANDE: Thank you very much Rita. I think we just have a few minutes in your agenda. Do you want to share something to the audience today, stakeholders from industry, media, Telecom, electronic communications industry, we have some platforms

here, do you have a message for them and maybe related to the €750 billion plans! I don't know if you would like to share something please?

RITA WEZENBEEK: Well I think for me, you overtake me a bit but I find even as a Commission official I find it is remarkable that in the midst of the COVID times, the Member States and we have been able to come up with first of all this fund, also with the plans and with the conditions, and now that we have the plans that have been proposed and are being wrapped up and in the process of being implemented, it's also very much over to the industry to work with the Member States and just as a person, I mean I have taken up this job in January, and I find it remarkable and also admirable how these things, and also my colleagues are delivering this from their own attic and from their own home offices, and we're working with people in the Member States also working from their home offices. Working with people from the operators who do the same. In the end, the result will have to be that the digging starts, and the networks are being expanded and also the cloud infrastructure is put in place. I would only encourage everybody more to work with us and with the Member States to actually make it happen.

JACK HAMANDE: I think there's a strong message delivered here to the members, and I am sure that the other panellists will be happy to commit on that on the second part of the discussion. Of course Rita you are welcome to stay with us but I know that you -

RITA WEZENBEEK: Unfortunately I can't.

JACK HAMANDE: This is too bad, of course we will discuss and agree about things we will be happy to come back to you. Thank you so much for your presence today, and of course we saw the European perspective, and I would like to invite Mrs Boutheina Guermazi as I said, Director of Digital Development at the World Bank, Department of Infrastructure to give us the world-wide perspective, because one of the questions of course we didn't address in the talk with Rita today is that all those plans are combining altogether. I don't know how do they find their way, but what can we learn from the European side, you introduced the question, and what we did and we do at the global level at World Bank, how do we connect the dots? Do we have a similar - you said you were seduced by Compass, do you have also a compass, and then maybe operators

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across globe will have to follow multiple compasses? You have the floor.

BOUTHEINA GUERMAZI: Thank you so much Jack. Many thanks to BEREC and IIC for the invitation. Just to start I just want to focus a little bit on the Digital Decade, I think it's an incredibly powerful message there. The next decade needs to be digital, we need to think digital first, and I think if we don't, we cannot talk about recovery from the pandemic, we cannot talk about resilience. So a great discussion point around those points that I think are relevant to other countries and continents.

I will talk a little bit about how the Bank is thinking about digital transformation and very nice that we see already a lot of alignment with the Compass, and it was only a few weeks back that the Bank had a very nice digital deep dive with the EC and comparing notes was very refreshing.

The first slide starts by something obvious to the audience here, it's you know the, how fast the industry is moving. Which I think requires all of us to rethink development, with digital not being an afterthought. We know that a digital part of the economy is growing much faster than the traditional one, at a rate of 2.5 times faster, and bigger contribution to GDP. We're also moving to a hyperconnectivity space, where we all know that connectivity is not only counted in terms of people connected to the internet, but also things, and this hyperconnectivity is also a smarter connectivity with AI and data-driven development. We know how important is data, with recent technological innovations, they really led to a massive increase in the availability or real time data that is multiplied through repurposing and reuse. The World Bank just released a few weeks back the World Development Report 2021, which highlighted the framework of how data can improve lives and can deliver potential benefits while important to think about safeguarding against possible harms, and I really invite you to check this publication out. One key message is it calls for a new social contract round data.

Moving to the next slide, and this you I know will not talk much about it because we all know how important digital was in the context of the pandemic. It was important for societal resilience, I think this is how Michel presented when we open the panel. It is I mean we have seen how the increasing mobile internet traffic for example, and we have

seen important lessons that I think are very important for us as we think about the Digital Decade. The lessons that are very clear is countries with strong connectivity, good regulatory frameworks, strong ID foundation, were more equipped than others to harness the digital tools.

The other very, very important lesson is that the concerns round the digital divides are very important and very deep. Increased risks and deeper inequalities, and I think it was called the 'pandemic of inequality'. Just think about over 460 million children in the world did not have access to remote learning during the lockdown. If we think about the gender digital divide, with COVID, we need a whole generation to catch up according to the World Economic Forum so these are important points. I want to move to our compass, I am going to call it the World Bank Compass, and it's basically this house diagram, if you allow I will say a little bit on this the slides. I think the main thing is we are thinking about the sector as a 'T', right, so there are so many things in the digital sector that are linked to the sector as a sector, and this is the connectivity, the policy framework, the enablers that are very important. What we're seeing more of is the importance of the sector as a cross-cutting theme, that enables other sectors to deliver their own agenda, by putting more emphasis on digital. This you know approach that we're taking, is one that embraces an ecosystem approach, thinking about digital foundations, and thinking about supply and demand the at the same time. Trying to move out of the silos approach, and really trying to think about the different foundational elements and here you know, reflecting on what we heard earlier from Rita you will see a lot of alignment on how we think about it.

So digital connectivity of course is the mother of all foundation. Without access to infrastructure that is available, affordable, and safe, we cannot talk about digital transformation. Here we think about it in terms of digital connectivity but also in terms of data connectivity. How do we make sure that there is a data infrastructure, the Clouds, that are needed, to as a foundation for the different application that we want to see.

Staying in the same slide but moving to the darker yellow, this is the other foundation in addition to digital infrastructure, digital platforms. Here we can talk about the importance

of ID for example, very important for digital transformation. As we move to increase service delivery online, having digital ID is very foundational and very important, but it is an agenda that requires a lot of attention. We still have over 1 billion people who are invisible because they don't have an ID.

Then digital financial inclusion, this is very foundational, because if we talk about digital economy we cannot not be able to transact online, a very important foundational element. As important as digital business, here we think about two types of digital business, the whole you know entrepreneurship, ecosystem, the start-ups but also the support to digital business for more than start-ups and how do we make sure that there is enough support because it's linked to the content that needs to fill those pipes and of course digital skills is very important, this is at the heart of the human capital dimension. How do we make sure that people have the skills to use the internet, have the skills to create the content that are very important, and how do we look at digital skills also from skills of policy makers, the skills of regulators, this is a sector that is moving very fast. So this ecosystem approach is very important for us. It is foundational, but you know, this is not the end objective, really when it work when it starts to transform other sectors, and this you know the green layer there. Many, many examples I think we will not talk about all of them but there is hardly any sector of the economy today that digital does not influence to a deep approach, and it's these use cases that create the demand that are very important to push digital transformation, and very important for countries to think about them in a way that there are foundational, then the sectors come and you know, do not replicate the investment, do not replicate the foundational layers.

In the Bank we look at it as a whole World Bank approach, so it's an approach where the World Bank public sector is active but also IFC and [name] and it's anchored into our objectives between goals, it's anchored into helping reach the SDGs.

The next slide, the next couple of slides very quickly on what are the priorities that we're focusing on in the Bank. Priority number one is closing the digital divide. We know there is a divide between countries, of course, the numbers are there. Still half of the world's population need to be connected and there is a big divergence in terms of regional, there

are more regions that need to work harder to get this connectivity. But also I think what is very important and it was highlighted very, very clearly in the context of COVID, is the divide within countries. Of course, the rural/urban divide. The rural population is 37% less likely to use mobile internet than the urban one. As I mentioned earlier the gender divide is getting deeper and really a serious concern, and there are you know divides round affordability. Data remains a luxury for many of the peoples in different regions, the affordability of data but also the affordability of devices so it is still a barrier for bigger uptake of mobile and you know, all connectivity whatever the type of industry behind it.

What we do in the Bank, and we will try to focus as much as possible on understanding better the different dimensions of the divide and also working with partner. It's a huge agenda that you know requires all of us working together, and of course it's a big priority in most of our projects around digital transformation, a big focus on the connectivity part of it. The next priority moving to the next slide is really managing the risks, I mean there is so much about the opportunities that digital offers to the agenda, but there are also a number of risks that we need to look at, and we need to tackle. Here you know, cyber security is really a top priority for us, it really affects the sector across the internet value chain, from the first mile to the last mile given that there is increased software-isation of what all we do, we need to look at it also at the device stage. We know cyber-attacks have increased, you know, globally, and the big-ticket item for the economy.

What we try to do in the Bank is work with many partners around this agenda. We want to tackle it not just as a risk mitigation, I think it's very important also as you know pushing digital transformation when people have the trust, you know there is an impact on increased usage of digital. Data, very important as I mentioned earlier. We need to understand and harness the full value of data to unleash its potential. We need to build trust environment for data and we need to make sure that you know stakeholders have a fair share of the benefits of data through investment and policies.

Another risk here is around dominant players, and the whole platform economy. There is a renewed attention to this topic, a deeper look at competition policy, and we're following the great discussion happening at OECD and WTO, just want to make sure that the clients

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that we represent have a voice around this topic and around these issues. The last one is the whole green and digital, the twin objectives as very nicely presented in the EU thinking. Here, we are working closely with the EU working with a number of partners to tackle this. There is so much digital can bring to the climate change agenda, and as we do it, we need to make sure that any risks, climate risk that digital infrastructure have are tackled by thinking green.

The third priority, moving to the next slide, is thinking about platforms, we are very, very active on ID4D and G2Px. I think ID4D and G2Px data each present very important building blocks for digital transformation but they are seen together as, they are foundational for digital and inclusive and digital economies and societies.

The last priority is embracing a green digital future. This is very important as we cannot afford to think about the sector in a static manner. So this is where you know, we need to think about the new frontier, that are not so new. For many of our clients we need to make sure that as we think about the digital divide of today, we are also tackling the opportunities that come with AI, with 5G and we're working with client countries to think about this and in analytical work and in projects you know, keen to learn from the experience of the EU and other parties on this.

Our work programme on this agenda is built around three building blocks. First, we are a development bank, we do a lot of financing to these digital development activities. Important to mention that the Bank's own journey on digital, kind of followed the journey of the sector. At one point we used to be called - yes?

JACK HAMANDE: Boutheina, it is there that I would like to gently interrupt you because we learned about broad plans and I would like to listen to the sector, we have a view on the World Bank conditions and this is impressive and I am sure we will come back on that. Let's listen to what the sector is thinking, again I invite all the participants to send their questions in the chat. Of course Boutheina will not leave the session, at the contrary, and will be happy to discuss that in a bit what exactly the engagement you have from the World Bank. Then I would like to give the floor to Lisa Felton, who is Head of Global Policy Programme at Vodafone. I will give you the floor, because we heard the key words about

the sector and then you know, what is very important today also is that we heard the Commission, we heard the World Bank, we heard the institutions, what is the sector thinking? We will just listen to you and then listen to Manuel. Please you have the floor.

LISA FELTON: Thank you for that excellent presentation, that was absolutely fascinating.

So we have heard about the Digital Decade targets which we are really supportive of and we think are really exciting. What I wanted to do today is just give you a vision of what that could create for everyone you know, what does 2030 really look like? If you could pop the slides on that would be great. If we think about 2030, we could think what our air is cleaner in cities because it is monitored by IT centres. Thanks to smart city platforms, energy usage is reduced and traffic jams are a thing of the past. SMEs are hopefully thriving with increased revenue from digital tools, giving them access to global markets and creating new jobs and opportunities.

Gigabit technology is available to all if we have achieved the targets and everyone has the digital skills they need to make the most of that gigabit connectivity and to start closing the digital divides. Next slide please.

Telemedicine is the norm, with patients monitored at home for the first time. So we are seeing something completely new. The question then is, is this possible? Next slide please. The one after that, thank you. Perfect.

So this is possible? All of those things are scientifically possible, we are not talking about flying cars here, but talking about very real things that are going to make differences to people's lives. But what I wanted to also share with you is the industry's view of what the barriers are to that and the importance of that ecosystem approach.

So firstly, looking at be digital infrastructure. The EU ambition is for all populated areas to be covered by 5G by 2030 but we are a really long way away from that today. In Europe for example, just over 40% of rural households do not have access to fast connectivity today. This is at a time when that connectivity has been a real lifeline. Those households can't work remotely and access online education. Overall Europe has a growing investment gap of over 42 billion a year and that is taking into account private investment.

The second potential barrier is the lack of digital adoption by SMEs and the deficit in digital skills. The EU ambition is by 2030, more than 90% of SME's should reach at least a basic level of digital intensity.

Our research during the COVID crisis, only 17% of SME's successfully integrated digital technologies compared to 54% of large organisations. 42% of citizens in Europe lack digital skills. SME's face three key barriers, availability and connectivity in the digital tools, capacity to reform due to cost and time, and capability, having the right skills.

The third barrier is the lack of resilience in the public sector. The ambition is that by 2030 all key services should be online. However, even before the crisis, health care and education were struggling with rising costs and ageing populations. There is a 4.1 million gap in healthcare professionals by 2030 that we have to address.

So how do we overcome these barriers? What are the enablers going forward?

Next slide please.

So first, we have to improve digital skills. This is necessary for connected schools, for digital training for SME's, for public sector workers, incentives to drive digitisation. Digital skills are going to be absolutely critical.

The second enabler is connectivity. As we have heard, the Recovery and Resilience Fund is a once in a lifetime opportunity to drive a step change through Europe. At least 20% must be allocated to digital and we have heard today that even more is being allocated to digital.

As a priority, recovery funds must crowd in private investment and should be focused on achieving gigabit connectivity in hard-to-reach rural areas in closing those digital divides. My concern, seeing the earlier slides from the Commission, that this will not be the case.

Finally, policy reforms. Reforms are essential for future resilience. Digital transformation is dependent on gigabit connectivity, therefore connectivity reforms are also essential and must be baked in, in a really tangible way into the plans removing barriers to rollout, having guidelines for networking sharing, creating investment friendly spectrum licensing procedures.

Let me close by sharing some of the key data points which show Europe's huge opportunities here. So digitised SME's have an average of 26% higher revenues than non-digitised SMEs. Rolling out telemedicine could save 48 billion and prevent more than 165 deaths annually - 165,000 deaths, sorry, annually. Implementing smart cities platforms in Europe's top 80 cities could yield energy savings equivalent to the entire energy use of Latvia on an annual basis. If we level-up and achieve 90% according to the DESI Index across Europe, this could drive an increase of 7.2% in GDP. That's a huge difference and we must sure that no one is left behind. I would agree with the Commission, we have to work together, business, Member States, the Commission in order to achieve this. Thank you.

JACK HAMANDE: Thank you very much Lisa, and of course we will come back on your slide because it was a good wrap-up of what you just said and I think that a slide sometimes is good to keep a huge number that you are proposing, we come back in one moment. I would like to invite Manuel Kohnstamm who is Senior Vice-President and Chief Corporate Affairs Officer at Liberty. You were already launching the discussion about the creation when we were discussing with Rita earlier in this panel, but of course I will be happy, we will be all happy to hear the broader view you have in this discussion. Please, you have the floor.

MANUEL KOHNSTAMM: Many thanks Jack, and great to be on this panel. I will share some of the experiences of Liberty Global in this space and the perspectives we have on it.

As most of you know, Liberty Global is one of the world's leading converged video/broadband provision companies, we've now going through quite a few changes and we have adapted actively to changing circumstances, but we now operate in about 7 European countries under the consumer brands Telenet in Belgium, the new Sunrise UPC combination that in Switzerland, VodafoneZiggo in the Netherlands which we own together with the Vodafone Group in a 50/50 JV. in the United Kingdom, we are about to conclude an historic venture together with Telefonica between their mobile provider O2 and our cable system, Virgin Media. This will actually support expansion of the Virgin Media's Gigabit

network and O2's 5G deployment, so I can tell you a little bit of that. Actually we just received hot off the press a couple of days ago, the green light from the UK competition authorities and we will start up the business on the 1st June next week.

Overall across our footprint, we have millions of customers subscribed over 80 million broadband, video and fixed mobile services. We and others have been looking for that magic formula on what will deliver the digital goals to our customers, everywhere in Europe, but in particular during this strange time of the pandemic and post-pandemic recovery that is ahead of us.

We all had a very steep learning curve into the digital age already. We have seen a fast forward into the digitisation of education and in the workplace and discussed earlier today. We should not waste this opportunity. As we go back into a new normal we should build on everything that we learned.

So what did we do so far? We have in the past two decades we have invested billions in infrastructure to expand gigabit connections across Europe. Trying to do our bit to ensure that Europe as a whole can reach its connectivity goals.

We have gone from offering speeds between 10 and 100 megabit to making gigabit ready connections available today already to more than 30 million homes across our European footprint and by far most of our customers actually take products only of 200 megs and higher. Which is you know, already educating that space quite a bit. We're also investing and rolling out 5G services in Europe, both in the mobile infrastructure itself and in all of the fibre backbones needed to make 5G work.

We think, you know, we really are working hard to achieve the Commission's Digital Decade connectivity goals by 2030, and in particular we think that the initiative should focus on countries with significant wide spaces and regional high-end connectivity. There is work to do. In the UK, for instance, we have already committed to expand our high-end networks to over 4 million new households, which we're already halfway doing and we're also looking at opportunities to develop this further into the regions that still need it.

As an industry, we definitely have more work to do. Particularly also in the mobile sites

and in the next years to reach those targets, and there is many challenges in the mobile world as you know. In fixed, after many years of consultation across the geographies where we are now active in, where everybody was consolidating, we are now entering a new stage where most companies are now creating more depth nationally, integrating fixed and mobile networks, and our own fixed mobile convergence strategy is founded on the belief that companies need to provide seamless connectivity of 1 gigabit at least and 5G services as the future of high-speed services. Customers and businesses don't care that much what technology connects them but they need the best and most reliable service wherever they go and whenever they need it. So we now have these fully converged services in the Netherlands, through the VodafoneZiggo combination, and Belgium with Telenet [inaudible] and other areas and Switzerland where we combined the fixed systems of UPC with Sunrise Mobile and then the UK system will be added to that.

We really believe that that fixed mobile convergence is going to be a massive driver of growth, of experience and of innovation in this space leading to happier customers but most importantly to significance in further innovation.

We also keep working on the European security and digital green agenda. Last week we announced a new venture with the company Digital Colony on contributing our digital infrastructure assets including real estate portfolios and edge computing capabilities in particular, into a new company that we will serve to grow, to develop a growing demand for scalable data centre capacity closer to the edge, where customers really are and we think that's going to be a very significant new area.

Another example we kickstarted and that's more in the line with the green agenda, we started a company called Liberty Charge because many of the Europe's telecom networks have very dense networks throughout urban areas that they are really capable of helping the electric charging infrastructure for cars in modern cities.

So, what did the pandemic do for us and how are we adapting to it? We experienced significant increase in downstream and upstream capacity, between 20-40% as you can imagine. Social media traffic went up incredibly, gaming traffic went up 100%, VoD 30-40%. Definitely most of the infrastructure players in Europe had to deal with that, had

to increase our capacity, but weathered that storm quite well. Perhaps in the earlier days we saw some glitches. Also by the way with providers of the streaming services that were very heavily used for the workplace and for and education, but all of that has significantly improved over the past 12 months. I think everybody online will testify to that. You hardly see any streaming services glitch anymore.

You see also very significant new innovations you know, working remotely, business, education, they are all here to stay and will add on new layers of virtual reality and artificial intelligence. Give you one example, you know, I know that our company is now using data from digital workplaces like MS365 because they are capable of actually measuring effectiveness of team co-operation and productivity and ways to improve it. We see some really, really new significant opportunities here.

We agree with the Commission and its industrial strategy and we emphasise the significant opportunities that are there in accelerating development and deployment of digital capabilities and you know as I said before, I think it should really be a two-pronged approach, both working on stimulating those regions that still need the connectivity and demand stimulation which has now got this golden opportunity ahead of it.

The pandemic has demonstrated that the European Union at this moment still suffers from underinvestment in a number of regions and dependencies from other regions in those critical parts in the supply chain and we need to work on that. And there's also still barriers, across sectors, and in digital skills, but the Commission also recognised these barriers of a more down-to-earth nature; inconsistent regulatory approaches, literally building permits, rights of way of local city authorities which are sometimes actually significantly delaying rollout of new networks and fragmented approaches to things like spectrum assignments and all of that still needs to be overcome and more pressure in that area is needed, certainly from the Commission and European authorities. We're very happy and supportive of the European policy revisions that make all that possible.

I think from our perspective also the national recovery plans, you know they should keep that strategic approach towards digitalisation, combine both reforms and investments and lots of positive impact on the future of the European digital space. So with all that we

support that Digital Compass and the targets for 2030 wholeheartedly.

Concluding, we're very happy and proud to be building these resilient networks over the past decades, and we're strengthening now our position with this fixed mobile convergence, we think that is the path forward, and we're very actively looking at ways to innovate on those. In our view, private investment is still a trusted vehicle that will deliver the next stage of connectivity digitisation. The good news is also, certainly in the past couple of years where interest rates were very low, we have seen a lot of money, a lot of private equity money also coming into infrastructure builds throughout Europe, this is something that should be welcomed. It's good to see that some public money kind of injected here as well, but let's, the one thing we should see is that the public money when it comes in is applied to those areas where it's marked failure and that it doesn't crowd out private investment, but we're ready for challenge. Thanks Jack, that was mine.

JACK HAMANDE: Thank you Manuel I would like to invite the panellists of course to react because in the discussion, please I invite again the participants to send their questions in the chat. I just want to come back quickly on your talk Manuel and also Lisa. You were talking about enablers. You were both mentioning policies reform and having investment and so on. Then you know, we were discussing with Rita and she's not there anymore, too bad, about those policy reforms needed and I think you also said nearly everybody in the panel which is a question mark to me that you embrace the Compass and so on, it's not so often that the market players embrace everything new targets and so on but I will come back to that later. Let's just talk one second on policy reform. We have policy makers here, we have regulators, what are the key messages you would like to deliver to them today, what do they need to do at European level, at Government level and at regulators level. Can you please elaborate a bit if you don't mind, Lisa you have the floor.

LISA FELTON: Sure, no problem. We really welcome the fact that we're seeing some Governments really start to adopt these policy reforms which in turn really incentivises investment, and Spain and Greece with the auctions they are looking at are really good examples of that. So our view is that the Member States really need to buy-in to the

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Commission's vision in terms of implementing the connectivity toolbox, ensuring investment friendly auctions and really removing the deployment barriers to the rollout of network and also looking at network sharing. So network sharing is particularly interesting because there is a need for clear guidelines. If network sharing is done in the right way, it can really support efficiencies and energy savings so we also see that one as really important.

MANUEL KOHNSTAMM: Jack I think you're on mute.

JACK HAMANDE: Yes, that's the most favourite thing. I just want to make sure that at least someone tried to listen to me, thank you Manuel. Then what about we just heard from Lisa, friendly auctions, network sharing, what can we add on the list? investment, just allow me because I saw it from the chat, is that there are people saying oh the telecom sector got a lot of benefits from the COVID situation with incredible numbers, and if we look to the communication that Ofcom did recently, a serious increase of the usage of the network, increasing of streaming services and so on, the telecoms sector is a winner from the crisis in a way. But just to come back on the policy first, do you have other policy requirements today? I think we put that on records for the Commission?

LISA FELTON: Are you asking me?

MANUEL KOHNSTAMM: Are you asking me or Lisa?

JACK HAMANDE: You, Manuel.

MANUEL KOHNSTAMM: Well first of all I'm completely concur with what Lisa said, the certainly the investment friendly kind of adjustment of things like the spectrum auctions, is super important. There was a time in the early years 2000 when all governments were interested in was literally getting money in for the Treasury, and they couldn't care less about the impact on investment potential, and that's now changed. We see lot of auction conditions, yes there is a commercial element to it but the conditions in many countries are now such that companies bidding are actually incentivised to invest as quickly in widely as possible. That's good. There are of course challenges, we have the challenges of the network security, which is the geopolitical debates about the mobile equipment,

which has price effects, we're not disputing those issues, but we need to be mindful of the price effects and the shortages they could appear. Not everything is something that can be resolved by policy only.

We are actually today the pandemic, yes, has caused a lot of extra usage of our networks Jack, but it has not necessarily brought a lot of new money into our revenues, right? Also we are seeing some challenges that the pandemic has caused, for instance in the chip sector, we have a significant worldwide shortage of chips which have an immediate knock-on effect in some of the equipment that our companies need. So we're looking for ways with governments and with the European authorities to see how we can overcome these kind of challenges. On a more down-to-earth level, it is literally when you rollout the networks in my experience, local authorities are the biggest limiting factor, the rights of way, opening up streets, co-ordinating with other utility operators who open up streets to make new network build put go faster, that is something that will require constant attention because otherwise it is something that will slow down the growth of these networks.

JACK HAMANDE: Thank you Manuel just to come back just shortly I see on the chat about investment, do we really need to have investment from public funds and so on, to the Telco sector? Is it not the Telco sector already investing a lot, of course we're mentioning the auctions which is impacting of course the P&L from operators, we need big investor in activity or it looks like it's going well?

MANUEL KOHNSTAMM: We have significant geographic differences right, there are certain areas of Europe and you know I live in one, the Netherlands and Belgium, we have near perfect infrastructure competition on almost 100% of the population. But that's not the same in all parts of Europe, there are parts of Europe where there are significant lack of infrastructure competition in the first place, let alone high-capacity gigabit networks rollout. If there is no economic haste to do so then you could make a case there is good reason to use public funds for that.

LISA FELTON: Just on that point, I think you are absolutely right Manuel. If you look back at some of the statistics I mentioned earlier, 40% of rural households don't have access

to fast internet today, I mean that is just you know exacerbating that digital divide, many of those areas will not be economic ones. We know there is already a huge connectivity gap, 42 billion per year. It does require both public and private investment to come together, I think. We have to acknowledge that neither public investment on its own, nor private investment on its own, is enough anymore we do need to find a way of having these financing these areas and also to complement that with the policy reforms that we were talking about.

JACK HAMANDE: Then Lisa, just to make sure we said here to the policy makers you have to engage into these investments. We will ask a few billions money loaned to the World Bank in one minute but then for the moment, but then I am collecting the money but will we discuss the rate just in one minute but just say a bit more when we talk about networks I see in the chat, that is something which is coming back about who needs to invest in infrastructure. Then you were mentioning the right of ways and I understand, just want to make sure that the audience capturing that. We have network security obligations, Manuel, that you introduced in the policy reform or attention or screening that we need do. We had the network sharing and friendly auctions, that you said Lisa. But what about the discussion we started years ago, about the video and over the top entertainment providers, which I see on the chat do not contribute to middle network costs and of course are using those networks, and instead of providing broadband companies with public subsidies, is it a not better idea to change the rationale on asking the over-the-top provider to get and to provide investment to these networks. Of course, I understand this question might be sensitive but nevertheless, Manuel.

MANUEL KOHNSTAMM: Listen, I think that's really yesterday's debate Jack, I don't think anybody is still worrying about that. Partly because the, yes, over the top video on-demand and entertainment services, have for some time been a very significant part of the usage pattern on our networks. Actually during the pandemic, it is, it is a lot more private use, what we are doing here today. The live streaming of hundreds of millions of people at work and at school, in science and everywhere, that is consuming at least as much and it is become part of the society.

JACK HAMANDE: I understand.

MANUEL KOHNSTAMM: The, yes, the, also, many of the service providers that we work with, as you call them, over the top service providers, they are working a lot with companies like ourselves to create more efficient ways of getting their traffic to our networks through co-location, local edge system ingress, so there are ways to manage that capacity usage and if you look at the extrapolation of where it is going in the next let's say, 5 to 10 years, the proportion of video on-demand entertainment services is going to reduce significantly in the total usage of our sector.

JACK HAMANDE: Manuel your response is no. Lisa? is it also no?

LISA FELTON: I think we're talking about different things really. I mean when we're talking about the RRF funds and what they can go into, it's really about the non-economic areas and rural connectivity -

JACK HAMANDE: I was talking about over the top, but I understand it's no. Let's come back to investment. You know the World Bank, and Rita was mentioning collaboration. We heard that several times from the World Bank and from the EU. Then, but then that just in short, because the time is running so fast, how do you see from the World Bank, can you give us a good example from private and public collaboration with an example, and I would like then to ask to Lisa and Manuel what do they think about how to engage about the connectivity on less I will say profitable attractive zone and how engage there between public and private companies? Boutheina, what is the good example you can share with us today?

BOUTHEINA GUERMAZI: Thank you so much. I mean collaboration is key because I mean the public sector alone cannot do it and the private sector alone cannot do it. I see the pandemic created an opportunity for a new pact. We see it even from the discussion of the private sector in this panel.

But we need to do it in a way that does not crowd out the private sector. This is the philosophy of the Bank, we call it the cascade, let's see how far the market can get without public financing. If there is market failure, if there's regulatory failure then there is a big role

of the public to do it.

You know, a number of investments we have done in the World Bank that are based on the TPP model, I mean I can think of an example of Africa, making sure that there is submarine cable connectivity to a number of small countries, Liberia, Sierra Leone, Guinea and Gambia, all of these they were part of the project where the Bank supported the creation of a TPP framework, and the use of public financing from the Bank was only used to cover the part that the private sector could not do it now. It doesn't mean that they cannot do it in the next 5 years, so the development question that we put on the table is, the need for connectivity now sometimes requires you know, injecting public financing but it has to be in a way that does not create an issue to the private sector and to the, to the nature of the sector that is competitive by definition.

JACK HAMANDE: Boutheina, just very shortly, does it mean that you are giving the money? Or do you have to reimburse, or how does it work, very shortly?

BOUTHEINA GUERMAZI: Yes, so the Bank, we talk about World Bank Group so there is IFC investment that go direct to the private sector, and then from the public sector side which I represent here, it's basically, working with the Ministry of Finance, through a loan or a grant depending on where the countries stand in their development trajectory and yes, those resources need to be paid back of course if it is a loan. If it is a grant, no.

Then we do it through this TPP framework where the public funding is part of an SPV for instance. That is a good example. Another one that is good for rural connectivity, is we use reverse auction. We go to the market and we tell the private operators in that particular market how much subsidy you need from the public to make sure you cover those remote areas.

JACK HAMANDE: Very interesting, Manuel and Lisa, based on that the perspective, how do we engage on those types of mechanisms, do you see really a need for it? Where do you see, we were talking about rural area, what is really the approach you would like to underline? Lisa?

LISA FELTON: Really, I am in violent agreement, governments and the private sector and

institutional organisations really need to work together quite quickly to bring together these new forms of cooperation and really sustainable finance that doesn't crowd out private investment as you said, but really works to address some of the digital divides. We have got to remember half the world today doesn't have good connectivity, we can't forget that. But also think it's important to pick up the points made earlier in the presentation that being connected isn't enough. We have already got half a billion people in Africa who have connectivity, but don't actually use it, don't access it for affordability reasons, for reasons that they don't have the digital skills. So you have got to create that demand for digital as well. We have to have the right skills in place. We need to see in Africa the same approach as in Europe that we really digitise public services at scale. Really allowing that access to quality healthcare and quality education, and also SME's, essential to close the gap for those SMEs in Africa just as it is in Europe and in other regions, so violent agreement really.

JACK HAMANDE: Thank you. Manuel I would like to go back to that, looks like we are going back to the Compass? Manuel, do you want to add [inaudible] to invest?

MANUEL KOHNSTAMM: Yes, definitely. So far we have ourselves had a lot to do already in the areas we thought we could make economically viable investments but we are now looking at, as we are increasing the footprint, looking at those projects going forward. Two things perhaps, one is we should remain technology agnostic, right in getting connectivity to rural places and sometimes it is better to accelerate a 5G kind of deployment in certain areas to ensure that kind of connectivity then getting fibre to the farm or fibre to the mountain top, right, which can be extremely costly.

The other thing is we should be mindful of the fact that it's not just money that is scarce in this world when it comes to rolling out superhigh networks in rural parts of Europe in particular. At this moment, there is so much building going on all over Europe in fibre networks, that there is actually a shortage emerging of people digging the streets. It is very interesting but it is, you need to, and not just that, but also capabilities technical, you know, machinery and all the rest of it that you need to make that happen. So it is useful to keep that in mind, it is not just money that needs to be thrown at the problem. It is more than that.

JACK HAMANDE: Thank you Manuel. I think you were touching on something important for the audience today. It is the technology agnostic. You were mentioning fibre and of course you were mentioning Netherlands and Belgium, and we know that in those countries there is not only one type of infrastructure, then think technology agnostic, it is interesting. Is it a message that you would like to push in another angle? I mean, we have to push connectivity and open all, all type of technology?

MANUEL KOHNSTAMM: Absolutely yes. So we you know, we talk about our networks essentially as hybrid fibre networks because we have a lot of fibre. Basically our HSC networks are 95% fibre. We use different technologies for delivery at the last mile but are capable of already delivering 1 to 10 gigabits in the coming decade. That's not the issue.

I am also talking about technology agnostic solutions between fixed and mobile networks because I think certainly mobile connectivity is going to be a very a significant outreach technology for areas which are not going to be fixed.

JACK HAMANDE: I think this is an important message here, not to forget this discussion of course and we will wrap up on that too. Just for everybody and I will start with Lisa and Manuel first because of course we were talking with Rita about the Compass and it looks like you are all seduced and so on, I am a bit surprised honestly? At this time of the day, you know, what is in the Compass and I am just trying to capture the right dimension. We talk about skills. We talk about governments being online. We talk about infrastructure and we have a number of things, connectivity, cutting edge on semi-conductors as Rita was mentioning, data, edge cloud and computing and we have businesses to get them online, and Lisa you were mentioning to that. Don't tell me that you want us to focus on everything at the same time? Today, if you can choose the main priority view from your perspective, what will be the one you said, this is - and I think you touched it in your presentation Lisa and also you Manuel, but I want you to recap to the audience today, this is the one start first and focus on first from the policy point of view and the regulatory point of view, to help the Digital Decade to become real. Lisa, what is the main ones you would like to the audience to focus on?

LISA FELTON: For me, it's, obviously connectivity is critical. You can't have all of these

wonderful digital things without having excellent best-in-class connectivity and I think if you don't do that across all the technologies as Manuel is saying, there is a risk that Europe as a whole will fall back behind other regions such as China and the US.

The other point which I mentioned earlier is skills. There is no point again having all of this wonderful connectivity if nobody has the skills to use it and we have seen you know, the skill level, the 42% of people who don't have basic digital skills in Europe is something that has to be addressed.

JACK HAMANDE: Thank you, I know Lisa, I don't want you to mention all of them. You have the number 2. Manuel what is your top two?

MANUEL KOHNSTAMM: If you asked me the top two of what needs to be done then it is everything to do with literally the national blockades to network deployment and spectrum options, which, but if you asked me what can be done by the Commission?, because I know some of these things are politically very difficult to achieve for the Commission in the current space, I think demand stimulation, and digital skills, I mean that is something where the Commission can immediately put major push behind the digital government, digitisation of the whole public sector and public space would be a massive, massive boost for the sector.

JACK HAMANDE: Thank you very much, then Boutheina you were mentioning your priorities and then based on your experience of course I will not say you will change your priorities, you mentioned them. But when you were listening to us and based on your experience, what will be your advice, gently advice or suggestion, please choose the word you would like, on the Compass from Europe, which I remind is skills, infrastructure, business, and government. What would be your top two?

BOUTHEINA GUERMAZI: I think for it to work it needs to be this ecosystem together because if we focus only on the foundation, and I like how it is presented. It is the physical foundation, that the human foundation, they go hand in hand but without the demand of government and business, those pipes will not have enough contact. So, the beauty of the Compass is like, it is all together in one story. This is the story by the way that Africa is doing on their digital transformation strategy.

JACK HAMANDE: I understand you like the Compass but the two? Just the two? I just wondered, I want to know if we can get a loan or grant, on which one? Just to have an idea? What is in your mind?

BOUTHEINA GUERMAZI: Connectivity.

JACK HAMANDE: Connectivity, ok.

BOUTHEINA GUERMAZI: Yes, connectivity and digital business.

JACK HAMANDE: Digital business. This is very interesting, digital business, I think there is really an opportunity there. I cannot finish, we have just the last minute I would like to ask of course that Manuel and Lisa, do you have a message to the Chairman of, you know that the Chairman of BEREC this year is Michel Van Bellinghen from BIPT and you know I am also sitting on the board to BIPT, what would be a short message to the Chair of BEREC? We are in IIC/BEREC meeting. Lisa, a short message to BEREC chair.

LISA FELTON: Support both Member States and the Commission on the policy reforms, especially the connectivity toolbox. It is a new initiative, the connectivity toolbox. It's taking the best practices across all the Member States, and it's the perfect position for BEREC to come in and make sure that it's implemented properly.

JACK HAMANDE: I promise you I will remind him every day. Manuel?

MANUEL KOHNSTAMM: I am happy that after many, many years of focus on regulation, of our sector, we now focus on investments and I think that that is something that we should keep doing because it is, it is literally what is going to bring Europe forward in the coming decade.

JACK HAMANDE: I will tell him too and I think he was listening. I would like to say thank you very much to you, Boutheina, for your presence, Lisa and Manuel, and of course Rita. We had an interesting session with sometimes a bit shy about all the things, I understand we will have offline some discussions about the Compass and come back to Rita. Don't forget that there is a consultation ongoing, about all those digital criteria that is running from the Commission, and we will have opportunities from the Member States, policy makers, regulators, to engage with the Commission. The message from Rita was quite

clear, we have to collaborate but we understood also between the lines that it's really an invitation to collaborate and to achieve and security will be one of the next panel, will be of course an underlying foundation of the Digital Decade. Ladies and gentlemen, do not leave those sessions. This is the next panel which will be obviously very interesting on DMA and DSA if I am right. It was a pleasure to welcome the panellists. I wish you all of you a good evening if it's evening, a good day afternoon and a good morning for the other ones on the other side of the world. Thank you very much and now we're giving the floor to the next session. See you soon.