IIC/BEREC Telecommunications & Media Forum 2021 - Digital edition
26-27 May 2021

Body of European Regulators
for Electronic Communications
BEREC

International
Institute of
Communications

Transcript of IIC/BEREC Telecommunications and Media Forum 2021

Day Two – Thursday 27th May 2021

Panel 3 – Keynote Conversation

MICHEL VAN BELLINGHEN: Thank you very much Dan and hello everybody. We are arriving at the end of this very interesting Telecommunications and Media Forum, and during the two sessions of this forums we touched upon various subjects, all crucial when it comes to electronic communications. But I invite you to stay with us for a few more minutes, in order to continue these discussions regarding two highly relevant topics. The first one is ensuring secure connectivity and second is closing the digital divide, and for this I am very pleased to welcome Jessica Rosenworcel, who as you all know, has been appointed as Acting Chairwoman of the Federal Communications Commission of the United States since the beginning of the year.

Hello Jessica and welcome. So good morning. I am delighted to have the opportunity to close this Telecommunications and Media Forum with you as I am sure that you can provide us with some interesting insights on the two topics that I have just mentioned.

So nowadays connectivity is essential in our day-to-day life and is therefore importance to ensure that access of end user to electronic communications service can be done in a secured manner, along with the attention given to rollout, intraoperability, spectrum availability and 5G business models, including the acceptability questions amongst the population, concerns relating to security, robustness, privacy and integrity of the digital ecosystem that has grown in recent years and will continue to require the attention of regulators and policymakers.

So on the second topic in addition to that, bridging the digital divide and providing

equivalent access and choice for people with disabilities will be of equal importance, given that digital society would only be possible with the inclusion of all citizens. Therefore, consumer protection needs to be up to new challenges and regulators must be active in enforcing transparency and more generally consumer rights. Finally, universal service obligations must make sure that everyone has the ability and capacity to participate in digital society by ensuring that all consumers have access, at an affordable price to adequate broadband internet services.

So Jessica, let's start with the secure connectivity and critical infrastructure in order to continue the discussion held by the previous panellists, who have shared very interesting points of view, even divergent view, on sector specific versus horizontal rules on connectivity. In a nutshell, whilst Rakuten is totally positive about potential control of vendors intraoperability with open RAN, the European Commission strikes a more cautious note when it comes to security implications being supportive of innovations, of course. In the UK and regulator Ofcom has launched a 5G supply chain diversification strategy, entailing to test open RAN intraoperability and integration of legacy network. Welcoming the certification schemes, Microsoft supports a holistic approach on security, including all sectors.

Open RAN brings opportunity and challenges, there is no black and white story about resilience and security. As a vendor, Nokia underscores the necessity to fully apply the 5G security toolbox to open RAN. For Telenor, finally as well, the regulation on security needs to remain in the European Electronic Communication Code and should not lead to regulatory fragmentation between countries. As you probably know in Europe cyber security is regulated via several cyber security Acts, and recommendations and as you maybe also know, BEREC is committed to promoting full connectivity which also means prioritising the work that improves the general condition for the expansion and take up of secure, reliable and competitive very high-capacity networks, both fixed and mobile across Europe.

For instance, BEREC has already played a role in implementation of the recommendation on cyber security of 5G networks that was adopted by European Commission and the Member States. In December last year, BEREC published its report on the recent

activities concerning the EU 5G Cyber Security Tool Strategic Measures which provide us an overview on the status play on the implementation of the EU 5G security toolbox.

This being said I am looking forward to know more about the way security issues are approached in the United States, Jessica. So my first question to you is the following. The European Cyber Security Act's dimension will allow the establishment of certification schemes also for 5G, so do you have similar work in the United States and what is the role for, of FCC. Over to you, Jessica.

JESSICA ROSENWORCEL: Thank you Michel and BEREC for having me here today. You asked about certification. Let me describe the traditional certification process Federal Communications Commission uses. It's really based on whether a piece of equipment uses radio frequently in an intentional or unintentional way. We have a process whereby we certify all of that equipment, not just at the FCC, but with third parties that work under our rules so as a result, a modem, a router, television, microwave oven, all of these things in the US were you to look on the back you would find a seal that says they have been certified in accordance with FCC rules. Our policies associated with that were traditionally based on preventing spectral interference. In other words, if we didn't all stay in our lanes when it came to using our airwaves we would have interference and we would diminish the capacity of those airwaves.

But we are now taking a look at this certification process and asking ourselves should it be used more broadly. For instance, just this month I have proposed to my colleagues that we consider network security more broadly in this process in particularly we have a list of equipment that the United States decided is insecure, because there are vendors associated with it who we do not believe produce secure equipment, and what constraints shall we put on this network certification process associated with security.

At the same time we're trying to wrap our arms round the Internet of Things, and the vast increase we're going to see in devices that use our airwaves and try to come up with processes that incentivise every manufacturer to produce products that are safe and secure. So we're looking at how to use this traditional equipment authorisation process for new security purposes, as well as trying to incentivise consumer-based products to

make sure they are more secure for the Internet of Things.

MICHEL VAN BELLINGHEN: Thank you very much Jessica, I have another question for you. So, security expectations are much higher than 20 years ago for telecommunication operators of course. What is the role of the FCC in setting these expectations, and do you think that the market can respond to the security challenges on its own? Over to you.

JESSICA ROSENWORCEL: Sure, I believe we have got to work together. I mean you said 20 years ago security expectations were lower than they were today, but the changes we have seen in the last two decades, with communications are radical. They now support every aspect of civic and commercial life. We're going to have to redouble our efforts, to make sure those networks are secure, because our national security and economic security depends on it. There are two things that we're doing at the FCC with respect to network security right now.

The first is we are removing, or helping our operators remove, insecure equipment from their networks. We have set aside $1.9 billion to make sure that we identify where that equipment is, in our existing networks today, and remove it. We will be subsidising the removal of that equipment to the extent it exists in the radio access networks or the core of any of our carriers. Again US$1.9 billion we have set aside to remove it. But I don't think that we can end there and removing it is only one part of the equation. The second piece is that we're going to promote and foster innovation, and I caught the end of the last panel, you talked a lot about open Radio Access Networks, it's something that we are very enthusiastically exploring in the United States. We have a long tradition of working in software, we would like to see virtualisation brought to the Radio Access Networks. We've can come up with a world where we can mix and match parts it will be more competitive, and more vendor diverse, and potentially more secure. So under my leadership we established the first proceeding at the FCC to explore open RAN and we're also talking right now to our National Science Foundation and our Department of Defence to come up with test beds. I think it's a really exciting moment, because there's a lot of potential with this technology but it's also important that we make sure that our cheerleading doesn't get ahead of where it is and that we build a comprehensive record to understand its strengths and any challenges it might pose.

JESSICA ROSENWORCEL: Impressive Jessica. I hear from you your two answers to the two first question that you are a real proactive regulator and definitely future oriented. I have a last question on this issue, but from a different angle now.

Given the increasing uptake of electronic communication services, what are the future relationships between electronic communication sector security regulators, and other security services such as Homeland Security, law enforcement and so on.

JESSICA ROSENWORCEL: You know I am sure this true in the United States, and in every other country. There was a time not that long ago, when we could act like regulators who only focused on telecommunications, or voice telephony, but those days are over. They're gone. We're going to have to work with every other actor out there, both in the public sector and private sector. If I could just raise the dialogue for a moment I will point out that earlier this month, the President of the United States issued an Executive Order on improving the nation's cyber security. If you stand back and squint at it you will see two things.

First, it directs every arm of the Government to take a hard look at its existing IT systems, communications and cloud-based systems, local systems, and make sure they are secure and make sure that they are not restrictions on the services they use that prevent us from sharing information among Government authorities. At the same time, it instructs the Government to work more closely with the private sector, recognising that information sharing is key, to making a cyber secure future. And I think that if you stand back and look at that executive order, what you see is something that is just true for us in the present, but it is even more true in the future. We're all going to have to work together, the days of us working in our own silos are definitively over. The task of making everything in our world cyber secure is too big and the consequences too great. We're all going to have to work together.

MICHEL VAN BELLINGHEN: Thank you Jessica you are totally right on that, that's exactly what we have tried to do also for many years now in Belgium, in particular. So just to conclude on this topic, I would like to add that BEREC will continue in 2021 to contribute to ensuring network security, and security in cyberspace by supporting further

work within the NIS Co-operation Group and then European Commission, but also by assisting in the process of the 5G toolbox implementation on different ways. First by elaborating further on the risk evolving from multi-vendor strategies, second by assessing whether open standards can ensure the prompt implementation of intraoperability and following the evolution of initiative like open RAN, and the last panel was just about that as you heard, and third, providing ad hoc measurable impact assessment of initiatives.

Furthermore, BEREC stands ready to provide its advice during the legislative procedure regarding security related European Acts, and finally you may know that BEREC has recently published an Opinion regarding the proposal of the revision of the Security of Network and Information Systems Directive in the EU.

But now, it's time to Jessica to move on to the digital divide. In Europe, not only in Europe of course, but in Europe due to the COVID-19 pandemic, digitalisation has accelerated in all sectors. We all know that the digital divide as such is not a new problem for regulators and policy makers, on both sides of the Atlantic. Digital inequalities have already existed for a long time in closing the digital divide has become one of the long-term goals and long-term thinking in the electronic communication sector, over the years. But if we look at, if we start looking at the bright side.

Let's start by this. Investment made in the past by telco operators have increased general access for fast broadband, at a more affordable price. Second, because of lockdown, many households used digital services for the first time. 3, telework, online shopping and vehicles have been booming since March last year and moreover the report of BEREC monitoring the capacity of electronic communication networks during the pandemic have shown that broadband networks in Europe have been proven to be resilient, despite the increasing demand for broadband in general. In addition to that, many Member States took measures to make it cheaper for certain social groups to study or to work from home.

But if we look at the other side of the ledger, there is a growing evidence in several studies that the digital divide is increasing. There are still too many people across the European Union without an access to high-speed internet and of course it is those people without adequate broadband, who suffer the most from this during the crisis. So, this leaves me

to my first question to you Jessica, what is your perception of the digital divide? Has the digital gap widened due to the COVID-19 pandemic, and what do you see as the main challenges in this post-COVID world? Over to you, Jessica.

JESSICA ROSENWORCEL: Well there was a time before this pandemic when we could talk about broadband as being nice to have, but I think that the last year and change has proven conclusively it's 'need to have' for everyone, everywhere, and yet in the United States we have households that are not subscribing to broadband and really our digital divide has two components. The first is deployment. We've have got some rural areas in this country, where the land is vast and the number of people are few and getting infrastructure to them is a task on par with getting electricity to those households during the last century.

So we are working on that with help from our legislative body to supplement and support the networks that exist there so they can reach every household everywhere. But I think we make the mistake if we think that that's the only problem in the digital divide. We also have a big problem with affordability in the United States. We have not just the pandemic but an associated social economic crisis. There has been a lot of job loss. So one of the things that we've done very recently at the FCC is we have set up two programmes to help with that.

The first is called the Emergency Broadband Benefit. It is our nation's largest ever broadband affordability programme. It is really important because it is designed to target households that have experienced job loss or rely on Federal Aid Programmes and it will support a broadband connection to their household and provide support of between $50-$75 a month. So they can stay online and of course being online right now isn't just, you know, shopping and watching. It often means going to work. It means going to school. It means keeping up with healthcare appointments, it means signing up for a vaccine. That programme has been rolled out for a little over a week and we had 1 million households enrol. I believe we will have bigger numbers because we've seen a lot of job loss in the last year and we want to make sure that those economic challenges don't prevent households from getting online.

But I said we had two programmes. So the second, if I can just prattle on about that is that we have a very distinct problem in the digital divide in the United States and I believe this is true worldwide too, which is not every student has internet access at home. During this pandemic when we had many of our schools shut and operate online, what we found is the kids without reliable and consistent internet access at home, were locked out of the virtual classroom. By some count there is about 17 million kids like this in the United States. They fall into what I have always called 'the homework gap'. They have reliable internet access at school but they don't have it for their nightly schoolwork. So we recently set up a programme to make sure all of our schools and libraries could get support to purchase devices and even set those students up at home with wi-fi hot spots, or routers and modems, because we want to make it so that no child is left offline and we think working through our schools and library systems will help with that element of the digital divide.

So we've two powerful programmes. All together it is about 10 billion in US dollars to support the Emergency Broadband Benefit and this programme to help end the homework gap. I think those affordability programmes are just important to ending the digital divide as the traditional programmes to extend the reach of infrastructure.

MICHEL VAN BELLINGHEN: Thank you very much indeed Jessica to explain the Emergency Broadband Benefit and also the programme related to help this homework gap for schools and libraries.

So from our side in BEREC we are not just, we are not policymakers, of course, we are, as you know, an important advisory body for reflection, advice to the European Union and a lot of work has been focusing on analysing what has happened during this pandemic and trying to identify the main factors that influenced the digital divide amongst citizens in our societies. We are not only examining the factors, but we are also trying to learn the necessary lessons related to the effects of the pandemic in our sector.

So, therefore, in BEREC we try to investigate the range of the possible roles and capabilities in designing the right conditions to improve digital inclusion for all citizens. And, finally, we order a study to gather the necessary insights to assist the regulators in

developing their approach on the closing the digital gap.

So my second question on this will be the following. One essential element is to find futureproof solution and what can regulators do in an effective way to promote digital inclusion in practice? So in short or even in medium terms and are there plans in the US where the FCC will play a role in closing the digital gap on its own initiative, or in cooperation with other federal agencies?

JESSICA ROSENWORCEL: So one of our other big initiatives now is broadband mapping, and this is one of those things that sounds a lot like what it is called. But one of the hard truths in the United States is that our existing broadband data isn't as good as it should be. We divide the United States in very small units called census blocks, and for a long time the FCC collected data that assumed if there is a single subscriber to broadband in one census block, that service would be available throughout. You don't have to be a statistician to understand that might systematically overstate where service is and as a result when we have funds to spend to extend the reach of broadband infrastructure, particularly in rural America we might not be sending it to the right places if we don't have more glandular and accurate data.

So I have stood up a broadband task force to really develop with pinpoint accuracy where service is and is not and at what speeds. My hope is that if we have a data set that is that comprehensive, we will make smarter decision about what to fund where and think about futureproof infrastructure. As part of that effort we will also have to understand what speeds are available where. The existing standards in the United States for broadband is 25Mbs down and 3Mbs up and candidly, I think, that is too slow and if we want to futureproof our networks, we will have to figure out how we support higher standards going forward in conjunction with all of that mapping work.

MICHEL VAN BELLINGHEN: Thank you very much, Jessica. Yes, this is also something we try to do in Europe in a harmonised way to gather data and to have this broadband mapping over all European countries. Of course, this is very important as well so that consumers can make well informed choices as well.

So digital divide is as we know a complex problem with different aspects related to

incomes, you referred to this in your first intervention. Social economic position in society but also gender, age, people with disability, and last but not least geographic situation. There is a real threat that rural areas without connectivity and broadband internet access, will even lag further behind without new innovative approach. In general we know the majority of households in urban areas, has access to broadband internet and in many cases, connectivity is much higher than as in the rural areas. So the following set of questions will be about this one. Do you see a role for the FCC in promoting the development and deployment of new telecommunications technologies to expand the coverage in rural areas and improving access to the digital ecosystem independent from the place where you live?

JESSICA ROSENWORCEL: Absolutely. I think when it comes to getting broadband to everyone everywhere, we have to embrace every promising technology we see. We are doing that at the FCC right now. We have programmes to help support the reach of our networks and build more fibre but we are also taking action to improve the viability of low Earth orbiting satellite systems that might be able to reach our rural communities with substantial speeds. We are also clearing our airwaves for unlicensed spectrum particularly in the 6Ghz band where we have 1200Mhz of spectrum newly cleared. We are holding new auctions for mid-band spectrum for 5G and also encouraging our couriers to work with the millimetre wave spectrum they purchased in earlier auctions, though I recognise that its propagation characteristics are more limited so they may not be able serve vast rural areas. But the bottom line is we got to embrace every single technology that is out there, because I don't think we are in a situation where one single technology is going to be capable of reaching everyone everywhere.

MICHEL VAN BELLINGHEN: Thank you very much indeed Jessica, I fully agree with you. We need to use all available technology to bridge the digital divide of course for rural areas as well. So, I wanted to thank you so you so much for providing us this very interesting overview of FCC's involvement in securing connectivity and closing the digital gap in the United States, and I really wish you all the best for the coming years at the FCC.

As you know we are arriving at the end of this Telecommunications and Media Forum

and I would also like to thank the representatives and the collaborators of ICC, BEREC, and BIBT who made this event possible, with a special thanks to you, Jessica and to all speakers, moderators and panellists who kindly agreed to share their views on these various topics. So depending on where you live, I wish you good morning, a good afternoon or a good night. Take care. Bye-bye.