0:5:21.320 --> 0:5:22.300
Henry Calvert
Welcome everyone.

0:5:23.120 --> 0:5:26.110
Henry Calvert
My name is Henry Calvert from the GSMA.

0:5:27.60 --> 0:5:28.390
Henry Calvert
I'm head of networks here.

0:5:28.850 --> 0:5:32.10
Henry Calvert
I'm also the industry lead for open gateway.

0:5:32.930 --> 0:5:37.980
Henry Calvert
Uh, it's great that we're on our second community.

0:5:37.990 --> 0:5:38.730
Henry Calvert
Uh, call.

0:5:39.740 --> 0:5:41.990
Henry Calvert
I think there's just one piece of housekeeping.

0:5:42.780 --> 0:5:50.890
Henry Calvert
So actually mentioned that during this call were very welcome to take feedback whenever 2 methods of doing feedback.

0:5:50.900 --> 0:5:54.220
Henry Calvert
The first one is by putting your questions in chat.

0:5:55.350 --> 0:5:55.690
Henry Calvert
Umm.

0:5:55.810 --> 0:6:6.780
Henry Calvert
And we'll answer the chat questions either by response through the chat channel, or we might actually discuss the question in the conversation.

0:6:6.930 --> 0:6:17.790
Henry Calvert
If we don't get to all the questions in the chat, we will follow up afterwards with the relevant people and provide them to across the group that is attended today.

0:6:19.440 --> 0:6:39.410
Henry Calvert

The second sort of piece of housekeeping just to mention is if you do wanna speak in the Q&A then please raise your hand using the raise button on teams and we will get to you and you can verbally talk to us about your question and we can get the right person to answer.

0:6:40.220 --> 0:6:47.450
Henry Calvert
And the third piece of housekeeping, if we could move to the next slide, all U is this is a Jasmine meeting.

0:6:47.460 --> 0:6:50.670
Henry Calvert
So I need to read out the GSA antitrust policy.

0:6:51.200 --> 0:6:59.630
Henry Calvert
That all GSA participants must abide by the following rules do clearly identify the positive purpose of each project and follow it.

0:7:0.100 --> 0:7:3.450
Henry Calvert
Do consult with legal in areas where you are unsure.

0:7:4.530 --> 0:7:10.340
Henry Calvert
Don't enter into agreements that restrict other parties actions or create barriers to market entry.

0:7:10.750 --> 0:7:18.0
Henry Calvert
Don't discuss or exchange information on pricing, business plans or any other confidential or commercial sensitive data.

0:7:18.270 --> 0:7:23.710
Henry Calvert
And don't discuss or recommend any reference prices or any particular pricing policy.

0:7:24.280 --> 0:7:29.760
Henry Calvert
A further details about the GSM antitrust policy can be found at our website www.usa.com.

0:7:30.740 --> 0:7:32.100
Henry Calvert
So to the next slide.

0:7:32.110 --> 0:7:39.70
Henry Calvert
Thank you very much for listening to that formality and to the agenda and we've just done the welcome on time.

0:7:39.620 --> 0:7:48.910
Henry Calvert
Then we're going to hear from Microsoft on the channels to market, how they see the marketplace adopting for open Gateway and Kamara based APIs.

0:7:49.680 --> 0:7:52.10
Henry Calvert
Then we're gonna talk about the early adopter programs.

0:7:52.120 --> 0:7:56.490
Henry Calvert
How are operators outreaching and talking to developers?

0:7:56.900 --> 0:8:2.480
Henry Calvert
How can developers failing the APIs and what use cases are on most beneficial to them?

0:8:2.850 --> 0:8:10.750
Henry Calvert
So we'll hear from Anna, from DT Pedro, from Telefonica and Chris from Cable Labs on how they're approaching it.

0:8:11.550 --> 0:8:17.860
Henry Calvert
Then before we get to the Q&A, we will have a progress update on Open Gateway.

0:8:18.410 --> 0:8:27.140
Henry Calvert
What are industry leaders doing around enabling open gateway and the artifacts that are required for that will be infrastructure that's required for that?

0:8:27.150 --> 0:8:39.490
Henry Calvert
Sorry, we'll hear from Huawei, Telefonica and GSMA will give you a little bit of an update about what we're doing around Las Vegas, Mobile World Congress, the end of September.

0:8:40.300 --> 0:8:45.320
Henry Calvert
So without Much Ado, I hope, do we have Ricardo on the line?

0:8:47.840 --> 0:8:48.220
Ricardo Villarreal (HE/HIM)
I'm here.

0:8:48.230 --> 0:8:49.80
Ricardo Villarreal (HE/HIM)
Henry. Kate.

0:8:49.890 --> 0:8:50.900
Henry Calvert
Hey, Ricardo.

0:8:50.910 --> 0:8:51.920
Henry Calvert
Good to see you.

0:8:51.930 --> 0:8:52.780
Henry Calvert
Thank you.

0:8:52.870 --> 0:8:54.800
Henry Calvert
I'm handing over to you, Sir, all the best.

0:8:55.810 --> 0:8:56.460
Ricardo Villarreal (HE/HIM)
Thank you very much.

0:9:0.270 --> 0:9:1.790
Ricardo Villarreal (HE/HIM)
Hello everyone I understand.

0:9:10.690 --> 0:9:11.420
Olu Omobitan
I'm going up.

0:9:4.40 --> 0:9:12.780
Ricardo Villarreal (HE/HIM)
I I can share my presentation but or I understand someone is going to be my slides are already here or should I share from from my computer or I'm ready for you.

0:9:13.850 --> 0:9:14.450
Ricardo Villarreal (HE/HIM)
You you share.

0:9:12.130 --> 0:9:14.810
Olu Omobitan
They have worship. We.

0:9:15.100 --> 0:9:15.900
Olu Omobitan
Yes, that's correct. Yes.

0:9:16.460 --> 0:9:16.730
Ricardo Villarreal (HE/HIM)
OK.

0:9:16.740 --> 0:9:18.630
Ricardo Villarreal (HE/HIM)
Well, just a quick introduction.

0:9:19.120 --> 0:9:20.40
Ricardo Villarreal (HE/HIM)
Hello everyone.

0:9:20.50 --> 0:9:21.380
Ricardo Villarreal (HE/HIM)
My name is Ricardo Villarreal.

0:9:22.500 --> 0:9:28.70
Ricardo Villarreal (HE/HIM)
I am a product manager in Microsoft in a team called Azure for operators.

0:9:29.20 --> 0:9:41.670
Ricardo Villarreal (HE/HIM)
The biggest remit of our group is that we are helping telco operators to build their networks on the cloud, not just the IT infrastructure, but the actual networks to be built on the cloud.

0:9:43.50 --> 0:10:1.940
Ricardo Villarreal (HE/HIM)
The product that we are building in my in my team is called Azure programmable connectivity and for that I'm gonna talk to you about how we believe applications are evolving and and what what is it that we are doing about right that applications can talk to the network.

0:10:1.950 --> 0:10:5.350
Ricardo Villarreal (HE/HIM)
Obviously this is gonna be through the network API that are being.

0:10:6.590 --> 0:10:7.660
Ricardo Villarreal (HE/HIM)
Orchestrated.

0:10:7.670 --> 0:10:13.0
Ricardo Villarreal (HE/HIM)
Harmonized in Open Gateway and Camara, if we can go to the first slide.

0:10:16.70 --> 0:10:19.620
Ricardo Villarreal (HE/HIM)
So this is how we see what's happening with with applications.

0:10:19.690 --> 0:10:29.310
Ricardo Villarreal (HE/HIM)
Basically on the left hand side we see that applications they have workloads spread across very different compute targets.

0:10:29.320 --> 0:10:32.290
Ricardo Villarreal (HE/HIM)
What we call compute targets these applications.

0:10:32.300 --> 0:10:37.830
Ricardo Villarreal (HE/HIM)
They could be running on the cloud, they could be running on a private Mac, they could be now running on on space compute.

0:10:37.880 --> 0:10:44.190
Ricardo Villarreal (HE/HIM)
Or they could be running locally in a in a, in a device as an IO T TH compute.

0:10:44.480 --> 0:10:52.0
Ricardo Villarreal (HE/HIM)
Sometimes these applications is not that they are running in different places, but different components of the applications are running on different places.

0:10:52.700 --> 0:10:55.90
Ricardo Villarreal (HE/HIM)
So in fact, the application is running all over the.

0:10:55.360 --> 0:10:58.620
Ricardo Villarreal (HE/HIM)
They are running all over the place, so that is something we have seen more and more.

0:10:59.640 --> 0:11:6.290
Ricardo Villarreal (HE/HIM)
And second thing is this applications are being accessed through a very different networks, right?

0:11:6.520 --> 0:11:18.210
Ricardo Villarreal (HE/HIM)
Public 5G private through wired through satellite in a very, very important thing that I wanted to highlight here is that these networks are programmable more and more every day.

0:11:18.680 --> 0:11:25.200
Ricardo Villarreal (HE/HIM)
That means that they are opening themselves up for interaction with these applications through APIs.

0:11:27.570 --> 0:11:28.750
Ricardo Villarreal (HE/HIM)
If we can go to the next slide.

0:11:30.790 --> 0:11:42.880
Ricardo Villarreal (HE/HIM)
So what we see here basically is an opportunity and we see a gap in an opportunity to make a better connection right between this computer targets and all of the networks for the applications.

0:11:43.350 --> 0:11:46.550
Ricardo Villarreal (HE/HIM)
So this is exactly what we are trying to solve for.

0:11:46.670 --> 0:12:2.930
Ricardo Villarreal (HE/HIM)
This is our vision for an aggregator product that we are putting together for API which is we wanna provide the best tools to write and deploy what is what we are calling network aware applications across diverse networks with a consistent experience.

0:12:3.860 --> 0:12:9.750
Ricardo Villarreal (HE/HIM)
We are basing our solution and the the solution that we are providing for this in three things.

0:12:10.390 --> 0:12:12.690
Ricardo Villarreal (HE/HIM)
1st is the network intelligence.

0:12:12.760 --> 0:12:15.170
Ricardo Villarreal (HE/HIM)
This is basically provided by the network APIs.

0:12:15.180 --> 0:12:30.20
Ricardo Villarreal (HE/HIM)
The APIs that are being again defined in open Gateway and Camara right and this is the intelligence that is coming from the network, all these network capabilities, a second principle is we want to provide unified connectivity.

0:12:30.30 --> 0:12:47.700
Ricardo Villarreal (HE/HIM)
We believe it's a there is a good, there is good value coming from an aggregator in the fact that developers wouldn't have to be dealing with each network separately, they they should should have a unified interface to many networks.

0:12:48.390 --> 0:12:50.260
Ricardo Villarreal (HE/HIM)
The idea is that the code does not change.

0:12:50.270 --> 0:12:53.90
Ricardo Villarreal (HE/HIM)
They don't have to adapt their code to each different network.

0:12:54.70 --> 0:12:57.500
Ricardo Villarreal (HE/HIM)
The third one is the complexity of ABSTRACTION.

0:12:57.830 --> 0:13:0.80
Ricardo Villarreal (HE/HIM)
We want to help with that.

0:13:0.290 --> 0:13:6.880
Ricardo Villarreal (HE/HIM)
We believe that we can provide high level objectives for the developers to work with as opposed to low level.

0:13:7.280 --> 0:13:10.500
Ricardo Villarreal (HE/HIM)
A network adaptation, right?

0:13:11.190 --> 0:13:14.360
Ricardo Villarreal (HE/HIM)
Those are the three principles that we are basing our solution on.

0:13:15.330 --> 0:13:16.440
Ricardo Villarreal (HE/HIM)
If we can go to the next slide.

0:13:21.510 --> 0:13:33.480
Ricardo Villarreal (HE/HIM)
With that, what we see the challenges is specifically that we are that we are solving for and you're gonna see that in the solution that we are building is that there are low levels of of of abstraction.

0:13:34.370 --> 0:13:44.440
Ricardo Villarreal (HE/HIM)
There are many developers that they are used working at this low level of abstraction and they do it

all the all the time, but there are many, many developers out there that are not working at this low levels of ABSTRACTION.

0:13:47.340 --> 0:13:48.830
Ricardo Villarreal (HE/HIM)
Another thing is the network API.

0:13:48.840 --> 0:13:51.550
Ricardo Villarreal (HE/HIM)
They provide inputs to intelligent adaptation, right?

0:13:51.800 --> 0:13:56.110
Ricardo Villarreal (HE/HIM)
But the developers want abstractions for guiding this intelligent adaptation.

0:13:56.750 --> 0:14:7.670
Ricardo Villarreal (HE/HIM)
So the solution that we see here is something I mentioned in the in the previous slide is providing developers with this high level objectives and if they're integrated with tools that they already know.

0:14:7.680 --> 0:14:16.180
Ricardo Villarreal (HE/HIM)
In this case, if they are developing in Azure, they this this high level objectives would be integrated into the Azure services.

0:14:16.470 --> 0:14:22.620
Ricardo Villarreal (HE/HIM)
That's that's what we what we are building, but this is this applies to any any, any cloud right out there.

0:14:23.590 --> 0:14:30.720
Ricardo Villarreal (HE/HIM)
Another thing is that IRREGULAR INTERFACES we are so happy that open Gateway is helping standardized.

0:14:30.790 --> 0:14:34.360
Ricardo Villarreal (HE/HIM)
Camara is helping also to standardize all of these network APIs.

0:14:34.770 --> 0:14:47.40
Ricardo Villarreal (HE/HIM)
We are true believers that the more standard this services are these API are these network capabilities are the better the the greater adoption from developers.

0:14:47.240 --> 0:14:49.810
Ricardo Villarreal (HE/HIM)
They are gonna understand exactly what the network can do.

0:14:49.860 --> 0:14:55.390
Ricardo Villarreal (HE/HIM)
If it is a very similar across networks and they're gonna be able to use it, right?

0:14:55.520 --> 0:14:56.570
Ricardo Villarreal (HE/HIM)
But that is not the reality.

0:14:56.580 --> 0:15:8.110
Ricardo Villarreal (HE/HIM)
Still with with, with, with, with, with many some of these APIs and so there are some regular interfaces even if some of them are Camara, some sometimes it's a different flavor of of Camara or open gateway.

0:15:8.340 --> 0:15:30.410
Ricardo Villarreal (HE/HIM)
And then what we are looking also is that eventually developers not only accessing the programmability of this public networks, right, 5G network, 4G networks, but also other networks eventually like we were mentioning like satellite or other types of networks and the they they would have IRREGULAR INTERFACES, right.

0:15:30.820 --> 0:15:37.370
Ricardo Villarreal (HE/HIM)
So the solution is that we want to aggregate and translate via a gateway a network API gateway.

0:15:37.440 --> 0:15:41.940
Ricardo Villarreal (HE/HIM)
Those are the two main challenges that we see and the solutions that we are proposing.

0:15:44.670 --> 0:15:45.980
Ricardo Villarreal (HE/HIM)
We can go to the next slide please.

0:15:48.500 --> 0:15:53.810
Ricardo Villarreal (HE/HIM)
So with that, this is finally the the architecture of what we are dealing.

0:15:53.820 --> 0:16:2.50
Ricardo Villarreal (HE/HIM)
We already released an early version of this product back in MWC in February, March of this year.

0:16:2.850 --> 0:16:8.470
Ricardo Villarreal (HE/HIM)
We're still working on the next version of this with a lot of partners, a lot of operators.

0:16:8.480 --> 0:16:16.420
Ricardo Villarreal (HE/HIM)
We have already 6 Tier 1 operators integrated into this solution, but basically what we are building is the the box in the middle.

0:16:17.360 --> 0:16:17.510
Ricardo Villarreal (HE/HIM)
Yeah.

0:16:17.520 --> 0:16:20.310
Ricardo Villarreal (HE/HIM)
Which is called Azure programmable connectivity.

0:16:21.40 --> 0:16:21.730
Ricardo Villarreal (HE/HIM)
It does.

0:16:21.790 --> 0:16:37.530
Ricardo Villarreal (HE/HIM)
The two main things that I mentioned before, it unifies and it abstracts unify just again is basically all of the networks that are connected to Azure programmable connectivity, the API they are accessible through one interface.

0:16:37.540 --> 0:16:41.700
Ricardo Villarreal (HE/HIM)
So developers only have to write code once, and they abstraction again.

0:16:41.710 --> 0:16:46.820
Ricardo Villarreal (HE/HIM)
This is something especially in the next version that is gonna be accessible as an Azure service.

0:16:47.380 --> 0:16:49.930
Ricardo Villarreal (HE/HIM)
So the and that means from the Azure portal.

0:16:50.830 --> 0:16:56.880
Ricardo Villarreal (HE/HIM)
So that means exactly how a developer is used to developing an application.

0:16:56.890 --> 0:17:14.660
Ricardo Villarreal (HE/HIM)
The same tools that they are used to use when developing an application, they would be using that the Azure portal and that would be for accessing the network APIs and rolling in the network APIs, subscribing to them, contracting them and also using them.

0:17:14.890 --> 0:17:16.620
Ricardo Villarreal (HE/HIM)
So that's the aggregator.

0:17:17.580 --> 0:17:21.210
Ricardo Villarreal (HE/HIM)
Uh service that we are providing a developer is gonna have the choice.

0:17:21.600 --> 0:17:24.50
Ricardo Villarreal (HE/HIM)
They can go directly to the to the operator.

0:17:24.380 --> 0:17:37.70
Ricardo Villarreal (HE/HIM)
That's always gonna be a choice, but in the sometimes if they're gonna be using many, many operators, they're gonna be working with 101520 operators because they have customers in many networks, in many different geographies.

0:17:37.510 --> 0:17:45.50
Ricardo Villarreal (HE/HIM)

They can come to Asia programmable connectivity and through the Azure portal it would be the the only the only tool that they would have to interact with.

0:17:46.790 --> 0:17:48.200
Ricardo Villarreal (HE/HIM)
So that's the box in the middle.

0:17:48.470 --> 0:17:50.520
Ricardo Villarreal (HE/HIM)
What we are providing, I'm gonna go.

0:17:50.530 --> 0:17:56.800
Ricardo Villarreal (HE/HIM)
The operators obviously are at the bottom, the two rows at the bottom are coming from the operators.

0:17:56.850 --> 0:18:1.420
Ricardo Villarreal (HE/HIM)
The first row at the bottom, the one that says network capabilities.

0:18:1.570 --> 0:18:4.140
Ricardo Villarreal (HE/HIM)
That is the magic that the operators are creating.

0:18:4.150 --> 0:18:12.670
Ricardo Villarreal (HE/HIM)
All of these great network APIs like quality on demand locations seem swap, a number of verification.

0:18:12.680 --> 0:18:16.820
Ricardo Villarreal (HE/HIM)
All of these great network capabilities are being created by operators at that level.

0:18:17.770 --> 0:18:22.540
Ricardo Villarreal (HE/HIM)
They're being exposed by the by the nest, by the network exposure function as a network API.

0:18:22.930 --> 0:18:27.80
Ricardo Villarreal (HE/HIM)
Then then they are being standardized through Camara and Open Gateway again.

0:18:27.130 --> 0:18:29.920
Ricardo Villarreal (HE/HIM)
The more that happens, the easier the experience. Right?

0:18:30.620 --> 0:18:32.730
Ricardo Villarreal (HE/HIM)
And then there are being exposed through the service API.

0:18:34.60 --> 0:18:41.30
Ricardo Villarreal (HE/HIM)
That's what we are consuming and then we are passing that uh to the developers who are on on top.

0:18:41.120 --> 0:18:49.10
Ricardo Villarreal (HE/HIM)
So I'm just gonna go to the right hand side just to make sure it is clear exactly the objective that we are trying for the developers.

0:18:49.420 --> 0:18:52.750
Ricardo Villarreal (HE/HIM)
It is that they have a seamless, unified experience, right?

0:18:52.760 --> 0:19:11.720
Ricardo Villarreal (HE/HIM)
So that they to to, to, to interact with the programmability of the networks, for us, for Azure is that we provide this simple experience for them that we abstract these complexities that I've been mentioning and for the operators at the at the bottom is that they want to have access to, to do the ecosystem that already exist of developers, right.

0:19:11.730 --> 0:19:17.790
Ricardo Villarreal (HE/HIM)
So they can actually monetize this new network capabilities, this new magic that they are creating right in the network.

0:19:20.400 --> 0:19:22.510
Ricardo Villarreal (HE/HIM)
With that, we can go to the to the last slide.

0:19:22.520 --> 0:19:26.140
Ricardo Villarreal (HE/HIM)
It's gonna be just a quick double click on the on the blue box that we are building.

0:19:27.360 --> 0:19:29.210
Ricardo Villarreal (HE/HIM)
So I said, he said this is a.

0:19:31.670 --> 0:19:37.720
Ricardo Villarreal (HE/HIM)
So these are we are seeing is the blue box is double click of the blue box that that we show the Azure programmable connectivity.

0:19:38.270 --> 0:19:41.80
Ricardo Villarreal (HE/HIM)
We are basically doing in the abstraction 4 things.

0:19:41.570 --> 0:19:51.840
Ricardo Villarreal (HE/HIM)
One is the credential management we would be taking care of all of that for the, for the developers we obtain credentials, we manage them and that is a transparent to the developer.

0:19:52.390 --> 0:19:54.500
Ricardo Villarreal (HE/HIM)
So the second thing is the resource discovery.

0:19:54.510 --> 0:19:58.620
Ricardo Villarreal (HE/HIM)

We discovered the first thing we have to do is to discover everything that is happening on the network.

0:19:58.630 --> 0:20:6.460
Ricardo Villarreal (HE/HIM)
Everything that is accessible via the network, this network capabilities, what are they for?

0:20:6.470 --> 0:20:7.790
Ricardo Villarreal (HE/HIM)
For each different network, right?

0:20:8.530 --> 0:20:21.460
Ricardo Villarreal (HE/HIM)
The third thing is, once you have discovered what's available to you as a developer, you have to configure it so you you also do that through this through this interface, and then the fourth thing is you monitor what's happening.

0:20:21.470 --> 0:20:30.10
Ricardo Villarreal (HE/HIM)
You discovered you configure and then your monitor and then that that becomes a cycle eventually at the bottom is a.

0:20:30.320 --> 0:20:35.830
Ricardo Villarreal (HE/HIM)
The adapters, obviously the Azure programmable connectivity has to have adapters to all the different networks.

0:20:36.460 --> 0:20:41.250
Ricardo Villarreal (HE/HIM)
These adapters can be very similar if they're following again standards.

0:20:41.320 --> 0:20:45.120
Ricardo Villarreal (HE/HIM)
In the case that a network is not following any standard, then it's gonna be a different adapter.

0:20:45.130 --> 0:20:52.390
Ricardo Villarreal (HE/HIM)
More complicated, but still and adapter is gonna give access to these capabilities and then and then on the right hand side.

0:20:52.400 --> 0:20:59.760
Ricardo Villarreal (HE/HIM)
I just wanted to show that obviously all of this is complemented by the usual support that we have 4 developers.

0:20:59.810 --> 0:21:4.660
Ricardo Villarreal (HE/HIM)
Uh, this is gonna be enabled by Azure marketplace the the.

0:21:4.720 --> 0:21:20.720
Ricardo Villarreal (HE/HIM)
As I said, the whole transaction of subscribing, if you're a developer subscribing to a network API

from operators, it's gonna be accessible through Azure and it's gonna be enabled through the Azure marketplace and it's gonna simplified billing.

0:21:20.910 --> 0:21:24.120
Ricardo Villarreal (HE/HIM)
Gonna be only one bill, and that's what we are working towards.

0:21:24.970 --> 0:21:35.220
Ricardo Villarreal (HE/HIM)
And then all of the other things that usually happen that the tools that we make available always to developers with that, that was my my last slide.

0:21:38.10 --> 0:21:38.760
Ricardo Villarreal (HE/HIM)
I know, Henry.

0:21:38.770 --> 0:21:41.710
Ricardo Villarreal (HE/HIM)
I forgot if the format allows for questions or not.

0:21:41.920 --> 0:21:43.120
Ricardo Villarreal (HE/HIM)
Uh, no.

0:21:42.970 --> 0:21:45.230
Henry Calvert
So we it, it does allow for questions.

0:21:45.240 --> 0:21:47.620
Henry Calvert
Thank you very much for that Ricardo.

0:21:48.630 --> 0:21:50.720
Henry Calvert
And then we do have a question in the chat.

0:21:50.730 --> 0:21:58.140
Henry Calvert
So we'll developers be able to access only operators whose core is on Azure.

0:22:0.540 --> 0:22:0.890
Ricardo Villarreal (HE/HIM)
Yeah.

0:22:0.900 --> 0:22:4.590
Ricardo Villarreal (HE/HIM)
For for the for our product, yes, obviously, right.

0:22:4.900 --> 0:22:13.690
Ricardo Villarreal (HE/HIM)
So we are we are forging this partnerships with as many operators as possible as I mentioned right now we have 7 because we are in the early stages.

0:22:15.320 --> 0:22:24.670
Ricardo Villarreal (HE/HIM)
But yes, only the operators that we have a partnership with would be accessible through our our aggregator model.

0:22:24.740 --> 0:22:27.230
Ricardo Villarreal (HE/HIM)
The idea is that we can connect to all of them, right?

0:22:27.480 --> 0:22:27.730
Ricardo Villarreal (HE/HIM)
That.

0:22:27.740 --> 0:22:28.760
Ricardo Villarreal (HE/HIM)
That that's the aspiration.

0:22:29.950 --> 0:22:42.110
Henry Calvert
And because the API S are consistent and Camara based to a standard, then a developer could go direct to an operator all through another marketplace that may be provided by other providers.

0:22:42.120 --> 0:22:51.10
Henry Calvert
So multiple routes for the developer to get into into the market and multiple routes for the operator to expose their APIs as well.

0:22:51.890 --> 0:22:52.430
Ricardo Villarreal (HE/HIM)
That is correct.

0:22:51.870 --> 0:22:58.320
Henry Calvert
Umm, but there's been a for a tremendous amount of work that Azure has been putting into this.

0:22:58.330 --> 0:23:3.300
Henry Calvert
As you know, leading sort of the way of how to create a marketplace in the industry.

0:23:3.350 --> 0:23:5.80
Henry Calvert
So thank you very much for your support.

0:23:5.450 --> 0:23:6.430
Henry Calvert
There are two questions.

0:23:6.970 --> 0:23:8.500
Henry Calvert
Them umm.

0:23:8.510 --> 0:23:16.320
Henry Calvert
So Raj, I I believe are you are you able to speak or do you wanna put them in chat?

0:23:17.530 --> 0:23:18.280
Henry Calvert
Yeah, please speak.

0:23:17.960 --> 0:23:18.770
Raja Krishnasamy
I I can speak.

0:23:18.780 --> 0:23:19.130
Raja Krishnasamy
I'm sorry.

0:23:19.140 --> 0:23:23.550
Raja Krishnasamy
I was just typing the questions, but I guess this helps me not to type it.

0:23:23.920 --> 0:23:49.130
Raja Krishnasamy
So the first question is very much infrastructure sensitive or uh, so there are new protocols coming in the industry such as the L4S Protocol, which is the low latency, low loss protocol initially started by Nokia Bell Labs and Apple has actually taken a precedence in this by enabling that in the upcoming set of iPhones.

0:23:49.140 --> 0:24:5.470
Raja Krishnasamy
While L4S is available with certain operators and this actually changes some of the protocols on packet queuing, how do you recognize some of that quality of service based on which operator you go against?

0:24:5.800 --> 0:24:11.370
Raja Krishnasamy
That's the first question I will wait for the second question or I can talk spread out as in question.

0:24:9.170 --> 0:24:15.330
Henry Calvert
But just keep the I wrote, so let's just keep to the first question because we do have to move on.

0:24:16.60 --> 0:24:20.160
Henry Calvert
But Ricardo, have you got any knowledge about that lower level protocols?

0:24:20.780 --> 0:24:26.210
Ricardo Villarreal (HE/HIM)
So we so we are working with what the operators are making available, right?

0:24:26.260 --> 0:24:29.270
Ricardo Villarreal (HE/HIM)
So we are not going deeper.

0:24:29.840 --> 0:24:34.920
Ricardo Villarreal (HE/HIM)
What we are consuming is the network capability already being exposed.

0:24:35.660 --> 0:24:42.30
Ricardo Villarreal (HE/HIM)
Of course we see that there are different evolutions already in in API's like quality of service.

0:24:42.520 --> 0:24:49.570
Ricardo Villarreal (HE/HIM)
We have seen just prioritization of traffic as a basic quality of the on on demand.

0:24:49.940 --> 0:25:0.400
Ricardo Villarreal (HE/HIM)
We are seeing that they are already infusing some network slicing in some part of the network, sometimes at the run only some others are already trying to infuse network slicing.

0:25:0.410 --> 0:25:5.720
Ricardo Villarreal (HE/HIM)
Also in the core, but our product does not deal below that Raja.

0:25:5.760 --> 0:25:9.940
Ricardo Villarreal (HE/HIM)
Our product only works with what is being exposed by the operators.

0:25:12.440 --> 0:25:12.760
Raja Krishnasamy
Thank you.

0:25:10.40 --> 0:25:16.610
Ricardo Villarreal (HE/HIM)
The magic that they are creating, so that would be more of a question for for for the operators think.

0:25:16.140 --> 0:25:16.770
Henry Calvert
Right here.

0:25:16.10 --> 0:25:16.950
Raja Krishnasamy
OK, now listen.

0:25:16.780 --> 0:25:32.750
Henry Calvert
Also thing please drop your next question into the chat and also as it's low level protocol, maybe the networks need to go actually conform that might might be enablement through an API that let's move on because I know time is tight.

0:25:32.760 --> 0:25:34.30
Henry Calvert
Thank you very much.

0:25:34.800 --> 0:25:38.540
Henry Calvert
So I'm gonna hand over to Lucy Thatcher.

0:25:38.550 --> 0:25:43.630
Henry Calvert
Who's going to take us through the next section of earlier doctor programs and introduce our next speaker?

0:25:43.640 --> 0:25:44.280
Henry Calvert
Thank you very much.

0:25:45.960 --> 0:25:58.480
Lucy Thatcher
Henry and the reason for the rush is slightly that I know Anna has to drop at half past, so compressing your section slightly, but Anna quickly handing over to you from Hubraum and DT Deutsche Telecom.

0:25:59.690 --> 0:26:0.530
Piwowarczyk Anna
Thank you, Lucy.

0:26:0.570 --> 0:26:1.600
Piwowarczyk Anna
Thank you, Henry.

0:26:1.730 --> 0:26:3.410
Piwowarczyk Anna
UM hello everyone.

0:26:3.420 --> 0:26:4.640
Piwowarczyk Anna
My name is Anna.

0:26:4.650 --> 0:26:6.900
Piwowarczyk Anna
I'm a program manager at Hubraum.

0:26:7.30 --> 0:26:7.980
Piwowarczyk Anna
What is hubraum?

0:26:7.990 --> 0:26:17.700
Piwowarczyk Anna
We might ask who Brown is a tech incubator of Deutsche Telekom, and what I want to talk to you today is Early Access program.

0:26:17.970 --> 0:26:29.0
Piwowarczyk Anna
The program where we emphasize a lot on feedback and about feedback and understanding of the market needs and demands is the topic I would like to talk to you today.

0:26:29.770 --> 0:26:38.700
Piwowarczyk Anna
And because this is exactly what we are doing in Deutsche Telekom right now, we support everyone in DT to develop API from the concept to market.

0:26:39.10 --> 0:26:54.340
Piwowarczyk Anna
We are trying to understand and we are grabbing the API in any stage of development from the concept to MVP to the to the market and if we can jump into a second slide.

0:26:56.310 --> 0:26:57.820
Piwowarczyk Anna
Thank you very much.

0:26:58.160 --> 0:27:33.960
Piwowarczyk Anna
So the whole journey about the developer relation for network API I start in 2022 where we were trying to understand the target group, the developers, what they really want, what they really need, because we want to start to work with them from the beginning, creating the APIs because we realize we are not only creating the APIs for them, but we are creating them with them and we can save a lot of money of doing it with them and creating and developing the product that needs the market that meets the market needs.

0:27:34.300 --> 0:27:36.300
Piwowarczyk Anna
And this is what we did.

0:27:37.120 --> 0:27:47.870
Piwowarczyk Anna
So we started with the research understanding the target group, evaluating the documentation, testing like on the dry kind of case.

0:27:47.930 --> 0:27:51.440
Piwowarczyk Anna
The and that was the concept validation.

0:27:51.690 --> 0:27:59.250
Piwowarczyk Anna
After that, we moved to UH MVP to the product and this is where 5 Julie Access program happened.

0:27:59.480 --> 0:28:1.300
Piwowarczyk Anna
What is 5 Julia access program?

0:28:1.590 --> 0:28:8.830
Piwowarczyk Anna
This is a program where we were testing 5G QD API.

0:28:9.80 --> 0:28:25.50
Piwowarczyk Anna
We invited seven different companies, different sizes of a companies to Berlin to test, to answer a lot

of questions, to connect with our other developers and and to get us a brutal feedback on the product.

0:28:25.220 --> 0:28:33.40
Piwowarczyk Anna
And we did that four times, so four times we invited 5 to 7 different companies, different use cases, different industry.

0:28:33.310 --> 0:28:45.520
Piwowarczyk Anna
Uh, we had a set of Technical Support researcher, engineering, marketing where we could take took care of the use case.

0:28:45.590 --> 0:28:52.380
Piwowarczyk Anna
We took care of the of the company where we were trying to understand where is the best fit for the APIs.

0:28:52.390 --> 0:28:56.60
Piwowarczyk Anna
Where is the best market fit for the APIs we were trying to understand?

0:28:56.70 --> 0:29:0.870
Piwowarczyk Anna
Also, what kind of benefits and?

0:29:3.190 --> 0:29:12.840
Piwowarczyk Anna
The business case of our participants, how the how our APIs, what kind of influence and impact has on the business case of our participants.

0:29:13.410 --> 0:29:19.870
Piwowarczyk Anna
And so as I was saying, we we run the program for four times, uh.

0:29:20.340 --> 0:29:37.610
Piwowarczyk Anna
And we gather a lot of feedback, a feedback that we put together in the research report that I'm happy to share it with you because we actually share it on MWC this year and we are very proud of the outcomes and inputs we gather for the whole year.

0:29:37.760 --> 0:29:39.430
Piwowarczyk Anna
But let me tell you one thing.

0:29:39.520 --> 0:29:41.570
Piwowarczyk Anna
All every developer said the same thing.

0:29:41.580 --> 0:29:43.990
Piwowarczyk Anna
Standardizing APIs across telecom.

0:29:44.900 --> 0:30:13.720
Piwowarczyk Anna
This is something what they're really dream of, and this is something what they really want to do and would like to receive, and this is like a one voice of developers and on the way we also launched MVP Portal where we learn a lot about what kind of tools developers wanna use and where do they feel comfortable to talk, to communicate to, to get APIs and so on.

0:30:13.850 --> 0:30:20.120
Piwowarczyk Anna
But it's like every MVP and product, so it's not developed yet.

0:30:20.440 --> 0:30:23.240
Piwowarczyk Anna
If we can jump to another slide, please.

0:30:25.710 --> 0:30:31.920
Piwowarczyk Anna
Uh, we are really proud that we can provide end to end environment for the whole testing.

0:30:32.350 --> 0:30:54.620
Piwowarczyk Anna
So we have we have proven the framework from validation to MVP to scale we have on House developer research team where they have excellent understanding of the APIs and they know what APIs are and who wants to use it.

0:30:54.630 --> 0:30:59.470
Piwowarczyk Anna
So that's why, like they know what kind of question has to be asked.

0:31:0.190 --> 0:31:2.240
Piwowarczyk Anna
Uh, what is very unique.

0:31:2.250 --> 0:31:7.110
Piwowarczyk Anna
We have a 5G testbeds in three different location in Krakow, Berlin and.

0:31:8.60 --> 0:31:12.590
Piwowarczyk Anna
Uh, Seattle and in under three different providers.

0:31:12.840 --> 0:31:16.690
Piwowarczyk Anna
Uh, in Seattle we have Nokia in Berlin.

0:31:16.700 --> 0:31:33.130
Piwowarczyk Anna
We will have Mavenir because there is a transition from Ericsson to Mavenir and in Krakow it will be Ericsson and we are very excited because we are opening our lap in Krakow I October 10th and and for sure there will be a lot of testing in Krakow.

0:31:33.440 --> 0:31:39.260
Piwowarczyk Anna
I mentioned also very briefly about developer portal that we created last year.

0:31:39.340 --> 0:31:54.30
Piwowarczyk Anna
MVP product, where we were able to also do a lot of research on what kind of portal, what kind of tool developers like to use, in which kind of environments they like to proceed and feel comfortable.

0:31:54.90 --> 0:31:57.270
Piwowarczyk Anna
And we got a lot of information there as well.

0:31:57.780 --> 0:31:59.100
Piwowarczyk Anna
We can move to another slide.

0:31:59.430 --> 0:31:59.760
Piwowarczyk Anna
This.

0:32:1.630 --> 0:32:2.420
Piwowarczyk Anna
Thank you.

0:32:2.650 --> 0:32:5.800
Piwowarczyk Anna
Uh, so yeah, really access program for us.

0:32:5.810 --> 0:32:11.640
Piwowarczyk Anna
It's something that we as a Deutsche Telecom, we open up the product for the external feedback.

0:32:11.730 --> 0:32:17.260
Piwowarczyk Anna
We wanted to understand what their needs are, what their demands and we were building it.

0:32:17.270 --> 0:32:20.760
Piwowarczyk Anna
As I said in the beginning, with developers, not only for developers.

0:32:21.290 --> 0:32:30.80
Piwowarczyk Anna
And in the end of the day, we we not only gather the feedback, we implemented this feedback into into the product.

0:32:30.90 --> 0:32:33.960
Piwowarczyk Anna
So whenever we are ready to launch an, the launch will happen.

0:32:34.770 --> 0:32:36.970
Piwowarczyk Anna
The product is as close as.

0:32:38.680 --> 0:33:12.40
Piwowarczyk Anna
Developers wanted to be as possible and and I think the other benefit would be that all telecoms, the telecom, they are not super specialized in the developers community and we are building it on the way because during the whole program we got actively participating developers, 70 different developer from all around the world actively talking to each other on the slack channel actively a cooperating with each other, solving problems, helping each other.

0:33:12.770 --> 0:33:14.100
Piwowarczyk Anna
And this is what we wanna do.

0:33:14.110 --> 0:33:27.330
Piwowarczyk Anna
We wanna build a developers community where they feel comfortable of sharing the issues, solving them and sharing the feedback and and to happy to share with you the research report.

0:33:27.340 --> 0:33:32.580
Piwowarczyk Anna
I think that will be very interesting document to read and after the call.

0:33:33.10 --> 0:33:33.750
Piwowarczyk Anna
Thank you very much.

0:33:35.430 --> 0:33:36.60
Lucy Thatcher
Thank you, Anna.

0:33:36.70 --> 0:33:37.220
Lucy Thatcher
I know you have to dash.

0:33:37.230 --> 0:33:44.0
Lucy Thatcher
There was a question for you, but perhaps we'll send it to you offline and then we can follow up as part of the feedback.

0:33:44.10 --> 0:33:46.410
Lucy Thatcher
So I know you have another call now, so much appreciated.

0:33:46.420 --> 0:33:46.850
Lucy Thatcher
Thank you.

0:33:46.590 --> 0:33:47.660
Piwowarczyk Anna
Thank you very much.

0:33:47.670 --> 0:33:48.280
Piwowarczyk Anna
Thank you.

0:33:48.290 --> 0:33:49.90
Piwowarczyk Anna
Have a great day. Bye.

0:33:50.100 --> 0:33:51.70
Lucy Thatcher
Thank you.

0:33:51.700 --> 0:34:1.130
Lucy Thatcher
So next I think if we hand over to Telefonica and to hear from more from there earlier adopter program with Pedro.

0:34:1.170 --> 0:34:2.430
Lucy Thatcher
So Pedro, over to you.

0:34:4.170 --> 0:34:7.740
PEDRO ANTONIO DE ALARCON SANCHEZ
Thank you and good afternoon or good morning to everyone.

0:34:7.810 --> 0:34:27.510
PEDRO ANTONIO DE ALARCON SANCHEZ
So I will explain in 10 minutes what we've been doing during the last months where we announced in February during the Mobile World Congress in Barcelona, we announce our work and our enthusiasm been on this kick off or the Open Gateway program.

0:34:27.520 --> 0:34:34.520
PEDRO ANTONIO DE ALARCON SANCHEZ
And as part of the Open Gateway program, we also announced our early adopter program within that initiative.

0:34:34.800 --> 0:34:36.480
PEDRO ANTONIO DE ALARCON SANCHEZ
So if we go to the next slide.

0:34:38.820 --> 0:34:43.670
PEDRO ANTONIO DE ALARCON SANCHEZ
So the objective behind this program was clear since the beginning.

0:34:43.680 --> 0:34:45.360
PEDRO ANTONIO DE ALARCON SANCHEZ
I totally agree with the message.

0:34:45.620 --> 0:34:46.180
PEDRO ANTONIO DE ALARCON SANCHEZ
Yeah.

0:34:46.580 --> 0:34:48.430
PEDRO ANTONIO DE ALARCON SANCHEZ
And that Anna deliver.

0:34:48.440 --> 0:35:3.310
PEDRO ANTONIO DE ALARCON SANCHEZ
We wanted to engage with the developer community mobile, mobilize the and get their feedback and work together in order to make A and to clearly define the market fit for the API that were being defined in Camara.

0:35:3.760 --> 0:35:16.170
PEDRO ANTONIO DE ALARCON SANCHEZ
We also wanted to validate some business apotheosis behind this API's because some of them were already existing services in mobile Connect and other initiatives.

0:35:16.710 --> 0:35:22.20
PEDRO ANTONIO DE ALARCON SANCHEZ
But some of the API's like the quality on Demand API were quite new for the market.

0:35:22.270 --> 0:35:33.450
PEDRO ANTONIO DE ALARCON SANCHEZ
So we want it to be and we are still want to be sure that we are creating a value proposal that is appealing for the developers and and the digital sector.

0:35:34.10 --> 0:35:43.720
PEDRO ANTONIO DE ALARCON SANCHEZ
So also we are using our earlier of temporal as a source for innovation and exploration of new use cases.

0:35:44.50 --> 0:35:59.590
PEDRO ANTONIO DE ALARCON SANCHEZ
In fact, we have a number of APIs like the one referred to blockchain that I making use as a as a test bed or on how wallets and metalwares could be a part of this API.

0:36:1.440 --> 0:36:13.830
PEDRO ANTONIO DE ALARCON SANCHEZ
Portfolio and I think another but volleyball point is that we are doing this not as as a one off initiative, more is more continuous initiative in time.

0:36:13.840 --> 0:36:25.770
PEDRO ANTONIO DE ALARCON SANCHEZ
So we establish a contract with our developers and and leads and we build our relationship not for 2023 but for or for the whole world map.

0:36:25.860 --> 0:36:29.950
PEDRO ANTONIO DE ALARCON SANCHEZ
So we can create an active and continuous relationship with them.

0:36:30.600 --> 0:36:31.630
PEDRO ANTONIO DE ALARCON SANCHEZ
If we go to the next.

0:36:34.970 --> 0:36:44.720
PEDRO ANTONIO DE ALARCON SANCHEZ
So what we offer we we have clear that we have, we need to be in a win win situation where we get a mutual benefit.

0:36:45.70 --> 0:37:4.380
PEDRO ANTONIO DE ALARCON SANCHEZ
Of course, we offer to our developers free access every access to to the API we provide them with all the educational materials, SDK's, development kits and so on, and also a safe environment to to test and to play with API.

0:37:4.710 --> 0:37:5.850
PEDRO ANTONIO DE ALARCON SANCHEZ
That is very important.

0:37:5.860 --> 0:37:14.450
PEDRO ANTONIO DE ALARCON SANCHEZ
This is a separate environment and it's a non commercial but production environment and so they can play for real.

0:37:14.520 --> 0:37:20.830
PEDRO ANTONIO DE ALARCON SANCHEZ
They they can is not a mock up running behind, but also the the actual network running.

0:37:21.120 --> 0:37:22.570
PEDRO ANTONIO DE ALARCON SANCHEZ
So if we go to next.

0:37:25.310 --> 0:37:41.550
PEDRO ANTONIO DE ALARCON SANCHEZ
So after we launch the program we we got an overwhelming response from the from the developers community and from mainly for sources we have our website where any developer can go there and register.

0:37:41.610 --> 0:37:43.840
PEDRO ANTONIO DE ALARCON SANCHEZ
You want to be one of the developers.

0:37:43.850 --> 0:37:48.920
PEDRO ANTONIO DE ALARCON SANCHEZ
Please go there and and you can be part of the early October of Telefonica.

0:37:49.330 --> 0:37:54.110
PEDRO ANTONIO DE ALARCON SANCHEZ
But also we have wider, which is our startup investment variable.

0:37:54.180 --> 0:38:4.870
PEDRO ANTONIO DE ALARCON SANCHEZ
Well, we got a lot of interest from the startups in white up and also we have a big companies preferred by operating businesses and geographies in Germany, Spain and Brazil.

0:38:5.650 --> 0:38:9.140
PEDRO ANTONIO DE ALARCON SANCHEZ
And inside the funnel of open gateway.

0:38:9.230 --> 0:38:20.800
PEDRO ANTONIO DE ALARCON SANCHEZ

So no matter the size of the company we have seen and individual freelancers and big, big, really big technology companies interested in testing the API.

0:38:21.130 --> 0:38:22.580
PEDRO ANTONIO DE ALARCON SANCHEZ
And of course we are.

0:38:22.870 --> 0:38:32.100
PEDRO ANTONIO DE ALARCON SANCHEZ
We have a very close collaboration with scalars and partners and they are also referring leads for the earlier October.

0:38:32.530 --> 0:38:33.260
PEDRO ANTONIO DE ALARCON SANCHEZ
We go to the next.

0:38:36.260 --> 0:38:36.710
PEDRO ANTONIO DE ALARCON SANCHEZ
Yeah.

0:38:36.760 --> 0:38:56.360
PEDRO ANTONIO DE ALARCON SANCHEZ
So approximately we have around 200 litres under qualification in the last three months we we have and having an A closer relationship with the around 5040 leads where as you see here this is the our qualification funnel.

0:38:56.850 --> 0:39:0.620
PEDRO ANTONIO DE ALARCON SANCHEZ
When a new company is is registering the the website.

0:39:0.630 --> 0:39:5.480
PEDRO ANTONIO DE ALARCON SANCHEZ
For example, we have to clearly identify why they are being resisted.

0:39:5.490 --> 0:39:14.100
PEDRO ANTONIO DE ALARCON SANCHEZ
So some of the companies just want to have some information, some others want to use the the API commercially and some others want to experiment.

0:39:14.230 --> 0:39:30.80
PEDRO ANTONIO DE ALARCON SANCHEZ
So we have to to go under a very careful intervention process of the leads and after this segmentation process, we qualified so far around 4050 companies we go to next please.

0:39:32.670 --> 0:39:41.500
PEDRO ANTONIO DE ALARCON SANCHEZ
So so far the API that got more most interest from the leads are those related to quality on demand and mobile.

0:39:41.510 --> 0:39:53.0
PEDRO ANTONIO DE ALARCON SANCHEZ
So lots of companies coming from from, for example, the drone market, the drone area, virtual reality of mental reality without or with glasses, it doesn't matter.

0:39:53.130 --> 0:40:15.490
PEDRO ANTONIO DE ALARCON SANCHEZ
They want to guarantee latency and throughput so that that was a permanent interest and other companies like IP extremely by IP, for example camera seeing or content streaming camera seeing in stadiums and companies in this space where very interested in this API.

0:40:15.560 --> 0:40:25.560
PEDRO ANTONIO DE ALARCON SANCHEZ
But we also have a lot of interest on the checkout carrier billing and fraud prevention API like since swap or member verified we go to next please.

0:40:28.930 --> 0:40:29.620
PEDRO ANTONIO DE ALARCON SANCHEZ
Yeah.

0:40:29.750 --> 0:40:40.60
PEDRO ANTONIO DE ALARCON SANCHEZ
So we are trying to segment the companies that register not only by the type of company but also with the feet of the within the program.

0:40:40.70 --> 0:40:58.120
PEDRO ANTONIO DE ALARCON SANCHEZ
So we have different objectives as I mentioned before, like for example, we have five companies in that are very useful for us to validate the end to end service experience and we focus for different geographies in several APIs for that companies for those companies. Sorry.

0:40:58.780 --> 0:41:19.780
PEDRO ANTONIO DE ALARCON SANCHEZ
So the other three segments are those for validating the use cases and the demand the companies used to validate or to shape the the service behind the API and for companies that were diverted to the commercial funnel interested in direct use of the API.

0:41:20.910 --> 0:41:22.580
PEDRO ANTONIO DE ALARCON SANCHEZ
And when you go to next.

0:41:26.580 --> 0:41:27.250
PEDRO ANTONIO DE ALARCON SANCHEZ
Yeah.

0:41:27.480 --> 0:41:35.770
PEDRO ANTONIO DE ALARCON SANCHEZ
Here just a few examples, we can go quickly over then, so selling authentication or number verify is very very interesting.

0:41:35.940 --> 0:41:49.390
PEDRO ANTONIO DE ALARCON SANCHEZ
I would say pretty much for all companies register in the program as an alternative method to authenticate security, authenticate users and as they do now with SMS OTP.

0:41:49.560 --> 0:41:57.900
PEDRO ANTONIO DE ALARCON SANCHEZ
So number verify definitely is an API that we are pushing forward in our road map and we go to next.

0:42:0.770 --> 0:42:7.40
PEDRO ANTONIO DE ALARCON SANCHEZ
E uh in general bundling API in order to prevent a mitigate a fraud.

0:42:7.540 --> 0:42:9.140
PEDRO ANTONIO DE ALARCON SANCHEZ
It's a primary interest.

0:42:9.150 --> 0:42:24.200
PEDRO ANTONIO DE ALARCON SANCHEZ
For example, combining science swap with verify or know your customer API where developers can get more information and trusted information provided by telcos and also a very interesting for the developers.

0:42:24.370 --> 0:42:40.920
PEDRO ANTONIO DE ALARCON SANCHEZ
So we got a interest from the banking sector, but other segment, other sectors like, am I gonna sees and companies working with digital identity where asking for access to these API we go to next.

0:42:43.540 --> 0:42:45.290
PEDRO ANTONIO DE ALARCON SANCHEZ
So device status?

0:42:45.300 --> 0:42:51.90
PEDRO ANTONIO DE ALARCON SANCHEZ
Uh, this is a big category of API, but we focus at first with the roaming status.

0:42:51.160 --> 0:42:58.130
PEDRO ANTONIO DE ALARCON SANCHEZ
That is, many knowing whether a mobile line is traveling abroad is forming in a different network.

0:42:58.280 --> 0:43:4.890
PEDRO ANTONIO DE ALARCON SANCHEZ
This has a interest for security and fraud prevention, but also for marketing purposes.

0:43:5.160 --> 0:43:16.540
PEDRO ANTONIO DE ALARCON SANCHEZ
Whenever a traveler is outside the country, we developers shall activate their marketing campaigns to offer insurance is or other type of services we go to next.

0:43:21.600 --> 0:43:23.810
PEDRO ANTONIO DE ALARCON SANCHEZ
Device location is also uh.

0:43:23.820 --> 0:43:47.230
PEDRO ANTONIO DE ALARCON SANCHEZ
It was a very appealing API and but I must confess that the many developers were a bit confused because they were expecting that telcos where able to provide precise positioning like GPS and we

had to explain and they welcomed the information about the robustness and the quality of the location provided by the SIM cards.

0:43:47.520 --> 0:43:48.970
PEDRO ANTONIO DE ALARCON SANCHEZ
But it's not compared.

0:43:48.980 --> 0:43:56.550
PEDRO ANTONIO DE ALARCON SANCHEZ
It's not, I would say, complementary to a GPS location and just to finish, we go to the next slide.

0:43:58.510 --> 0:44:2.600
PEDRO ANTONIO DE ALARCON SANCHEZ
The next sorry tomorrow and next.

0:44:4.820 --> 0:44:12.790
PEDRO ANTONIO DE ALARCON SANCHEZ
Just some takeaways and I would say that the is one single big feedback we got from all.

0:44:12.800 --> 0:44:16.790
PEDRO ANTONIO DE ALARCON SANCHEZ
All the leads is that they believe in this initiative.

0:44:16.870 --> 0:44:34.670
PEDRO ANTONIO DE ALARCON SANCHEZ
As long as we as the technical industry are all about onboard, they want to implement this as long as all the customers, all the telecoms in a given geography, or at least a significant percentage of the market is inside is open gateway initiative.

0:44:34.680 --> 0:44:44.180
PEDRO ANTONIO DE ALARCON SANCHEZ
This is the way they see the the value to scale up and well, I I let the the others take away for your consideration.

0:44:44.490 --> 0:44:58.20
PEDRO ANTONIO DE ALARCON SANCHEZ
But in general, I would say that as next steps we are concentrating now in proof of concepts around those use cases that we consider more representative and with higher market demand.

0:44:58.150 --> 0:45:1.230
PEDRO ANTONIO DE ALARCON SANCHEZ
So I hang open to questions later on if you if you wish.

0:45:4.50 --> 0:45:4.390
PEDRO ANTONIO DE ALARCON SANCHEZ
Thank you.

0:45:3.870 --> 0:45:4.460
Lucy Thatcher
Thank you.

0:45:4.470 --> 0:45:5.100
Lucy Thatcher
I think yes.

0:45:5.110 --> 0:45:8.970
Lucy Thatcher
Let's move on and then we can come back if there are any questions.

0:45:8.980 --> 0:45:18.920
Lucy Thatcher
So I'm waiting patiently has been Chris, who narrowly avoided A3 AM start this morning and thanks to his diary and our meeting times.

0:45:18.930 --> 0:45:22.970
Lucy Thatcher
But Chris handing over to you to talk about the cable labs point of view.

0:45:24.430 --> 0:45:25.10
Chris Corcimiglia
Awesome.

0:45:25.310 --> 0:45:25.970
Chris Corcimiglia
Thank you so much.

0:45:28.330 --> 0:45:32.300
Chris Corcimiglia
I'm Chris Corcimiglia and I lead the future infrastructure group at Cable Labs.

0:45:32.730 --> 0:45:43.550
Chris Corcimiglia
We do a lot of work in convergence, so obviously the cable network is our is our is where we have our genesis, but we're doing a lot of work in convergence and part of that is uh and should be called network as a platform.

0:45:45.320 --> 0:45:45.830
Chris Corcimiglia
Umm.

0:45:45.920 --> 0:45:49.360
Chris Corcimiglia
And we began, uh, having conversations inside of that working group.

0:45:49.370 --> 0:45:52.240
Chris Corcimiglia
Uh, which is focused on, you know, overall the network exposure layer.

0:45:52.250 --> 0:45:54.830
Chris Corcimiglia
Are those those standards that have API and all those things?

0:45:54.840 --> 0:45:59.470
Chris Corcimiglia

But it was just an idea of how can we get developers more easily accessible into those into those APIs.

0:46:3.390 --> 0:46:7.200
Chris Corcimiglia
I would rapper platform came to be and we started really working it and but it's not meant to be.

0:46:7.300 --> 0:46:11.620
Chris Corcimiglia
It's meant to feed into the overall strategy that open Gateway is is putting forth.

0:46:11.630 --> 0:46:13.610
Chris Corcimiglia
So we go on to the next slide.

0:46:14.590 --> 0:46:14.940
Chris Corcimiglia
Umm.

0:46:15.90 --> 0:46:15.720
Chris Corcimiglia
What our what?

0:46:15.730 --> 0:46:18.690
Chris Corcimiglia
Our Members were looking to do is really provide.

0:46:18.700 --> 0:46:31.80
Chris Corcimiglia
They wanted to be really quickly stand up, a way to be able to provide a standard registration and authorization flow for third party developers so that we can easily grant access to the actual network services that they could provide.

0:46:31.280 --> 0:46:42.620
Chris Corcimiglia
And so really here it's just the whole idea of again registration of third parties and then authorization of those third parties onto the APIs that never with operators are providing.

0:46:43.200 --> 0:46:51.880
Chris Corcimiglia
And so that's really where began and and really the genesis of it was and it was an idea that could be follow very standard Oauth 2 flows and those kinds of things and.

0:46:54.940 --> 0:47:16.800
Chris Corcimiglia
Want to be able to have a like a pilot focus, a POC driven mentality where we could both develop the overall flow and how this would work as well as begin to mature the APIs that are either being brought in from Camara or APIs that we could develop it and then could you get back either through OGI to camera or the camera depending upon how things work out.

0:47:16.810 --> 0:47:21.180
Chris Corcimiglia
I'm going to talk a little bit about the the APIs that we have been developing as well.

0:47:21.870 --> 0:47:22.780
Chris Corcimiglia
So that's the main thing.

0:47:22.790 --> 0:47:25.720
Chris Corcimiglia
You have third party developers a whole potential large ecosystem.

0:47:29.380 --> 0:47:44.120
Chris Corcimiglia
As another side, how can we bridge the gap between the two and what we're doing with our Members is really creating a place where they can we can have these functionalities deployed in our in our 10G lab at cable labs are making so it's easy for us to be able to experiment and kind of see where this could go so.

0:47:46.530 --> 0:47:47.720
Chris Corcimiglia
Uh, we got in next slide, please.

0:47:51.440 --> 0:47:59.200
Chris Corcimiglia
All right, so the initial use case for for starting the pilot was trying to focus in the area of both.

0:48:2.250 --> 0:48:4.440
Chris Corcimiglia
Property management and hospitality.

0:48:5.50 --> 0:48:14.500
Chris Corcimiglia
We had this whole idea of there's a there's a common user here that that could be a customer of the network operator.

0:48:14.590 --> 0:48:20.600
Chris Corcimiglia
And then there's also potentially user of the space and the thing that we're looking at is disk guest Wi-Fi, right?

0:48:20.610 --> 0:48:30.270
Chris Corcimiglia
So this idea of more broadly, we've come to term as an isolated networks, this idea of being able to create an isolated network for a guest when they arrive at a particular location, uh.

0:48:30.280 --> 0:48:38.80
Chris Corcimiglia
So this really begins with the network operator saying, hey, I want to participate and I'm going to say these are the set of services I can provide.

0:48:38.280 --> 0:48:45.90
Chris Corcimiglia
Those services don't have to be the same for everybody, but all of them should be stated in July, interact with them from an API perspective.

0:48:46.610 --> 0:49:5.120
Chris Corcimiglia
Umm, the third party then is really looking for a way to be able to register as a developer and then to register themselves their app, their particular application as well, so that that application could become a trusted application that could then begin to provide access into the services and network operator can provide.

0:49:5.670 --> 0:49:8.660
Chris Corcimiglia
So the idea here is that you have a.

0:49:12.360 --> 0:49:20.700
Chris Corcimiglia
The property owner and they they have a subscription with a network operator and they essentially going to grant access to other third parties.

0:49:20.710 --> 0:49:33.910
Chris Corcimiglia
We're also utilizing this third party application to be able to act on their behalf and been up guess Wifis right, spin up isolated networks and so that's ideas relative to facilitate that.

0:49:33.920 --> 0:49:43.600
Chris Corcimiglia
And then you can expand yourself into lots of different use cases from there, and initially to focus on this space to try to to prove out that there's that there is potential for this overall flow.

0:49:43.610 --> 0:49:51.800
Chris Corcimiglia
We really want to develop a code base that could begin as a starting point for us as we begin to step into collaboration with the.

0:49:56.260 --> 0:49:57.260
Chris Corcimiglia
That we've already begun all.

0:49:57.950 --> 0:49:58.240
Chris Corcimiglia
Yeah.

0:49:59.270 --> 0:50:0.690
Chris Corcimiglia
So we'll go ahead with the next slide, please.

0:50:5.670 --> 0:50:6.980
Chris Corcimiglia
Uh, really?

0:50:6.990 --> 0:50:10.620
Chris Corcimiglia
The The There's three major things here.

0:50:10.630 --> 0:50:17.900
Chris Corcimiglia

One is the guest Wi-Fi experience, and that's what we're developing a set of APIs called isolated networks.

0:50:21.920 --> 0:50:42.40
Chris Corcimiglia
Three through through open gateway and ultimately into Camara to be able to look at that as a as a means for being able to create these isolated networks to be utilized to can be utilized from a guest perspective to use be utilized from a property manager's perspective it could utilize really anywhere you need to be able to dynamically spin up an isolated network on a particular device at a particular location.

0:50:42.970 --> 0:50:43.440
Chris Corcimiglia
Tom.

0:50:43.650 --> 0:50:48.860
Chris Corcimiglia
And so that's the the the the, the proving ground of the API that we're focusing on.

0:50:49.110 --> 0:50:52.170
Chris Corcimiglia
And then the central off and registration model.

0:50:53.500 --> 0:50:59.100
Chris Corcimiglia
Uh, we did that for now for the pods and make it quick to make it easier for us to be able to have a means of of doing these pilots.

0:51:0.400 --> 0:51:7.270
Chris Corcimiglia
So we have two Members utilizing the same you know, central GDP instance in order to be able to do their the application.

0:51:8.820 --> 0:51:13.220
Chris Corcimiglia
Registration and authorization, but ultimately we know this needs to be able to scale.

0:51:13.230 --> 0:51:16.60
Chris Corcimiglia
We can't have a a central location where everybody's going to.

0:51:16.70 --> 0:51:24.500
Chris Corcimiglia
We need to alternately evolve towards a Federated model and so that's where we want to be able to align and really start taking this step forward and saying, hey, what does this look like at scale?

0:51:24.510 --> 0:51:27.280
Chris Corcimiglia
What does this look like from truly a global perspective?

0:51:27.290 --> 0:51:31.850
Chris Corcimiglia
And how do we fully align and contribute into everything that's happening within open Gateway?

0:51:32.400 --> 0:51:38.370
Chris Corcimiglia
And of course, really what we're trying to enable is consistent access for a third party developer is right.

0:51:38.380 --> 0:51:59.100
Chris Corcimiglia
So not everybody has to make all the same services of Alibaba all the all the services that are available should be done in a standard way and an ideally, those that those standards are, you know, being openly provided by the API specifications that that Camara has is hosting.

0:52:0.110 --> 0:52:2.310
Chris Corcimiglia
Uh, so we'll go through our next.

0:52:4.390 --> 0:52:21.690
Chris Corcimiglia
Slide my life last one and this is really the last slide is just to look at really we've had so far our our network operators are members of cable labs have been really been focusing on you know the overall validation of this Oauth 2 authorization process for third parties.

0:52:21.910 --> 0:52:25.790
Chris Corcimiglia
How can we go about is how does the registration process work?

0:52:25.800 --> 0:52:27.550
Chris Corcimiglia
How does it approval process work?

0:52:27.560 --> 0:52:29.40
Chris Corcimiglia
Really, what would this look like?

0:52:29.50 --> 0:52:32.670
Chris Corcimiglia
How do we want to begin to endeavor in these business relationships?

0:52:32.720 --> 0:52:42.800
Chris Corcimiglia
And then ultimately in the standard APIs and this code base that we developed to be able to do these pilots allows us to kind of iterate through this over and over again and get us to a place where we can mature more quickly.

0:52:42.810 --> 0:52:46.690
Chris Corcimiglia
We feel uh, because we have, you know, kind of real world examples that we're working through.

0:52:47.900 --> 0:52:51.400
Chris Corcimiglia
Uh, with real partners as developers and the.

0:52:55.160 --> 0:53:33.10
Chris Corcimiglia

Actions is again contributing back, you know, through both, uh, the Open Gateway community and also Camara these Saturday APIs aligning with overall architectures and and federation Federated approaches and trying to make this so that the cable community can participate more broadly into everything that's happening in this space and then really begin to identify you know, third parties and and and developers that that would be interested in participating in the ecosystem as a whole as well as those particular use cases, both whether we're coming up with them internally or we're getting them from developers to trying to trying to strum up more use cases and prioritize them.

0:53:33.20 --> 0:53:34.370
Chris Corcimiglia
So we can execute it accordingly.

0:53:35.310 --> 0:53:35.990
Chris Corcimiglia
So that's all I had.

0:53:38.490 --> 0:53:39.810
Chris Corcimiglia
Any any questions?

0:53:39.820 --> 0:53:40.900
Chris Corcimiglia
Happy to happy to answer them.

0:53:42.280 --> 0:53:43.30
Lucy Thatcher
Thanks, Chris.

0:53:43.440 --> 0:53:43.890
Lucy Thatcher
Brilliant.

0:53:43.900 --> 0:53:59.610
Lucy Thatcher
So I think before we go on to the next section, we will have a quick pause and just see if there's any questions for the team around earlier doctor programs and Early Access programs and then we'll move on to the third and last section of the agenda today.

0:54:4.290 --> 0:54:6.390
Lucy Thatcher
Stein anything popped into the chat.

0:54:6.400 --> 0:54:11.710
Lucy Thatcher
So and then there's a question for Anna that I will send to her offline.

0:54:22.110 --> 0:54:22.910
Chris Corcimiglia
Yeah, absolutely.

0:54:21.650 --> 0:54:24.780
Lucy Thatcher
Uh says when they're from Nadine gone.

0:54:24.790 --> 0:54:25.230
Lucy Thatcher
Sorry, Chris.

0:54:25.490 --> 0:54:25.620
Chris Corcimiglia
Yes.

0:54:26.700 --> 0:54:30.170
Chris Corcimiglia
Yeah, that's actually an area that we're, uh, we're looking to as well.

0:54:30.180 --> 0:54:40.20
Chris Corcimiglia
I think that that network analytics is is definitely an API that would be, uh, we're we're seeing some interest and some things we have going on and also within our lab as a whole.

0:54:40.170 --> 0:54:56.880
Chris Corcimiglia
And so I think that's a that's a great area where it may not be, you know where you're you're actively doing something on what you're understanding how is, how is a network responding to my application, what type of information can I get that could affect the be affecting my application.

0:54:56.890 --> 0:54:58.300
Chris Corcimiglia
So that's an area that we're looking into.

0:54:59.680 --> 0:55:4.450
Chris Corcimiglia
We don't have those API Witten but but maybe it will be a a contribution coming from us soon.

0:55:5.780 --> 0:55:18.850
Manjaro, Nadine
Yeah, I would love to contribute something to to that because they think they're response for the network given the operators at at an opportunity to improve uncertain areas is gonna be critical for the success, especially on the specific application use cases.

0:55:21.950 --> 0:55:22.700
Chris Corcimiglia
Yes, absolutely.

0:55:25.290 --> 0:55:25.980
Lucy Thatcher
Thank you.

0:55:26.120 --> 0:55:28.980
Lucy Thatcher
And I could see Jeff has put his camera on.

0:55:28.990 --> 0:55:40.380
Lucy Thatcher
So he's ready and raring to go, so let's move on to the the next section of the agenda, which is a bit of a broader section around from the progress we've seen across open Gateway recently.

0:55:40.530 --> 0:55:43.310
Lucy Thatcher
So, Jeff, over to you, first of all.

0:55:44.410 --> 0:55:44.880
Jeff Wei (来宾)
OK.

0:55:45.0 --> 0:55:46.20
Jeff Wei (来宾)
Thank you very much.

0:55:46.850 --> 0:55:49.380
Jeff Wei (来宾)
Good morning, good afternoon, good evening.

0:55:49.470 --> 0:55:54.460
Jeff Wei (来宾)
So first of all, thank you for inviting Huawei for this section.

0:55:54.770 --> 0:56:4.780
Jeff Wei (来宾)
So I am just from Huawei and I'm responsible for the network capability is disposure topic.

0:56:5.530 --> 0:56:15.860
Jeff Wei (来宾)
So for the previous section, I think the more focus on the service API, how to use the service API.

0:56:15.910 --> 0:56:30.700
Jeff Wei (来宾)
So from hallway side, it's a vendor, we will share more on how to plan the network API and how to decide a new service API and also we will share our latest research and our understanding.

0:56:31.50 --> 0:56:33.50
Jeff Wei (来宾)
OK, so next page please.

0:56:35.650 --> 0:56:36.60
Jeff Wei (来宾)
OK.

0:56:36.110 --> 0:56:41.900
Jeff Wei (来宾)
So actually last or network capability is exposure is not a new concept.

0:56:42.210 --> 0:57:15.410
Jeff Wei (来宾)
We work closely with our partner, including operators, some some ecosystem partners from

sponsored data, BYOD and also for for the QO D and we we also been invited to join the Kamala and Kamala and also work closely with GSMA Open Gateway and also we are focused on the standard standard relation and and and so on.

0:57:15.640 --> 0:57:16.820

Jeff Wei (来宾)

So next page.

0:57:20.80 --> 0:57:31.630

Jeff Wei (来宾)

So from our experience and practice with customers, we believe that there are three key factors for telcos not success.

0:57:32.200 --> 0:57:39.250

Jeff Wei (来宾)

So when we are talking about network capability exposure again network capability is the foundation.

0:57:39.480 --> 0:57:49.840

Jeff Wei (来宾)

So first of all, we believe that for our network, in order to exposure the capability, we need to have three key features, which is sufficient.

0:57:50.10 --> 0:57:50.340

Jeff Wei (来宾)

See.

0:57:50.470 --> 0:57:58.700

Jeff Wei (来宾)

Sufficiency means your network need to have enough resources, and then the next feature feature is differentiation.

0:57:59.10 --> 0:58:10.960

Jeff Wei (来宾)

So the network need to have in replaceable capability such as voice call with phone number and the last feature is automation.

0:58:11.350 --> 0:58:19.400

Jeff Wei (来宾)

So when talking about the last uh, the requirement is is talking about the on demand real time.

0:58:19.530 --> 0:58:26.540

Jeff Wei (来宾)

So the network needs to need to have the automation feature to meet this requirement.

0:58:26.890 --> 0:58:27.340

Jeff Wei (来宾)

OK.

0:58:27.400 --> 0:58:35.700

Jeff Wei (来宾)

And then the second factors, the second factor are the standard ration of service API and Network API.

0:58:35.790 --> 0:58:54.500

Jeff Wei (来宾)

So for this service API standardization just just just now detached telecom and Microsoft uh, they also mentioned that that is very important and we are happy that GSMA and Kamala are forecast on this service API standardization.

0:58:55.110 --> 0:59:16.170

Jeff Wei (来宾)

So from our side, we believe that the network API is also very important and we also see that TM, Forum and GSMA has already aligned on this part and the network API will be part of the TM Forum sent in 10 API and the last factor is the ECHO system.

0:59:16.240 --> 0:59:18.0

Jeff Wei (来宾)

So include two parts.

0:59:18.80 --> 0:59:28.430

Jeff Wei (来宾)

The first part is the widely go to market and the second part is we need to have the Innovation Center, we need to have more ecosystem partner.

0:59:28.520 --> 0:59:33.760

Jeff Wei (来宾)

We also very happy to see now we have EAP program.

0:59:33.770 --> 0:59:37.900

Jeff Wei (来宾)

We have a lot of partners joining into the Community.

0:59:38.160 --> 0:59:39.500

Jeff Wei (来宾)

OK, next page please.

0:59:41.890 --> 0:59:42.290

Jeff Wei (来宾)

OK.

0:59:42.330 --> 0:59:49.620

Jeff Wei (来宾)

So, uh, Huawei will support the last or the network capability exposure in three experts.

0:59:49.870 --> 0:59:53.990

Jeff Wei (来宾)

The first part is our essential the network API.

0:59:54.780 --> 1:0:7.530

Jeff Wei (来宾)

I talking about the network capability and then the second one is the I TA which is the communication cloud service platform and OK, the last one is.

1:0:7.600 --> 1:0:20.610

Jeff Wei (来宾)

So we believe that now the whole industry are exploring what kind of new service API, what kind of new use cases that can bring new revenue.

1:0:20.760 --> 1:0:26.170

Jeff Wei (来宾)

So Huawei are willing to explore this new use cases with the whole industry.

1:0:26.500 --> 1:0:31.650

Jeff Wei (来宾)

OK, so I will introduce these three expects 1 by 1 briefly.

1:0:31.820 --> 1:0:33.20

Jeff Wei (来宾)

OK, next page please.

1:0:35.630 --> 1:0:36.240

Jeff Wei (来宾)

Thank you.

1:0:36.330 --> 1:0:36.750

Jeff Wei (来宾)

OK.

1:0:36.820 --> 1:0:51.20

Jeff Wei (来宾)

So, uh, the first uh part is the network API actually, uh, we believe that the essential of mass is to release the potential of the value of our networks.

1:0:51.350 --> 1:0:54.0

Jeff Wei (来宾)

So we keep working on that.

1:0:54.150 --> 1:0:58.870

Jeff Wei (来宾)

We believe that the there are three layers of network value.

1:0:59.140 --> 1:0:59.420
Jeff Wei (来宾)
Yeah.

1:0:59.470 --> 1:1:7.120
Jeff Wei (来宾)
I I I acquisition so are they first layer is to improve the ON efficiency.

1:1:7.270 --> 1:1:19.60
Jeff Wei (来宾)
So here are some cases, for example from alarm API indication API so that we can complex the alarm and also the auto provisioning of the service.

1:1:19.390 --> 1:1:20.960
Jeff Wei (来宾)
So this part is talking.

1:1:20.970 --> 1:1:23.900
Jeff Wei (来宾)
This is the first layer of the network value.

1:1:24.150 --> 1:1:29.280
Jeff Wei (来宾)
The second layer of the network value is to enhance the existing offering.

1:1:29.290 --> 1:1:34.620
Jeff Wei (来宾)
Selling, for example, we have the SLA visualization.

1:1:34.680 --> 1:1:37.120
Jeff Wei (来宾)
Uh API, OK.

1:1:37.200 --> 1:1:41.300
Jeff Wei (来宾)
And we also have the potential customer identification API.

1:1:41.710 --> 1:1:49.760
Jeff Wei (来宾)
So this is the second layer and the last layer also is our final target is to enable a new offering creation.

1:1:50.30 --> 1:1:57.920
Jeff Wei (来宾)
So for example, now qod BYOD and also later ideal introduce 5G new calling.

1:1:58.290 --> 1:2:7.90
Jeff Wei (来宾)

So for Huawei side, we already are 10 more than 16 network API to support the network capability exposure.

1:2:7.420 --> 1:2:8.920

Jeff Wei (来宾)

OK, next page please.

1:2:11.80 --> 1:2:13.750

Jeff Wei (来宾)

And then that is the I TA IT.

1:2:13.820 --> 1:2:28.50

Jeff Wei (来宾)

IT means in touch aggregator, but the the the the function of IT I TA is to aggregate the service API and sell them to the capability consumer.

1:2:28.340 --> 1:2:35.370

Jeff Wei (来宾)

So As for ITA, I believe that we have two two functions.

1:2:35.440 --> 1:2:37.930

Jeff Wei (来宾)

The first the first function is.

1:2:38.60 --> 1:2:50.730

Jeff Wei (来宾)

We can provide the fastest option to operator for the network capability exposure and then the second function is as I as I TA.

1:2:50.800 --> 1:2:56.310

Jeff Wei (来宾)

We have a customer base, so we understand what customer needs.

1:2:56.460 --> 1:3:8.190

Jeff Wei (来宾)

So we we may define, we may know what what kind of service API may be valuable to our capability consumer, OK.

1:3:8.200 --> 1:3:11.810

Jeff Wei (来宾)

And then the last one and then the next page.

1:3:11.890 --> 1:3:12.220

Jeff Wei (来宾)

Thank you.

1:3:14.80 --> 1:3:14.360

Jeff Wei (来宾)

OK.

1:3:14.370 --> 1:3:19.490

Jeff Wei (来宾)

The last piece talking about a new service API or new use case innovation.

1:3:19.800 --> 1:3:23.190

Jeff Wei (来宾)

So we are this is our research.

1:3:23.200 --> 1:3:30.70

Jeff Wei (来宾)

We believe that there are are three parts or three steps for the new service API.

1:3:30.120 --> 1:3:41.610

Jeff Wei (来宾)

So the first first phase or the first step is the production means is the large scale application of our existing service API.

1:3:41.740 --> 1:3:45.780

Jeff Wei (来宾)

As we know, open Gateway as already released API.

1:3:46.50 --> 1:3:54.620

Jeff Wei (来宾)

Now we focus on how to make all more and more operator to join in our community and use this API.

1:3:54.670 --> 1:3:59.340

Jeff Wei (来宾)

So this is the first step and the second step is the development.

1:3:59.470 --> 1:4:3.130

Jeff Wei (来宾)

So we also have the two direction.

1:4:3.210 --> 1:4:20.50

Jeff Wei (来宾)

One Direction is connectivity based, so we have the idea of from SOD service on demand to BOD bandwidth on demand and quality on demand, and then last the stable QOD and then for direction too.

1:4:20.220 --> 1:4:24.130

Jeff Wei (来宾)

We also share a case regarding to fighting new calling.

1:4:24.180 --> 1:4:31.230

Jeff Wei (来宾)

Later I will introduce a little bit more and then the last step we believe that is the beyond the connectivity.

1:4:31.460 --> 1:4:36.950

Jeff Wei (来宾)

So we also have some idea scenario one is talking about one ID.

1:4:37.140 --> 1:4:49.620

Jeff Wei (来宾)

We use a phone number as authentication, a unique authentication and this scenario two is we for a wide, the API for the uh terminal for the mobile phone.

1:4:49.890 --> 1:4:58.280

Jeff Wei (来宾)

So actually for the scenario one, we also have some successful practice in China in, in, in China.

1:4:58.350 --> 1:5:12.500

Jeff Wei (来宾)

OK, so next page please, so a little bit more detail for the OK for the case, but the case one is talking about from the service on demand.

1:5:12.930 --> 1:5:50.610

Jeff Wei (来宾)

So we are talking about is self service provisioning API and in this scenario we are talking about is cross operator and in international connection between 2 operators and then it's the bandwidth on demand which means it's a mini level on demand at the judgment and then it's the quality on demand which is talking about the QS and then it's the last is the stable quality on demand which means we will have a more advanced technology such as slicing.

1:5:50.980 --> 1:6:1.710

Jeff Wei (来宾)

So for all this scenario where we already have the the network capability and also we have the API network API as well.

1:6:1.900 --> 1:6:2.410

Jeff Wei (来宾)

OK.

1:6:2.520 --> 1:6:4.270

Jeff Wei (来宾)

And then next page please.

1:6:6.580 --> 1:6:6.910

Jeff Wei (来宾)

OK.

1:6:6.920 --> 1:6:9.680

Jeff Wei (来宾)

And then the next case is the new calling.

1:6:9.730 --> 1:6:11.790

Jeff Wei (来宾)

Uh, why we why?

1:6:11.800 --> 1:6:13.870

Jeff Wei (来宾)

Why we select a new calling?

1:6:13.960 --> 1:6:28.540

Jeff Wei (来宾)

Because as from our experience, we found that uh, voice call and SMS are the main capability for the very new contribution for for the nuts.

1:6:28.730 --> 1:6:36.540

Jeff Wei (来宾)

So we believe that for the 5G new calling is upgrade version for the traditional voice and SMS.

1:6:36.630 --> 1:6:43.140

Jeff Wei (来宾)

So we believe that this will have a great potential for the revenue sharing.

1:6:43.210 --> 1:6:49.250

Jeff Wei (来宾)

OK, so here we can see that for the upper layer is the network capability.

1:6:49.500 --> 1:7:7.970

Jeff Wei (来宾)

Yeah, it it may include some new devices and also we we also have some new network API and then for the upper layer is a new service API, maybe a new 5G new calling a video call or maybe intelligent translation API.

1:7:8.40 --> 1:7:15.510

Jeff Wei (来宾)

And then for the for the top are some use cases based on the five new GI capability, OK, next page.

1:7:18.120 --> 1:7:20.310

Jeff Wei (来宾)

OK, so now it's the take away.

1:7:20.320 --> 1:7:20.790

Jeff Wei (来宾)

I will.

1:7:21.260 --> 1:7:22.310

Jeff Wei (来宾)

Briefly summarize.

1:7:22.320 --> 1:7:37.690

Jeff Wei (来宾)

OK, so the first point is the uh network sufficiency, differentiation, automation are the foundation for the network capability exposure and also network API will be part of the TM from an intent API.

1:7:37.940 --> 1:7:48.570

Jeff Wei (来宾)

And also we share the two layer or two direction for the new valuable API connection related API and new calling.

1:7:48.860 --> 1:7:51.170

Jeff Wei (来宾)

Yeah, this a new calling API.

1:7:51.260 --> 1:7:53.10

Jeff Wei (来宾)

The last uh is the uh.

1:7:53.20 --> 1:7:56.180

Jeff Wei (来宾)

We believe that there are three layer for the network.

1:7:56.420 --> 1:8:8.290

Jeff Wei (来宾)

Uh network capability is exposure and we also are output more than 60 network API to support the network capability exposure.

1:8:8.780 --> 1:8:9.110

Jeff Wei (来宾)

OK.

1:8:9.120 --> 1:8:10.530

Jeff Wei (来宾)

That's all for my part.

1:8:10.700 --> 1:8:11.380

Jeff Wei (来宾)

Thank you very much.

1:8:13.360 --> 1:8:14.30

Lucy Thatcher

Thank you, Jeff.

1:8:14.40 --> 1:8:28.650
Lucy Thatcher
As much appreciated and and with that, I'm going to change tax slightly and then move back to Europe to here from Telefonica about the uh market champion work they're doing in Spain market update for Spain.

1:8:28.660 --> 1:8:29.120
Lucy Thatcher
So Alberto?

1:8:32.460 --> 1:8:41.280
ALBERTO ANDRES TORRON RODRIGUEZ
Hello everyone and thank you very much for coming and thank you for the opportunity to share our view of what's going on with the Spanish industry these days.

1:8:42.200 --> 1:8:44.200
ALBERTO ANDRES TORRON RODRIGUEZ
In my name is Alberto Torron.

1:8:44.380 --> 1:9:6.230
ALBERTO ANDRES TORRON RODRIGUEZ
I'm part of the go to developers team in Telefonica for the Open Gateway Initiative, which is completely crucial and critical for all all of us, and I want to to tell you about what we're doing and how hard it is to make sure we all aligned to the purpose in a really, really short term, right.

1:9:6.240 --> 1:9:20.710
ALBERTO ANDRES TORRON RODRIGUEZ
So so I will, I will talk about what we're doing together with our colleagues from Orange and Vodafone to start this Open Gateway initiative in Spain and be really open to discuss any questions you will have.

1:9:21.740 --> 1:9:48.270
ALBERTO ANDRES TORRON RODRIGUEZ
Please could you go to the next slide think So what we're doing nowadays in in Spain is to to come to go against a common enemy which is the time we we're really in a hurry to to launch the this is the nearest station program called Open Gateway in in Spain, in Germany, in Brazil and Sun in Latin America as well, right.

1:9:48.280 --> 1:9:48.650
ALBERTO ANDRES TORRON RODRIGUEZ
So.

1:9:48.660 --> 1:10:19.450
ALBERTO ANDRES TORRON RODRIGUEZ
So what we'll do is to organize and a weekly meetings, a set of weekly meetings with all the rest of the MNO that want to to launch this initiative together with us and and the idea that that goes through this is OK, we need to align the scope of this joint lunch and we must adhere to the existing regulation in the in the countries we want to operate or our our services.

1:10:19.460 --> 1:10:25.450
ALBERTO ANDRES TORRON RODRIGUEZ
So so there's a common issue, which is OK we need to to follow the standards.

1:10:25.460 --> 1:10:33.400
ALBERTO ANDRES TORRON RODRIGUEZ
We need to go together, align to the, to the European laws in our case and and we need to get to the minimum.

1:10:33.780 --> 1:10:45.220
ALBERTO ANDRES TORRON RODRIGUEZ
Agree that lets us show to the marketer a a very clear message of what's going on before the launch of of the Mobile World Conference in February in Barcelona.

1:10:45.230 --> 1:10:46.420
ALBERTO ANDRES TORRON RODRIGUEZ
Next, next year, right?

1:10:46.430 --> 1:10:47.940
ALBERTO ANDRES TORRON RODRIGUEZ
So please go to the next slide.

1:10:50.160 --> 1:10:53.490
ALBERTO ANDRES TORRON RODRIGUEZ
So what we're doing, we have three different levels of discussion.

1:10:53.830 --> 1:11:7.510
ALBERTO ANDRES TORRON RODRIGUEZ
The first one is the legal issues, which as you can imagine, are enormous in Europe, under the GP Umm Regulation, the second one is the business and the third one is the technical right.

1:11:7.520 --> 1:11:12.890
ALBERTO ANDRES TORRON RODRIGUEZ
These three tracks involve more than 15 people in in weekly basis.

1:11:12.980 --> 1:11:24.930
ALBERTO ANDRES TORRON RODRIGUEZ
From these three MNO, orange, Polyphone, and Telefonica, and what we do share is all we can share without going against the the competence laws in Europe.

1:11:24.940 --> 1:11:33.670
ALBERTO ANDRES TORRON RODRIGUEZ
So the antitrust regulations prevent us to to discuss about pricing, discuss about and whatever the business could be.

1:11:34.430 --> 1:12:1.720
ALBERTO ANDRES TORRON RODRIGUEZ
In separately taken from one operator to the other and we we simply want to make sure that we addressed the standards following the GSMA Learning initiative on the Camara regulations and all the the open standards we we are following for for this initiative and we go together with a with a product that can be tested by the developers as not a better right.

1:12:1.950 --> 1:12:19.250
ALBERTO ANDRES TORRON RODRIGUEZ
So what we ran into is a really challenging, umm, initiative in order to have this, the first customers

set in Spain by mid November more or less right, so so this is the the scope of what we do in this week.

1:12:19.260 --> 1:12:21.390
ALBERTO ANDRES TORRON RODRIGUEZ
Team meetings we do have.

1:12:21.580 --> 1:12:22.430
ALBERTO ANDRES TORRON RODRIGUEZ
Please go to the next one.

1:12:25.460 --> 1:12:26.840
ALBERTO ANDRES TORRON RODRIGUEZ
So what?

1:12:26.850 --> 1:12:27.830
ALBERTO ANDRES TORRON RODRIGUEZ
How we do this?

1:12:28.340 --> 1:12:31.660
ALBERTO ANDRES TORRON RODRIGUEZ
Well, there's no rocket science behind this.

1:12:31.670 --> 1:12:32.0
ALBERTO ANDRES TORRON RODRIGUEZ
There's only.

1:12:32.610 --> 1:12:39.420
ALBERTO ANDRES TORRON RODRIGUEZ
Uh, a mother of organization and and and what we do is to organize a weekly meetings with a referee.

1:12:39.560 --> 1:12:54.800
ALBERTO ANDRES TORRON RODRIGUEZ
The GSMA and we make sure that we do have all the picture together so we share what are the steps we're taking, what the players were trying to involve to work together in this common launch.

1:12:54.810 --> 1:13:6.110
ALBERTO ANDRES TORRON RODRIGUEZ
We want to to prepare for and let's say November and and this go to market initiative that will be crystal clear by February.

1:13:6.420 --> 1:13:8.550
ALBERTO ANDRES TORRON RODRIGUEZ
So we discussed the topics in advance.

1:13:8.560 --> 1:13:22.320
ALBERTO ANDRES TORRON RODRIGUEZ
We shared the the the open points for the discussion and of course we shared the the Minutes after the meetings, but we, umm, completely need the the the the participation of the GSMA.

1:13:22.330 --> 1:13:34.140
ALBERTO ANDRES TORRON RODRIGUEZ

We need someone to make sure that we align to the focus and we don't deviate then the message or the OR the project to make it easier for us to get to the to to the endpoint, right?

1:13:34.150 --> 1:13:34.440
ALBERTO ANDRES TORRON RODRIGUEZ
So.

1:13:34.450 --> 1:13:40.120
ALBERTO ANDRES TORRON RODRIGUEZ
So at the end of the day, all of us do have a an API business already in place.

1:13:40.170 --> 1:13:52.710
ALBERTO ANDRES TORRON RODRIGUEZ
And what we're trying to align is the go to market with a common view with a common API set and a common API initiative that will be easier to handle for the developers.

1:13:52.720 --> 1:14:13.690
ALBERTO ANDRES TORRON RODRIGUEZ
So what we're aiming to is to make sure that after this couple of API, we're going to launch really soon, they'll be they'll be tons of them, come in in their close, close future because as you've heard from the Microsoft colleagues in the Huawei colleagues, there are plenty of different ways to take advantage of this new capabilities at the operators are willing to sell.

1:14:14.0 --> 1:14:21.120
ALBERTO ANDRES TORRON RODRIGUEZ
So what if we are discovering one of the biggest revenue streams in the in the last few years?

1:14:21.330 --> 1:14:37.60
ALBERTO ANDRES TORRON RODRIGUEZ
And what if we prevent something similar that what would have what that what happened with the WHATSAPPS and the SMS is in the in the past and we can lead our own future so that that's the the the idea and what that's the reason for this initiative.

1:14:37.70 --> 1:14:56.330
ALBERTO ANDRES TORRON RODRIGUEZ
I mean we we think we can create tons of revenue and anonymous set of APIs can be sent the market in our appropriate manner for the developers and that can create a big difference in their industry and can be absolutely compliant with the regulation, right, so so that's what we do.

1:14:56.600 --> 1:15:5.330
ALBERTO ANDRES TORRON RODRIGUEZ
We organize the set of meetings to make sure we all align to the single purpose and and we'll be ready to go by the end of the year.

1:15:6.410 --> 1:15:10.300
ALBERTO ANDRES TORRON RODRIGUEZ
Please go to the next one and what have we learned?

1:15:10.570 --> 1:15:20.900
ALBERTO ANDRES TORRON RODRIGUEZ
We learned over the last few months of meetings that if you want to evolve a big industry with tons of legacy and you'd better be proactive and abrasive change.

1:15:20.910 --> 1:15:24.640
ALBERTO ANDRES TORRON RODRIGUEZ
I mean, of course we have a, a, a business to defend.

1:15:24.650 --> 1:15:25.110
ALBERTO ANDRES TORRON RODRIGUEZ
Of course.

1:15:25.120 --> 1:15:30.480
ALBERTO ANDRES TORRON RODRIGUEZ
It's that's crystal clear, but you can't even imagine the as of today.

1:15:30.490 --> 1:15:38.250
ALBERTO ANDRES TORRON RODRIGUEZ
Besides of the opportunity and the market size that is coming and the set of different new services that will be blooming in the next few months.

1:15:39.20 --> 1:15:43.830
ALBERTO ANDRES TORRON RODRIGUEZ
Yeah, eight with this new API initiative from the cars, right?

1:15:43.900 --> 1:15:57.690
ALBERTO ANDRES TORRON RODRIGUEZ
So if we share the the the view and sync to a speed and go to market together, they'll be at a completely enormous, let's say, European market for for this and and that's the point.

1:15:57.700 --> 1:15:58.610
ALBERTO ANDRES TORRON RODRIGUEZ
That's the only point.

1:15:58.680 --> 1:16:4.450
ALBERTO ANDRES TORRON RODRIGUEZ
So imagine what will happen if we go by our own and as as we used to do in the past.

1:16:4.660 --> 1:16:8.490
ALBERTO ANDRES TORRON RODRIGUEZ
It would be the same problem we suffered in the earliest days of the roaming.

1:16:9.270 --> 1:16:21.340
ALBERTO ANDRES TORRON RODRIGUEZ
We're talking about something quite similar to that unless we go to to a standard and we standardize the provision, the building, the service and the regulation that goes below, this won't make sense.

1:16:21.390 --> 1:16:40.920
ALBERTO ANDRES TORRON RODRIGUEZ
This won't scale enough and we want to leverage in the new technologies and the new capabilities that the that are blooming over the last few years in the industry to make our networks more, more, more and more profitable instead of letting other people take advantage of what we're investing in.

1:16:41.240 --> 1:16:54.210
ALBERTO ANDRES TORRON RODRIGUEZ
So we can complete the efforts of any of many other players, but we work looking for a really big revenue stream with this, right.

1:16:54.220 --> 1:17:17.630
ALBERTO ANDRES TORRON RODRIGUEZ
So we commit to have a common framework under the Camara project and host a regulated and complaints and compliant discussion about the standardization process and we commit to follow open standards on the Camara initiatives and that's a big, big step for all of us because at the end of the day will be extremely easier than it is today for the developers to go and use our networks.

1:17:17.840 --> 1:17:19.680
ALBERTO ANDRES TORRON RODRIGUEZ
But please go to the next one.

1:17:21.910 --> 1:17:41.420
ALBERTO ANDRES TORRON RODRIGUEZ
So after what my colleague Pedro has told you about the AP program, the Early Access program and and was the the and from Deutsche Telekom told you what's going, what's coming next, what's coming next is we're going to be and we're being extremely open to tell the industry what's going on.

1:17:41.430 --> 1:17:47.950
ALBERTO ANDRES TORRON RODRIGUEZ
What are the the next use cases where seen and what are the next things you can discuss with the with the aminos?

1:17:48.590 --> 1:17:53.450
ALBERTO ANDRES TORRON RODRIGUEZ
Umm, that can be much lower than what you probably already know about our capabilities.

1:17:53.700 --> 1:18:5.100
ALBERTO ANDRES TORRON RODRIGUEZ
So if you have a big plan on Telco API, so you need more information, we're wide open to discuss about that, right that there you have my ideas, please go to the next one.

1:18:7.610 --> 1:18:9.900
ALBERTO ANDRES TORRON RODRIGUEZ
And thank you very much if you have any question of it.

1:18:9.910 --> 1:18:12.490
ALBERTO ANDRES TORRON RODRIGUEZ
Really honored to try to to address it.

1:18:15.200 --> 1:18:16.190
Lucy Thatcher
Thank you very much.

1:18:16.200 --> 1:18:17.530
Lucy Thatcher
Thank you for that overview.

1:18:17.540 --> 1:18:22.470
Lucy Thatcher
And as you say, your contact details are there, just a reminder for those people who didn't see it up front.

1:18:22.480 --> 1:18:28.50
Lucy Thatcher
So we do record this call and make it available both on the website and also via email.

1:18:28.60 --> 1:18:32.900
Lucy Thatcher
So if you missed them first time round, you will be able to see them in the replay.

1:18:33.830 --> 1:18:34.170
ALBERTO ANDRES TORRON RODRIGUEZ
OK.

1:18:34.180 --> 1:18:40.610
Lucy Thatcher
I'm all quickly do the next section and then we'll hopefully have about 10 minutes or so for Q&A.

1:18:40.770 --> 1:18:50.670
Lucy Thatcher
So we wanted to make you aware that as part of the Open Gateway program will be running an open gateway Dev Con as part of MWC Las Vegas.

1:18:50.940 --> 1:19:2.300
Lucy Thatcher
So on September the 27th, all day we'll be having a theater session around specifically around open Gateway aimed at developers.

1:19:2.310 --> 1:19:5.980
Lucy Thatcher
So we developers talking to developers and and teams talking to teams.

1:19:6.590 --> 1:19:9.820
Lucy Thatcher
And if you want to the next slide, Ollie.

1:19:12.90 --> 1:19:29.870
Lucy Thatcher
Really hectic agenda that we tried to pull together and so you'll be hearing from the likes of Nokia, Bell Canada, KDDI, GSMA, Microsoft DT, T-Mobile US, Verizon and Telefonica.

1:19:29.880 --> 1:19:42.110
Lucy Thatcher
So some of the names and some of the people you've heard from today, but also a much broader view of focused not only on what's happening now, but also what could be happening in the future and network APIs.

1:19:43.290 --> 1:19:52.70
Lucy Thatcher
And if you flick onto the next slide, most important thing to say is that there's the opportunity for you to register for free.

1:19:52.120 --> 1:19:59.650
Lucy Thatcher

So we have Discovery exhibition passes for MWC available for free for those people who would like to attend the Dev con.

1:20:0.440 --> 1:20:5.940
Lucy Thatcher
So whilst the Devcon is only one day, that gets you access to the show floor for all three days.

1:20:5.950 --> 1:20:19.30
Lucy Thatcher
So if you want to come and experience a lot of Mobile World Congress looks and feels like and you are US based, then I would encourage you to go on to the GSMA website or the MWC website and have a look.

1:20:19.40 --> 1:20:27.0
Lucy Thatcher
You'll be able to see more about the agenda, some the speakers, and get that all important access code to come along and join us.

1:20:27.10 --> 1:20:35.350
Lucy Thatcher
We would love to see you love, to hear from you and and experience open gateway in all its glory at DEFCON.

1:20:36.930 --> 1:20:42.200
Lucy Thatcher
And with that, I'm going to stop talking and, UM, open up for Q&A.

1:20:43.860 --> 1:20:48.560
Lucy Thatcher
So I think there were a couple that we didn't go through.

1:20:49.980 --> 1:20:55.700
Lucy Thatcher
I'm not sure if Ricardo still on, uh.

1:20:55.740 --> 1:20:57.870
Lucy Thatcher
And then there's a question for Anna.

1:20:58.340 --> 1:21:1.670
Lucy Thatcher
So any other questions that people would like to raise?

1:21:1.720 --> 1:21:6.690
Lucy Thatcher
As I said, we will follow up individually with the questions that have been raised and haven't been answered so far.

1:21:30.650 --> 1:21:34.0
Lucy Thatcher
No, doesn't look like there are any questions coming through.

1:21:34.390 --> 1:21:35.670
Lucy Thatcher
So thank you very much.

1:21:35.680 --> 1:21:46.140
Lucy Thatcher
Thank you to our speakers, especially those who had to do this twice today and thank you very much to everyone for attending and we will end the call there.

1:21:46.150 --> 1:21:46.570
Lucy Thatcher
Thank you.