GISELLA GRUBER: …I think it would be quite interesting to have these sessions recorded, so that we could just go back and see what we’ve learned, not only from us, but from you as well. So, every time, when you speak in the mic, if you can just say your name, you know, Gisella speaking. And then for the transcript that we’ll have afterwards.

But to speak clearly in your mic, and when you’re finished, just switch it off, thank you.

HOLLY RAICHE: Holly Raiche speaking. And the first thing you do is, you press the button, and it’s red and then you talk. And when you finish talking you turn it off, because otherwise, if you don’t, you talk over each other and we’ve got lots of voices.

Okay, here I go.

Is it on Adobe?

[SPEAKER OFF MICROPHONE]
No, no. We’re not doing it… We’re doing this, absolutely, we’re talking and then you’re talking to each other. So, Ariel, may I have the next slide please?

And this is Holly Raiche and I’m going to talk until… Now, this is a slide that talks about the very tortured history of the internet. It started with a bunch of people in, largely in UCLA, but if you listen to people, you will find out that there are people from France who say that they have invented it, and the people in England say they invented it.

And there are lots of people in Australia who also have invented the internet. So, there is a bit of a checkered history, but a lot of the work actually happened in UCLA. In California. And where you see DARPA, you will find that the US Defense Department, very early on, found that the internet was really going to be something important for defense.


MONA: This when you can. My name is Mona. It is when you can cut the internet, the whole internet, is that what your question? No?
HOLLY RAICHE: I’m going to answer this question so we can go on… Actually, can we go on to the next slide? Thank you. There are a couple of events in the history of the internet, and explained why the national telecommunications information administration, which is a subsidiary of the Department of Commerce in the US, was so willing to part with money.

In telecommunications, one form of communications, what's called circuit switched. And that is, a circuit is actually established over wires. Have you ever wondered why, if it's a fixed phone, you can talk over somebody, and the two voices can go on at once? You cannot do that with a mobile phone, because it’s not circuit switched with what’s called twisted copper piers.

You have got a bunch of packets, and what the packets do, is each packet has got a little nametag that says, my name is Holly, and I actually want to go back to Sydney. And I've got a little sign on the back that says, this is Holly, and she wants to go back to Sydney. And I will find my way. And I may take a variety of routes, but I’ll get there.

Now, if every one of those packets has got the little name tag in the front and the back that says, this is where I am going, I will find whatever route I can. My standard example is, if, for example, and I will use the Sydney example, you have a 100
person choir, and they all practice, and they’re all, you know, the sopranos, and the altos, and the tenors, and the bases, they’re all in the right order.

If it’s circuit switched, they all get out of the practice hall in the same order, they get into the bus in the same order, they wind up at the opera house, in the same order. All of them are there, and nothing is lost. The order is not lost, nothing is lost.

The packet switch, they’ve all got a little nametag that says, Holly, alto, opera house. I might actually get on a bus to get there. I might swim in the harbor and be eaten by a shark, and I won’t get there.

I might take a cab, I might take a train. And everybody gets together and some people have been lost. Traffic jams, eaten by sharks, whatever. We’ve all got to reassemble. Have you ever looked at the bottom of a screen and seen how things keep reassembling? That’s what is happening.

What the defense department means, that instead of being able… Somebody, a foe, being able to take out just one bomb, you take out the communications hub, but if you’ve got the internet, you don’t know how the packets are going, and the packets will find a pathway. If there is a traffic jam, they’ll get on a train.
If the train stopped, they’ll swim. They’ll take a boat. They’ll take a ferry. They don’t get there until you will have a message go through, and that is why the US Defense Department thought this was fantastic, what a great idea, we will fund it, that’s why they funded it. Next slide.

After a whole lot of experiments in California, France, Europe, whomever is claiming credit, you had a concern about this is largely US-centered. And there was what’s called a green paper, that went out and said, we actually want to create a multistakeholder model. We actually want somebody, a private company, not the US, to take ahold of this.

So, what we had was the creation of ICANN. Now, we will get to, if you look in these elements are important, because when we look at for an ICANN became completely independent on October 1st, three things, the domain name identifiers. This is about the domain names, whether it’s country code or generic.

The address, and that’s numbers. Do you all remember that if you type, if you type in a name, it transfers into numbers, and the numbers are basically the address. It’s like a phone number. You used to be able to have… You had like a [inaudible], but that just becomes a series of numbers, and it’s just the phone, it tells you where to go to the registry, that it tells you, for
instance, for the Australian thing, if it's [inaudible] dot AU, that's me.

The registry is EDU, that's education. So, the message will go into the little body that handles education. UNSW, University of New South Wales. And then it finds my desk. That's how it works. So you need a domain name that translates into the set of numbers. And then there is the protocols, and the protocols are the things that explain how all of that happens, and I am not going to tell you, because I don't know.

I can't explain it. Anybody can explain it or not? Next slide. Too technical. If you look at ICANN, actually, can you go back one? Can you go back one slide? In the ICANN structure, domain names are actually, it was originally called the DNSO, but it became split in two the generic names. And that's because the registries that manage the generic names, work with a direct contractual relationship with ICANN.

Country codes, the manager or controller of the two letter country code, is managed by that manager. It might be the state itself, it might be a government department, it might be a separate entity. In Australia, it's dot AU, and it's managed as a private organization that operates under an arrangement with ICANN. Okay?
So, we've got the SOs, they're called Supporting Organizations. Now, if you attended this morning, you would have heard Paul Wilson. He heads up the organization that manages the numbers. They're five regions, five registries. There is APNIC, for Asia Pacific, that's all you need to know. There are four of us.

And then you have the IETF, which is actually underneath the Internet Society. Those are the three things you need to know. That's got a new name. We'll get to that later. Okay. Now, can I have the next slide?

The other part of ICANN structure are the advisory committees. There is the government, there is the stability and security. There is us, which is the At-Large, and the root server really looks after that whole kind of IETF protocol area. So you've got the real structure of ICANN [AUDIO FADES OUT]…

Okay. ICANN actually started off as a contract with NTIA, where they took over responsibility for the ICANN functions, but they were operating under contract with NTIA to manage the IANA functions. Those are the root server functions.

And this is where the Defense Department, see, the Defense Advanced Research Project Agency, that was the originally body that looked after, that was originally involved in the whole internet project. Now, the functions that ICANN took over, coordination of the technical protocol parameters. That’s the
technical stuff, the IT stuff. The administrative functions with the root management, sorry. That’s the root name servers.

IP address has gone to the RIRs, that’s the ASO, the Address supporting organization. And the others… So that’s what IANA does. Next slide please. Okay. A little bit about the history of ICANN. The original contract between NTIA and IANA, was signed in 1998.

That was renewed, it was renewed, but in 2006 was the beginning of the… We, in the United States NTIA, gradually recognized that ICANN needs to become at least a little bit more independent. And the process of independence was started back with a [inaudible]. The affirmation of commitment was another step, where the US said, well, yes we are going to give up the join project agreement, and what we’re going to say is, you can manage yourself as long as you do four things.

I haven’t written them there, but that was essentially, it was a gradual process by which the NTIA, really the Department of Commerce, started to say, we recognize ICANN as becoming an independent body. The big event was in March 2014, when in fact, the Department of Commerce said, okay it’s time.

We want you to transition to be an independent private company. Can I have the next slide? Their criteria, and for two years… Now, if you were at this morning’s ceremony, what you
would have heard is the two years that everybody slaved away to meet these criteria.

These were the conditions that had to be met if ICANN was going to operate a part from, away from, the contract with the Department of Commerce. The first thing, it had to have broad community support. And that means, not only all of the ICANN people, but at every stage, things had to go out for public comment. There had to be a lot of consultation at every step.

It was incredibly important that it was a multistakeholder model. That is, all of the people involved, whether it’s people involved in the root server, and the parameters, whether it was the RIRs, which is the address, the names, the At-Large. It was a requirement of the US government.

The everybody, all of the stakeholders, had to be involved, and they had to support the model. It was also critical, and still is, that whatever the model looked like, there had to be commitment to maintaining the security and stability and resilience of the internet. What does the DNS stand for? You see that?

UNKNOWN SPEAKER: [Inaudible]. DNS stands for Domain Name System.
HOLLY RAICHE: Absolutely correct. There was concern that there are loads of global customers of the IANA services, and they had to be part of this agreement. It was critical, for the US government and for most of us, for all of us, that the internet remained open, and its management remained open.

And one thing the US was very clear, absolutely clear about was, it is not going to be taken over by any particular government. So if you heard today, this morning’s page, like this is a multistakeholder model. There is no government that has complete sway at all.

Next slide. Okay. Two critical dates, really critical. After two years of really hard work by three different bodies, there was a body that Paul Wilson talked about, which is a bunch of the RIRs, there was the domain names, there was us in ALAC. There was the technical community, all of them come up, just really hard work, come up with the fact that in August, the US government said, you know what?

After [AUDIO FADE OUT] years, you have come up with a proposal that meets all of our criteria. And that was fantastic. That was absolutely fantastic.

October 1st was when everybody who knows anything about ICANN just had a really quiet celebration and a glass of champagne. This is a chart that you can read on your
computers, it’s hard to see, but this is what ICANN looks like. It has got a Board. It has got [AUDIO FADE OUT]…

…but the left column.

No, no, no. Okay. NomCom, ASO. The ASO is the address, and the five RIRs, which is the Regional Internet [AUDIO FADE OUT]…are APNIC, AfriNIC, which is the African, ARIN, which is… Is that Europe?

RIPE, okay. Which is ARIN? I always forget. North America. LACNIC, that’s Latin America, and RIPE is Europe. And the ccNSO is where… Now, not every manager of every two dot is a member of the ccNSO, but a lot of them are. Maureen?

How many members of the ccNSO [AUDIO FADE OUT]…

…other, how many managers of the…?

…projects is defined at, how many members of the ccNSO there are? How many countries are not represented on the ccNSO? Because it is voluntary. The managers of the two dot, and I hate to say [AUDIO FADE OUT]…

…countries because there are some that aren’t countries.

This is voluntary. And that’s the difference between the generic top level domains, where in fact, all of those registries are under contract [AUDIO FADE OUT]…
...versus the ccNSO where country codes, is what’s it called, all of the country code managers have [inaudible]. Next column over.

...this is generic name supporting organization, actually has [AUDIO FADE OUT]...

...community, it has non-commercial interests as well as not for profit. Below that is At-Large, and you’ve got [AUDIO FADE OUT]...

...we’re going to talk about the ALAC structure [AUDIO FADE OUT]...

...one column over. These are the other, now there is the security and stability, which they are the body that’s responsible for that section of the requirement the US Government put on for security and stability.

The root servers is [AUDIO FADE OUT]...

...that is the multistakeholders, and that’s how that all fits together. Next slide.

This is what we do. [AUDIO FADE OUT]...

Anybody know the difference between a registry and a registrar?

Okay. Mona?
MONA: [Inaudible]

HOLLY RAICHE: No. RIPE, RIPE is the one of the five regional, and they’re the number organizations. When we talk about registries and registrars, we’re now talking about [AUDIO FADE OUT]…

…anybody else what to guess [AUDIO FADE OUT]…

UNKNOWN SPEAKER: …[inaudible] having established the, you know, is the authority to provide the network connections. That is all the stories. Registry is a kind of letter based setup.

HOLLY RAICHE: Go ahead.

UNKNOWN SPEAKER: Registrar is… [Inaudible] Armenia. Registrar are organizations which are registering and managing domains, and registrars are those organizations which are operating top level domains. They create domain name extensions, and so on and so forth, set rules for domain names.
HOLLY RAICHE: You’re next.

UNKNOWN SPEAKER: [Inaudible]. I think registries have a direct contract with ICANN, and registrars contracted with the registries to resell the addresses?

HOLLY RAICHE: The second part was right. The first part, the registries have a contract to manage the dot AU, or the got EDU, or the dot whatever. And below that, you’ve got registries that actually have the contractual relationship with the individual domain name holder.

So, it’s a relationship that starts with a registry that contracts with the registrar for particular dot AU. So, for example, oh let’s say I’ve got a store named Smith, and I want to have Smith dot com dot AU. So I’m going to go to the registry that manages, well you’re going to have a registry that manages dot… You start with dot AU, and that’s...

In Australia, it’s managed by the Oz registry. And then various people will manage, one manages the EDU, one manages the [inaudible] and so forth. And so I go to the registry to get Smith dot com dot AU. So I will go to a registrar who has a direct relationship with the registry. Okay?
Now, and the registry… In fact, there is for generic top level domains, there is a standard contract called the RAA, it’s the Registration Accreditation Agreement. It is on the ICANN website, and that’s the standard contract for registries.

Sorry, registrar, yeah registries. Registrars, sorry.

Okay. So, it runs an accreditation system for registrars. It also… And this is where, again, you see the three functions. You’ve got direct relationship between ICANN and the registries, the registrars is what we call, they’re actually called contracted parties for generic names. You’ve got the coordination function with the RIRs. These are the numbers. And it works closely with the IETF.

So, again, those three functions, which is about names, numbers, and protocols, are what ICANN does. Next slide.

Now, it’s your turn. Okay? I don’t have a watch so Maureen is going to tell you what time it is. What I want is for all of you to split up in about four or five groups, and I want one group to tell me, pick either a supporting organization, and remember what we talk about the names supporting organizations?

That was the security and stability. It was. What are the others?

GAC. What else?
No, don’t talk about At-Large because that’s tomorrow.

These are the advisory committees. What else?

Sorry?

UNKNOWN SPEAKER: There is root server, stability, security and advisory committee.

HOLLY RAICHE: Security and stability is separate from the root server. You can also pic… You can do either a supporting organization, or advisory committee. So everybody… You’ve got your computers, you can go back a couple of spaces. Actually, can you go back to find the chart? Before the chart. Let’s go back. Next slide. Where have I got… I’ve got the list of them.

The advisory committees. Go back. We’ve got the advisory committees, we’ve got the GAC, we’ve got the SSAC. You’re not allowed to do ALAC because that’s tomorrow. Or you can do the RSSAC. Or, next slide please. I think we want to go the other way please. After the advisory committees. That’s it. No, no, no. Here we go.

So, there is the GNSO. There is the ccNSO, or there is the ASO. Okay? Now, I want you to organize yourselves into… All right, who wants to do what? Because the first, I think the first four…
Well, okay, what I want each group to do is to pick, either a SO or an AC, and explain to the group what it is and what it does, and you will find all of that information on the ICANN website. Do we have ICANN Learn? Or just go…

In fact, can you go to the, just to the ICANN website?

[SPEAKER OFF MICROPHONE]

Just the ALAC, because we’re talking about ALAC tomorrow. So…

[SPEAKER OFF MICROPHONE]

No.

[SPEAKER OFF MICROPHONE]

Okay, now, if you look at the ICANN website, you see where it says groups? Go to where groups are, okay? Up there, it will say groups. That’s it. Under community, it says groups, and there is a little circle, and you can see, just go up. You see that you can hit one of those buttons, and that tells you there is GAC there, there is SAC, RSSAC, there is the ccNSO, the GNSO, or the ASO.

So, could I have…? Now, could I have, I’d say, the first four people, what do you want to do? And then the next four and so forth.

[SPEAKER OFF MICROPHONE]
Well, how do you want to do it? Do you want to do it just by [inaudible]? You’ve got two minutes to do this.

I’m going…

[SPEAKER OFF MICROPHONE]

All right. I would like, before that, I want one group to explain what registries are, and I want another group to explain what registrars are. Now, where you find out… Where would I find out? What group contains that?

[SPEAKER OFF MICROPHONE]

Possibly the GNSO? Why would it be the GNSO?

[SPEAKER OFF MICROPHONE]

You’ve all got five minutes. Now, put up your hands, group one. Who wants to be in group one?

One, two, three, four. You’re going to talk about registries. Now, the first three, the next three, you’re going to take about registrars. You are going to talk about… I’m going to… You’re going to talk about GAC. And this side, you’re going to talk about SSAC.

Okay? Now, I know. You can join whichever group you want to. The people in the back. And I think, I think the best thing is, it’s going to be… Because we started a little bit late, there isn’t
enough time to report back, but this is your project. So that tomorrow, we'll have a very brief, two minutes each, to say what it is. Okay.

Judith, you're not allowed to help them.

I simply want you to be able to explain what the organization is and does. I think I gave you the SSAC. Did I give you the GNSO? Sorry. That's what, I thought I gave you... If you want to do GNSO, it's over there. That's the... It's the SSAC you've got.

[SPEAKER OFF MICROPHONE]

UNKNOWN SPEAKER: There are two groups here. I think you gave us SSAC over there. Right?

HOLLY RAICHE: Okay. Well, you can do the... Why don't you do the RSSAC then? The bottom group can do the RSSAC, and you can pick what you want to do.

UNKNOWN SPEAKER: So we are...
HOLLY RAICHE: Now, has everybody…? We sent around a piece of paper. Has everybody signed a piece of paper? Has every…?

[SPEAKER OFF MICROPHONE]

Okay.

[SPEAKER OFF MICROPHONE]

If you look at that circle, and you hit one of those circles, it’s an explanation of what that is. That’s how you get into each of those organizations, those sections of…

See, you hit ALAC, but you’re not doing ALAC today. We’re doing ALAC tomorrow. But if you look at, for example, this GNSO, that’s what it is, and that’s where you will find what GNSO is and what it does. And I suppose your project for tomorrow, or maybe over the next 24 hours, is to actually explore one of those areas.

So you know what it’s about.

[SPEAKER OFF MICROPHONE]

You have got a few minutes left. And what I hope, is if you’ve got questions on your mind, you will, in fact, go back to your rooms, or whatever, and find out the answers, because ultimately, this is about you finding out about ICANN.
UNKNOWN SPEAKER: We have a report back. It’s an advisory committee within ICANN sector.

HOLLY RAICHE: This is about GAC, and you forgot to say your name.

UNKNOWN SPEAKER: It’s a governmental advisory committee, within ICANN structure. It represents governmental, and international governmental organizations. And it gives advice to the ICANN Board about the policies related to national laws and international [arguments?].

HOLLY RAICHE: So far, she’s got a gold star. Because she did it by herself. Does anybody want to report back next? Do I have a…? Are you guys ready to report back? And if not, why not? Go for it.

UNKNOWN SPEAKER: Okay. We have organized our presentation in a way to say what it is, what is the SSAC, and what is its mission, how it operates, what is its engagement, and then how you can participate. I have two minutes?

HOLLY RAICHE: Talk quickly.
UNKNOWN SPEAKER: Okay. So, I will talk about its mission, he will talk about its operation. Its mission is to advise ICANN community, and Board, on matters relating to security and integrity of the internet’s naming and address allocation system, which means that it advises on operational matters, administrative matter, and it also, and registration matters.

And yeah, and it also take care of tracking and assessing sites and risk to the internet naming and address allocation services. [CROSSTALK]

HOLLY RAICHE: …function, we’ve got one minute for you guys.

UNKNOWN SPEAKER: Go ahead, talk about operating.

UNKNOWN SPEAKER: How do, sorry.

I’m [inaudible]. How does the SSAC operate? SSAC produces reports, advisory, and comments. Reports are longer documents from usually take a few several months, usually several months. Advisory or charter documents produce more
quickly to provide timely choices, and advice for the community. And comments are responses to the reports.

Maybe those reports are from users and other community.

HOLLY RAICHE: I’m going to stop you there, but I’m going to say, you should be reading them. Those SSAC reports are really interesting. And you find out a lot about the issues of security and stability in the internet and what you should do about it, so you’re absolutely right, I’m cutting you off, but they’re great reports, read them.

Okay, over here. Have you got a report? Next.

UNKNOWN SPEAKER: So we’re [inaudible], we work on registrar. So registrar basically is the agent that’s selling domain names, yeah. And you sell TLD [inaudible] is the [inaudible] domain names.

HOLLY RAICHE: Excellent. You didn’t say your name though.

UNKNOWN SPEAKER: Okay. I’m [inaudible], I’m from Hong Kong.
HOLLY RAICHE: Thank you. Next.

UNKNOWN SPEAKER: This is [inaudible]. And I would like to explain registry, what registries. Registries are organizations which is authorized to sell generic domain names or country code TLDs. Like, I would like to give an example, for dot com, dot net, there is VeriSign, which is a registry. And the host of this event [inaudible], is a registry, which is authorized to sell dot IN, dot [inaudible] and so on.

And that’s all about registry. And we have also prepared [inaudible] GNSO, and are we?

HOLLY RAICHE: You’ve got 30 seconds, because they haven’t reported and they’re really jealous.

UNKNOWN SPEAKER: Okay. GNSO is an organization which supports TLD and help making our policies about TLDs, like they are responsible to ensure that during registration, what services a registrar should provide, and if a registrant, another service, for the registrant forgets to renew their domain, how they can recover their domain names after that. And they also deal with the conditions
when similar domain names are registered, how the issues can be resolved.

And that’s how GNSO does, and there is a list, which GNSO does, I would like to…

HOLLY RAICHE: That’s fantastic. The period that is between the actual expiration and when somebody else can take it up is actually called the grace period. That varies from country to country, from registrar to registrar. So, but there are policies in terms of expiry…

You’re next. Maureen is not going to let me talk.

UNKNOWN SPEAKER: This is [inaudible] from ISOC India. And we are going to say about RSSAC. RSSAC is Root Server System Advisory Committee. They mainly deal with advising ICANN Board on operation, administration, security of internet root server systems. They are composed of 13 voting members and their Board, and five or six other non-voting members. And more details will be told by my team members.
UNKNOWN SPEAKER: This is [inaudible] again from [inaudible]. Well, the RSSAC meets regularly and mostly on telephone. In face to face meetings happen at such ICANN meetings and sometimes at the IETF meetings. The latest meeting that was held was somewhere around in September. And periodic publications and advisors are being made, and these publications are let out open, the latest publication was again, made on the 8th of September, which is... I'm sorry. The 6th of October. There was a new one that came up on the 6th of October, and this report is in response to the GNSO policy development processes, which advises the ICANN committee in how it works.

HOLLY RAICHE: Is there anyone who has not talked? Because you've got 30 seconds.

UNKNOWN SPEAKER: This is [inaudible] again. There is this caucus of DNS and root server system, the experts actually advise... They're responsible for the central work of this particular RSSAC. And they publish, RSSAC publish, you know, advisory [inaudible] reports and what not. They mandate the advising of ICANN community and Board, as well as documents [inaudible] work.
HOLLY RAICHE: That is excellent. And you’ve all done really well, and you can give yourself one gold star. You’re all aiming for four gold stars. What I hope you will do is go back to the website and just look at all of the components of ICANN, because that’s what we do. That is the multistakeholder model right in front of you, that set of circles.

And it all works together. Now, next time, which is tomorrow, same time, same place, by the way, there is lunch out there, is going to be ALAC. Please try to be on time so that we’ve all got time to talk. We’re going to look about the model of At-Large, and we’re also going to look at some of the policy issues that we’re dealing with. Gisella would like the final word.

GISELLA GRUBER: Sorry. While I still have everyone’s attention, please, no same time, same place. No. In your red folders, please look at this sheet, and I’ve sent to all of those who registered, and there a couple of people, but I’ll send it to the APAC list. I’ve sent an email, in all fairness, it was very late last night.

But to make sure that you check the time and the meeting room, because we actually change every day, at least time and meeting room. But yes, for every session, there will be lunch served. So if you’re running late, you know that you will be able
to get food here. So tomorrow, it is 12:30 to 1:45. So that’s good, we’ve got a 75 minute session, and it’s in MR01.

So just next to this one. Thank you.

HOLLY RAICHE: I lied. Sorry. Look at your red folders, don’t listen to me. But I’ll see you tomorrow.