JORDYN BUCHANAN: Alright, everyone. Welcome. Good morning. This is Jordyn Buchanan and we are once again having a Competition and Consumer Choice Subteam Meeting of the CCTRT. I assume that no one has updates to their Statements of Interest overnight.

This morning we're going to start talking about price competition and take a look at our projects, see what data we have and expect to get. I think we're a little further along here than we are in some of the non-price projects so I'm optimistic we'll also be able to have some substantive conversations today. And in just a minute we'll be able to see our projects.

I'm just going to run through the projects as we did yesterday, sort of do a status check, then at the end we can talk through what we know and if there's anything else that we're missing because I know that the ICANN staff loves it when we add additional projects at this point.

Kicking off with Project 1.1. This is comparing pre and post prices by strings on the market. We need data from aftermarket providers. We do not have any. We currently don't know how to get any. We're working on trying to get some from SEDO which is our last ditch chance, and otherwise we won't be able to do this project. That's a fair summary, Jonathan?

JONATHAN ZUCK: Yes. That's a fairly fair summary.

JORDYN BUCHANAN: Alright. Jonathan says it's a fairly fair summary. So we'll see. The rest of these I think are all… the projects are largely complete.

Project 1.2 is to compare pricing versus single string and multiple string registry operators. Is [inaudible] doing this actually? I don't think I've seen this project done. I don't know if you guys are working on it.

GREG RAFERT: No we're not. I guess it would be helpful to have a little bit of clarification on what you had envisioned for the project.

JORDYN BUCHANAN: I think the goal behind this project is to see if there is any economies of scale essentially. And so if a registry operator has more than one TLD, does it affect the way they price their domains? And so I would imagine the output would be like a histogram. It would just be like number of strings, average price, or something like that.

So this project is like, so say .club – they only have one TLD as a registry operator. They're called .club so that would be a really bad name if they had other TLDs. They have, I don't know, let's say their wholesale price is $30. Then there's Donuts. They have 200 TLDs. What's the average price that Donuts charges for their domains? And they would be like the 200 entry. And then you could either get – I don't know what the best way to present that data is – but essentially a summary of average price with some relationship to the number of TLDs that the registry operator has. Stan has an intervention.

STAN BESEN: This is just not spelled out in a detailed…. If I were being tasked to do this, I wouldn't know exactly what [is being] asked to do.

JORDYN BUCHANAN: Alright. This one had "suggested by Jonathan" next to it.

JONATHAN ZUCK: [Inaudible]. What is the…?

JORDYN BUCHANAN: The project description says, "Using the most current wholesale price data, calculate average price by number of strings managed by the registry." So you could imagine that literally being, "Compute the average price per TLD per registry operator. Put an entry for the number of TLDs they have. And then if there's more than one registry operator that has that many TLDs, then average across all those."

I don't know if that would be that useful because you're probably just going to get at one, two, and three, you'll probably have a bunch of operators, and at 207 you'll probably have one. So it might be useful to bucket them or something like that.

STAN BESEN: I still have lots of problems here, but my understanding is that we don't actually have wholesale price data for that many registries.

JORDYN BUCHANAN: They don't have for 125, is that right Greg?

GREG RAFERT: I think we have 139 TLDs that we collected wholesale price data for. I don't know how many registries that covers, but we can check.

STAN BESEN: The reason I raised that is that you have another table which you have calculated correlations and that's based on n=13. I understand that because they're aggregated across groups. But it doesn't seem like a lot of observations to me.

GREG RAFERT: I think, Stan, that table that you're referencing is that the TLD family table? Yeah, we might have a little bit more data for something like this just since we wouldn't be restricting to TLD families per se. But we can certainly see how much if we think there'd be enough data there that it would kind of produce meaningful results.

STAN BESEN: [Inaudible]. It would be useful to write up a more detailed description of this from that one line.

JORDYN BUCHANAN: Sure. Jonathan, do you want to try that?

JONATHAN ZUCK: Sure.

JORDYN BUCHANAN: Alright. Jonathan will try that.

ELEEZA AGOPIAN: May I just ask what this analysis would tell you?

JORDYN BUCHANAN: It depends on what it says. I think it is about economies of scale, actually.

STAN BESEN: Yeah, actually. There are probably other factors that determine the price than this and if you were doing this, you would do some sort of multi-variant analysis. This is going to be a simple uni-variant analysis subject to all the limitations of that.

[GREG RAFERT]: Yes indeed.

JORDYN BUCHANAN: Megan and then Waudo.

MEGAN RICHARDS: It's a question and probably Stan or Greg can answer it. Would this not also give you an indication of better competition in the sense that prices have gone down. One of the theories of better competition is that prices for consumers are lower. So wouldn't that be also something that you could extrapolate from this? It's not just a question of marginal costs of [inaudible].

STAN BESEN: Just to go back to something that Greg mentioned earlier, there's another table that attempts to explain registry prices by the extent of competition between or among TLDs in the same group. So, you could imagine the extent of competition as well as what Jordyn refers to as the economy of scale. There are a number of factors that could affect that price. This is just focusing on a single possible explanation for variations in prices. There are others. If one were doing a complete analysis one would try to take all of the factors into account simultaneously.

MEGAN RICHARDS: [I'll] come back on it, but my point is that for us – what we're concerned about – is competition, consumer choice and therefore increasing competition which reduces prices is something that expanding the gTLD market is something that we want to be able to show – yes, no, [inaudible].

STAN BESEN: And you could imagine controlling for this and analyzing the fact that competition is taking this into account. So you're making the same point that it's one of a number of factors that could affect prices.

JORDYN BUCHANAN: Alright, Waudo.

Well, it sounds like Jonathan's going to try to write this up but Greg might be able to do something [inaudible].

Alright, 1.3 – Basic Market Share Calculations. Stan was going to look at the Analysis Group results and tell us about what he found.

STAN BESEN: This is their Project 1 Chart. This may not be the latest version. It's the latest version I have. It's dated 8/26. The most useful rows are the first six. I don't think we need the rows below that. So just as an example, this says that, "Looking at the change in the number of registrants in TLDs as a whole, the new gTLDs" – I'm sorry, this is the fourth row – "the new gTLDs have captured 50% of the increment."

And then if you go to row one, overall they now have 9% of the total number of registrations. The other rows two and three and five and six are for different groupings of TLDs. The second one has to do with combining gTLDs and ccTLDs. The third one combines gTLDs and open ccTLDs. The numbers are a little different.

The one comment about this of course is that –

UNIDENTIFIED MALE: [Inaudible].

STAN BESEN: I'm sorry.

JORDYN BUCHANAN: It was Greg who sent it out 19 hours ago. That was just to me and Stan.

STAN BESEN: No, this is a later version that that was sent I think to everybody. This is the [inaudible] 26 version.

JORDYN BUCHANAN: In any case, do you have it… It wasn't sent to you. But I think you should already previously have had it. It's called "Basic Market Share Calculations Project 1."

STAN BESEN: The one comment about this –

UNIDENTIFIED MALE: [Inaudible].

STAN BESEN: Let me go slower and tell you what it says.

JORDYN BUCHANAN: Hold on one second. So this was also sent out… Pamela sent it out on –

[GREG RAFERT]: I can send you the most up-to-date version right now.

JORDYN BUCHANAN: Alright. Hold on one second.

UNIDENTIFIED MALE: [Inaudible].

STAN BESEN: Old fashioned [ice] paper. I never lose a connection. I never power, my battery today is charged.

Jordyn, are we going to be waiting for the chart to come up, or is that the idea? I just have one other comment about this which is obvious, which is these could change when we just take parking into account. So I think this is fine. It gives us an interesting picture at a very high level of what happened. We have not yet enough parking data to do it for all these measures basically because we – well, we should be careful here – We have parking data for new gTLDs. We don't have parking data for legacy gTLDs and we will not have parking data for ccTLDs.

JORDYN BUCHANAN: We're going to try to get parking data for some subsets of ccTLDs but we certainly won't have it for all of them.

STAN BESEN: My point is that rows one and four of this table could change when we take parking into account.

JORDYN BUCHANAN: So it's called "Basic Market Share Calculations Project 1."

Alright. In any case, to re-summarize what Stan said, this shows like on a growth basis since the inception of the program 50% of the growth in gTLDs has been in new gTLDs. Exactly to the tenth of a percent, 50%. Greg, can you tell us the exact period this was computed between?

GREG RAFERT: It's from the date of the entry of the first new gTLD, which I think was in something like October of 2013, [inaudible] research correctly.

UNIDENTIFIED MALE: [Inaudible].

JORDYN BUCHANAN: So from October, 2013 to March, 2016, 50% of the growth in gTLDs was in new gTLDs.

UNIDENTIFIED MALE: [Inaudible].

KAILI KAN: You were saying that for this 50% [happen] that figure has been excluding all the parked?

STAN BESEN: No. No adjustment has been made for parking.

JORDYN BUCHANAN: Kaili, we're not going to have the same conversation again. We understand that there is parking in the new TLDs but what we don't know is what the parking rate is in the legacy TLDs so we can't make any useful comparison between the new TLDs and the legacy TLDs at this point. So as soon as we have that data, as Stan said, we're going to recompute or we're going to overlay that data on top of this and see if it makes a difference.

KAILI KAN: Anyway, I just trying to follow because before [inaudible] it's really hard to follow you. It sounds like a statement or conclusion. Would it be okay to enter the restatement [inaudible]? That was one conclusion.

STAN BESEN: Stating a number. The increase in the number of registrations in TLDs, half are accounted for by the new gTLDs and half by [gross] in the legacy gTLDs. That is row four – 50.0. And if you go to the first row, it's looking

at the stocks, if you like. As of the end of the period, new gTLDs accounted for 9% of the total registrations in all gTLDs.

KAILI KAN: In 2013?

STAN BESEN: No, that's as of the date of this which is March.

JORDYN BUCHANAN: That's not [gross], that's the total dates.

STAN BESEN: Think of it as the stock and the flow in economic terms.

JORDYN BUCHANAN: So of all of the domains registered in all gTLDs.

KAILI KAN: So far.

JORDYN BUCHANAN: Since the beginning of time, yeah. At the moment of March, 2016 there were however many – let's say 150 million gTLD registrations of which 9% are new gTLDs.

KAILI KAN: And the second row.

JORDYN BUCHANAN: So the second row is if you add in also ccTLDs.

KAILI KAN: Okay. Then new [inaudible] right?

JORDYN BUCHANAN: Right. And the third row is if you add what we call open ccTLDs but not other ccTLDs. The open ccTLDs are the ones – we use that list from Google – the ones that are not like .co or .me or .tk the ones that are marketed as if they were generic as opposed to country [inaudible].

KAILI KAN: As if they were gTLD. I see. So those are the two-digit TLDs which should be ccTLDs but are actually not.

JORDYN BUCHANAN: Right. Where those countries have elected to sell them in a non-country specific context.

So the other conclusion I think we see from this is depending on how you count the ccTLDs, if you count open versus total, the growth over the past from the inception of the program through March, 2016 is about a third in the new gTLDs, somewhere between 32% and 38% of the growth came from new gTLDs once you include ccTLDs.

Go ahead, Stan.

STAN BESEN: As Jordyn said on the phone the other day, even though the new gs isn't capturing a large share of the increment, they overall have not captured that large a percentage of the total. It's still a low number, in the single digits.

JONATHAN ZUCK: Maybe it's a stupid question. How do we assess whether it's a lot of the total number? What does that mean? Because it feels like capturing 9% feels like a lot to me given how long the program was going before this time. What would constitute having captured a lot in that period of time?

STAN BESEN: I should have been more careful. You're capturing 50%, and the question is how is that going to move the stock? And as a matter of arithmetic, that depends on how fast the stock is growing. If the total number of registrants had grown enormously between this period and the end, actually 50% would have given you a much larger percentage of the total. And so the 9% number is driven by two factors. One, the 50% number, and second, the rate of increase of like the denominator.

What I'd say is, the needle has been moved, but 50% is a big number. It's a lot bigger number than 9% and that's because the total stock isn't growing that fast.

MEGAN RICHARDS: Only to add a little bit to what Jonathan said. You want to also do it – I'm going to call it "per capita" – because the growth, if you think about the numbers of registrations, that's all very nice and well but we have 1000 new gTLDs, whereas the legacy gTLDs are what – less than 20. So you have – I'm going to call it the per capita – issue as well. So the growth per new gTLD is by definition far lower than it is in the legacy gTLDs. And that's an aspect, isn't it? Or is that just going to complicate things?

STAN BESEN: This chart – I proposed this and I actually did a calculation of this back in February – using very aggregated data and [gender]. Don't expect this to do more than it's doing.

MEGAN RICHARDS: I'm just putting it in context, that's all.

STAN BESEN: You're absolutely right, but this is a very gross picture of what has happened. [Inaudible] we need to know this. That's quite apart from the question of this could be all .xyz or it could be a small amount for all of them. You will not know that until you look at [inaudible].

JORDYN BUCHANAN: Kaili, I've got you after Jonathan. So Jonathan and then Kaili.

JONATHAN ZUCK: Stan, thanks. Thanks for your explanation and I understood that relationship. It was more the normative evaluation you had made about it not being a lot. And I guess I don't know what would constitute a lot. I was actually pleasantly surprised to hear that there was a 9% change in stock. I get how that happened and what the difference is. What would we consider to be a lot in this period of time? That's what I mean. There was a sort of value judgement there, and I was trying to figure out what your math was for that, if that makes sense.

STAN BESEN: All I was doing was comparing the 50% and the 9%. 50% of the [increment] could have produced a much bigger change in the stock if the rate of growth had been [inaudible].

JONATHAN ZUCK: Of course that's true.

STAN BESEN: But take the word "large" out. This is a big issue of how to characterize things and I went back and looked at a famous case that occurred in the U.S. during the Carter Administration where Alfrey Kahn was accused of… People complained in the White House about his use of the word "recession." So he said, "Well, from now on I'll call it a banana." And so you can call this –

JONATHAN ZUCK: No, I don't even mean to catch you up in semantics that way either. I guess what I'm trying to plumb is your extensive history in anti-trust and other areas in market dynamics, and so in this period of time for you to have felt that it was a lot – forget the 50% now for the moment. Don't compare them. Just looking at the 9%, what number would have impressed you as having been a big movement given the period of time relative to the… That's more what I'm getting at.

STAN BESEN: I don't think this is the chart to look at that. The question I think is most interesting it's a later chart where we ask the question, "How did this entry affect market structure and concentration?" Don't use this table to do more than it's intended to. I'll try to not use the word "large" in the future. I'll say "banana."

This is just what it is. When we get to the question of what effect it's having, we'll have to look at other statistics that are inherent in later charts. So don't make this do more than it's intended to do.

JORDYN BUCHANAN: I'm going to let Kaili jump in. I've got a comment and then you want to loop back around to Jonathan. Kaili?

KAILI KAN: Thank you. Again, I agree with Stan. We are just try to be objective. We do not make judgements whether 9% is large or small. No judgement. 9% is 9%.

However, the point you're trying to make was comparing the 9% versus the 50%. So the total registrations, 9% for new g. That was the incremental new registration the new g has 50%. How would be the possible interpretation of that? Well, there could be, well then that. Okay, great. The new increase is… Well, a large portion of it is the new g great for new g. Okay, it's great success. That could be another one interpretation. Another interpretation – I just want mention [part] now there's more than half – 38% to 75% of new registration is strict for speculation part. We can sort of equal part as speculation so far. And then I say, "Okay, very bad. New g contributed so much for in speculation that [was] another interpretation." So you're not interpreting. You are telling that these are all the possibilities. We do not interpret but to notice the difference between 9% versus 50%. That is all you're saying. Okay. Just making it clarified.

Another [inaudible]. Are we going to discuss after line four, five, six, and seven? I find it sometimes hard to understand what they're saying. The [Inaudible] English or whatever.

JORDYN BUCHANAN: Okay, we can go through the rest of the chart in just a moment. I've got a quick comment and then I think Dejan wanted to jump in, too.

I think maybe, Stan, to remake the point I made on the other chart. The part of what we're seeing here is just that the growth rate in the overall domain universe is not that big. I think I just looked online, there's about… Verisign says that the global growth rate for year over year was about 5.5% last year. If the growth rate in the domain name universe

was 100% year over year, which in some markets happens, then the fact that the new gTLDS had 50% of the growth would mean that over two and a half years they would essentially have 50% of the entire market as well because the initial stock was so low relative to the growth rate. And here we just see a mature market with a relatively normal, not that fast, growth rate and the new gTLDs are capturing a good fraction of the growth but it will take a long time for them to significantly affect the stock as a result.

KAILI KAN: Just one thing, Jordyn I think your observation is quite objective, not subjective. Thank you.

STAN BESEN: I'm sorry, the other point besides the parking issue is probably not enough time has passed for the full effect of the entry to have been built. When we write this up… This might look different if we did it two years from now.

KAILI KAN: Just also one comment for Stan's comment. Okay, yes. I agree time could be one factor of this what we see right now. However, on the other hand we have also seen two factors. One is the large scale speculation. A majority, more than half, is away by any measurement, number one. I believe that is not anybody, not ICANN, well not all the constituencies want, number one. Okay. Number two, I think in other e-mails that we discussed e-mail about two weeks ago, I think there were

at least two e-mails that noticed that there have been declines in the new g registries for some of them. Okay. So that could also be a time effect. So with the time passing by, it's not the [stock] growth and even might decline, so that's also a possibility. So that means as we even think, and so the time effect could work either way. Thank you.

JORDYN BUCHANAN: Alright, Dejan.

DEJAN DJUKIC: To me, very useful if we would have historical data for these tables if there is chance to get it because with that data we can have the main conclusion is there something changing between these three years after launch of the new gTLDs.

JORDYN BUCHANAN: Right, then presumably we could see things like, is the rate of… What is the derivative of some of these numbers, essentially? It could be that right now new gTLDs are 50% of the TLD growth and six months ago it was only 25%, or to Kaili's point, it could be that it was 100% six months ago and now it's slowing down. We don't really know that. I think Greg is going to jump in and talk about the feasibility maybe of that.

GREG RAFERT: That is incredibly easy to do. So I guess it'd be useful to know whether you'd wanted it every month n terms of that or once a year or every quarter or something like that, but it's easy to do no matter what the

time period is. We have the monthly transaction reports going back pretty far.

JORDYN BUCHANAN: Alright, so why don't we just decide right now what we want them to do. I would say once a year would probably be totally sufficient. Kaili's going to –

KAILI KAN: For the conclusion, well, once a year. But anyway, since we have [inaudible] you have all the data so let's see whether we can draw conclusions. If once a year will suffice, we'll see. If it cannot draw much conclusion, we go for once per month and maybe especially last few months and see a trend if possible. Thank you.

JORDYN BUCHANAN: Okay, do you want to say something, Margie? And then I've got Jonathan. Okay, go ahead, Jonathan.

JONATHAN ZUCK: I don't know if this is relevant, but in addition to time is availability is a potential factor. In other words, they've been delegating over that time. They've only finished delegating now, and so the availability of more TLDs is potentially a factor in [gross] market share.

JORDYN BUCHANAN: So you're saying like number of launched TLDs as another number beside that. I don't know if Analysis Group has that but I know ICANN does.

GREG RAFERT: We do, and it's actually once the report comes out it's going to be figure one in the report. We can provide that to you as well so you have the raw data.

JORDYN BUCHANAN: Sure. I don't know exactly what once a year means given that this is a two and a half year period, but maybe every six months is the right increment. But yeah, if you guys could lay that on that would be fantastic, and then maybe as one line in here – number of launched TLDs at each point along the way.

So Kaili had wanted to talk through the rest of the numbers on the spreadsheet. Pam, did you ever get the spreadsheet? Do you want to throw that up for a second? Project 1.

Alright, so we've talked through one, two, three, four, Kaili, and then five and six here are the ccTLD numbers depending on whether you're counting all ccTLDs or just the open ones for growth. And then starting on line six is all ccTLDs. So just to make sure I understand this, Greg, six would be the total number of new gTLDs as a percent of all ccTLDs? Is that right?

GREG RAFERT: That's correct.

STAN BESEN: By the way, I would eliminate all the rows below row six.

JORDYN BUCHANAN: That number is just a number, it is true. I'm not sure what to do with it in my head.

And then the next line would be not open ccTLDs, so just the fractions, a percentage of a thing that is not directly related to. And then the last two just look at growth rates relative to those two things. So there has been twice as much growth in new gTLDs as compared to the standard pool of not open ccTLDs. Pleasant facts, I guess but I'm also not sure what to do with that.

So if you look at how many new gTLD registrations, how much growth there has been from zero to the current amount of new gTLDs, that number is 210% of the number of new registrations or growth that has happened in the ccTLDs that are not opened.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Oh, yes, the last line. I don't think it's a very… All of the last four lines are all doing a comparison of new gTLD growth versus just ccTLD growth.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Right. We need numbers next to these things – one, two, three, four, five, seven. Line seven and eight show the growth of… So that is the number of new gTLDs as of March compared to the number of all ccTLDs at the end of March. I think these numbers are mostly confusing and not very helpful so it's probably not worth talking about them very much.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Correct, so this is dividing it as an apple by a banana, that is exactly what this is doing.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Correct.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Right. If you compare the two numbers, one is 11.5% as big as the other number. But it's not 11.5% of the ccTLD market because it's not. It's not part of the ccTLD market.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: So that is all of the ccTLDs in the world minus the open ccTLDs.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Correct. It's only the real ccTLDs.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Correct.

KAILI KAN: Indeed, Jordyn, as you said, this may not be as important as the first [two lines]. However, yesterday as we understand that, for example,

Latin America, ccTLD is the vast majority. So at least for that region, [see] that compares it with ccTLD might be more important, although not more wide.

JORDYN BUCHANAN: I think there are contexts in which it might be helpful to have these numbers available, but I think putting them… The problem is everywhere else the numbers are real percents and here they're just comparing two different numbers. Like when you say it's 9% up above, the gTLDs are included in the denominator so it actually is a percent of the thing that you're dividing by whereas these other numbers, they're just two different numbers being compared and the gTLDs are not included in the denominator. So it's a little odd to use… In this context where there are percents being shown, these are a different kind of percent than the ones at the top.

JONATHAN ZUCK: You can say that they are growing faster than classic ccTLDs.

JORDYN BUCHANAN: In aggregate, once again, that is correct.

KAILI KAN: Also just a suggestion for Greg, the header of this table is indeed sort of misleading because you're saying percentage of new gTLDs versus –

JORDYN BUCHANAN: I agree with Stan's suggestion, it is nice that we see this data right now. It gives us a rough sense of how the gTLDs and the ccTLD markets compare, but I think this is mostly confusing on this chart and I agree with Stan we should probably just take it off of this chart. And if we ever want to do a direct comparison of ccTLD and gTLDs, we should do it in a separate chart so it doesn't look like the percentages are –

KAILI KAN: And also make sure to use easier to understood language, especially for me as only ESL – English as a Second Language, [my] third.

JORDYN BUCHANAN: Alright, I'm going to move on to the next project in our chart. That one is called "Basic Registry Market Share Structure Calculations" – 1.4 on our chart. I think Project 2, that's according to Analysis Group. I guess you guys did the same order just different numbering.

I think I wrote up the summary of this. Is this the one I wrote up? Yeah, I wrote the summary of this document up a few weeks ago.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: 1.4. We were just looking at 1.3. It's also known as Project 2. So Stan suggested the project and I wrote the paper summarizing the findings

which I sent out and we discussed a few weeks ago. This is the first project that Analysis Group completed.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Yeah, do we want to see my… Have these numbers changed at all, Greg, since the initial e-mail from Stacy?

GREG RAFERT: I don't think so but I can check right now.

JORDYN BUCHANAN: Let's just use the previous ones for the moment because that's what's summarized in my paper, my write-up. In the e-mail from Stacy with the original, with Project 1… Five days ago Greg sent an update and this is called "Basic Registry Market Structure Calculations Project 2" sent by Greg. That's the raw data or –

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Same e-mail. This one is Project 2. Pam, do you have the write-up that I did? I don't want to spend too much time on this because we actually have already discussed this one.

The e-mail, “Four spreadsheets from Greg” is the canonical data that we’re looking at. In this particular case I had written up one of your templates some weeks ago with the summary of this data.

This is the one where Kaili got angry that I said “competition” instead of “concentration,” to remind everyone of our previous conversation. Just to summarize – and this may get closer to answering the question that you asked earlier, Jonathan, to Stan. Stan, is this the one where you talked about the concentration figures instead of market shares?

STAN BESEN: About the charts, I’ve actually talked to Greg about this. Some of these numbers are in two different charts and it makes it hard to compare them. So I proposed that we put things together. So for an example, there is an Analysis of Registry Concentration on Project 2 that’s March, 2016. Somewhere else there is the concentration information for legacy gTLDs, which were the only ones as of September, 2013. So that’s also Project 2. They’re just on two different charts.

So just to summarize the numbers, the four-firm concentration ratio in September, 2013 before the program started was 99.3 – that is, the top four firms had 99.3%. You go to a different chart, as of 2016, the top four registries had 90.3%. I wouldn’t say the difference is large or small. I’d be more careful than that now. But that’s the sort of two numbers we want to have side by side in a single table.

KAILI KAN: I think in this Project 2, this table we're looking at, September, 2013 four-firms concentration ratio 99.3% while March, 2016 is 99.4%.

STAN BESEN: It's the wrong comparison. Look at the heading of the table. Those are just legacy gTLDs, that's not concentration overall because it excludes the new gTLDs. You have to go to a different chart to look at the new concentration ratios, and that's also on Chart 2.

KAILI KAN: It's not on this table?

STAN BESEN: It's in a different table. It's also Project 2. And if you look at that, it says, "As of March, 2016, the four-firm concentration ratio for all gTLDs is 90.9%." That's the number [inaudible].

KAILI KAN: Can we see it somewhere?

GREG RAFERT: It's the first tab in the Excel file that I think you're in, Kaili.

JONATHAN ZUCK: Kaili, there's an e-mail from Greg on Friday, August 26th in which there were four current spreadsheets. Project 2 is the one you want to open up.

KAILI KAN: We're looking at Project 2. But then in the same line, 99.3% for March, 2016, that's 99.4.

STAN BESEN: [Inaudible] the table that only applies to legacy gTLDs. If you want the actual concentration ratio –

KAILI KAN: In this whole table, I do not see the 90%.

JORDYN BUCHANAN: At the bottom there's tabs. One of them is called "Marketplace Structure." One of them is called "Legacy TLD Structure." You're looking right now at legacy. "Marketplace Structure" has the 90.9% number. So those numbers are for the overall gTLD market as of March, 2016.

KAILI KAN: So 2013 is before the new g. And 99.3. And this is March, 2016 for all TLDs the four-firm concentration.

JORDYN BUCHANAN: For all gTLDs. Alright, we're all looking at the same thing now.

Looking at this data, the summary I wrote up a few weeks ago, which is really just based on the first tab not the second tab. The second tab is helpful now because we have historical context that we didn't have

when I first wrote it up, or I didn't include at least. The summary is that there is, if you look at the overall gTLD market, the concentration ratio is quite high – 90.9% for the four-firm, 95.7% for the [eight] firm, and the HHI is 6,364. All of those numbers, I think, are above the thresholds at which competition authorities would find it interesting to look at the market. How is that for language to summarize the situation, Kaili?

I have Eleeza, Megan, and then we'll jump back to Kaili.

ELEEZA AGOPIAN: I'd be interested in hearing all the economists' take on this because if Greg's put this together I'd like to hear his opinion on how he would interpret that as well as the other [two]. I'd like to hear the economists' interpretation of these numbers. I'd like Greg to start.

GREG RAFERT: I guess my view on them is it's a measure of concentration, assuming that you define the market in the correct way. But I don't think we've really done any work to define what the market would be. So I would shy away from saying that it's the market per se, having not done the first step. I think that's probably my big takeaway. But I think if that were the relevant market, then those concentration ratios would be high, but I think you have to do the first step.

JORDYN BUCHANAN: Let's keep in mind I think what we've generally agreed we're likely to end up doing is to have multiple market definitions. So this is one of

them. One of them would be the gTLD market as a working definition for the purposes of looking at [data].

ELEEZA AGOPIAN: Just one other point because we've talked about this quite a lot but we still haven't come to what the other market definitions are and I think for the purposes of your discussion you need to see those before you start drawing conclusions on… I think it's worth comparing these figures across the different markets before you start drawing conclusions.

STAN BESEN: We do have other alternatives in the data. Some of them are not presented here. One will be with the ccTLDs. That's not been done yet. And Greg has also produced measures of concentration for the groupings of markets, the smaller ones. So there's a version for broader markets – there will be a version for broader markets – including ccTLDs and there is a version that's already been produced for a number of "narrower" markets which are the 16 groupings.

I think when this first came up I said just what Jordyn said which is we probably will not have a definitive market definition. It's appropriate for us to provide calculations for a number of alternatives and we will have it for a market broader than this and for a number of markets narrower than this.

JORDYN BUCHANAN: While I agree with you, Eleeza, any market that includes .com in it is going to have an extremely high concentration number. Actually any

market that includes both .com and .net in it is going to have an extremely high number because you have one firm with an extremely large number of registrations relative to the entire universe of domain names. So it doesn't really matter what other collection you throw in there, that's always going to happen. If we make a market definition that does not include .com, as we do in Project 2 when we look at just new gTLDs, then you can maybe expect a broader variety of results. But any time .com is included it's going to be really high.

Go ahead, Megan.

MEGAN RICHARDS: My comment was related a bit to what you said because in b in your template, a and b seem to be contradictory. And if you don't know the .com and .net are governed, let's call it, by one company you don't know the nature of the market or the way in which the system works. You would think that these are completely contradictory because you say the new gTLD market is significantly less concentrated than the overall market, and then you go on to say that the new overall gTLD market is highly concentrated. That seems contradictory, but when you explain it the way you do, of course it makes sense. I think this just needs to be a bit more robust to clarify what that means is all.

STAN BESEN: I'm less interested in concentration in the new gTLDS because I don't think that's a market.

MEGAN RICHARDS: That's a whole other discussion. Maybe if we just take out the word "market," we can say –

STAN BESEN: Let me just actually not respond but just amplify what Jordyn said before. It's usually the case that when economists go from a narrow market to a broader market, the market gets less concentrated. Take these narrow markets that Greg has defined the groupings of gTLDs. Some of them have concentration ratios that are not as high as they could be. If you broaden the market to include .com, the concentration ratio is… This is a case where broadening the market could lead to a higher concentration if broadening involves including .com that wasn't there before. This is an unusual case in that in the typical anti-trust case you'd have narrow markets and merging parties want to say the market's broader and therefore much less concentrated. Here if the broadening involves adding .com, it's inevitably going to produce higher concentration. It's a fact.

JORDYN BUCHANAN: We've got Kaili and then Margie.

KAILI KAN: Just a little extension on what Stan and Jordyn you're saying. I fully agree with you and also I believe because of the very nature of domain names, when you are in it you will never be able to leave. Basically, we'll use [registers] for .com. You do not leave it.

STAN BESEN: [Inaudible] the next step is how to interpret the [inaudible].

KAILI KAN: Yeah, that's why I'm saying that's an extension to that. If we recognize that this is the case then we really could come up with some interesting suggestions which may also imply than just by introducing competition in order to lower the concentration ratio [is] almost useless.

MARGIE MILAM: I think one of the things is if you look at the work you need to do is we're looking at the effects of the New gTLD Program. So to the extent the report focuses on how the New gTLD Program improved things, I think that's helpful. Historically, this is something Jamie raised on one of the calls. Obviously, we're moving historically from a point where we started doing one provider and then no registrars and the whole ICANN experiment, if you will, is the idea of introducing competition from the historical situation of having one provider. I just want to be cautious about when you get to the drafting point and start explaining things that you couch it in more of what's changed because it's almost a given that you've dealt with whatever the historical situation is and what it is before and if that helps you with the analysis.

JORDYN BUCHANAN: I think, Margie, the main complication is just one that we've been talking around for a few minutes which is we are going to have various definitions of markets for the purposes of our calculations, but all the numbers are going to converge on very high the second .com gets

thrown into them. And, to get to Kaili's discussion of substitutes, it's hard to imagine… I'm sure that there are ways of thinking about a market where .com is not a substitute, but I think that's probably an unusual case more than the usual case. And so I think, looking at the way the number has changed is probably pretty useful. That's why it's good to have both of the numbers here, but it's still going to end up looking very high regardless of the fact that it's changed for the better.

Any other discussion around these concentration ratios before we move to the next project?

Alright, let's move to the next project, which is "The gTLD Registry Price Analysis," which is Project 3. It's called "gTLD Registry Price analysis, Project 3." I think Stan was going to –

ELEEZA AGOPIAN: This project, actually if I can ask for you guys to hold off on this one because we're still double-checking the data on this on the wholesale prices. There may have been some problems in the chart that you received so I don't think it would be helpful to talk about this now. It won't be accurate.

JORDYN BUCHANAN: Okay. I will say I think what we are generally seeing on this chart is that registries that are subject to price caps price their TLDs at the maximum amounts that they are allowed to under the price [caps]. Most of them.

ELEEZA AGOPIAN: I'm just going to caveat that actually. The price information that we have from the registries indicates that each year they change their prices and that they've gone up to the cap. That doesn't necessarily mean that's precisely what they're charging, it's that they can charge the [maximum]. The price [of] noted changes that we received indicates that the registry plans to charge up to this amount. We don't know that that's actually the amount that they charged. That's not what was collected, or that's not what's reported to ICANN, I should say it that way. That has to be requested directly from the registries.

JORDYN BUCHANAN: So what they actually charge.

ELEEZA AGOPIAN: It may have been less than the cap. What they report to ICANN is, "Okay, we've raised our price to reach the cap," but we don't know, for example, say the cap was $5, perhaps they charged $4.

JORDYN BUCHANAN: And does the work you're doing involve actually getting the amount they charged, or are you just going to tell us what they reported to you so far?

ELEEZA AGOPIAN: I have [is] listed reported to us.

UNIDENTIFIED MALE: [inaudible].

ELEEZA AGOPIAN: No. we didn't collect that. I think you requested it from the legacy but I'm sorry I can't recall.

GREG RAFERT: No, we didn't request it from the legacy because our understanding was those prices were reported to ICANN. But since it sounds like they aren't, then I think we'll need to go back and request it.

JORDYN BUCHANAN: Alright, so it sounds like we need to –

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: .net has been raising the cap as aggressively as possible. Whether or not they've actually been charging what they're allowed to under the cap is. The .net contract is weird and they can request increases in so many years, X out of Y years, and they've requested those increases as fast as they possibly can. So I guess it sounds like that doesn't mean that they've necessarily actually increased the prices as fast as they possibly can.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: For I think most of the legacy TLDs or all of them?

ELEEZA AGOPIAN: Most of the legacy TLDs have price caps. I can send you some information on that.

JORDYN BUCHANAN: Can someone first give a quick one-minute summary of the price cap mechanism just so people have context. I guess I'll try to give you a one-minute summary and they can correct me if I'm wrong.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Oh, right. Okay. Let's try the one-minute version and see whether it's A) correct, and B) useful enough.

Most of the legacy TLD contracts with ICANN contain the price cap that says that's the maximum wholesale price that a registry can charge to the registrar. Some of the gTLD agreements with ICANN also include a mechanism to increase the price cap over time. Not all of them. Some of them just have a fixed price throughout the entire course of the contract.

Kaili asked if they're different from registry to registry. That is correct. Each registry has its own unique price that they have in their contract recorded with ICANN for that particular gTLD. That's right, ccTLDs don't have contracts with ICANN so there's no price caps on any… A country could impose a price cap on the ccTLD operator, but ICANN is not involved with that in any way.

The .com price cap is a somewhat special animal in that it was not, at least the most current version was not, directly determined by ICANN. There was consultation with the U.S. competition authorities in order to figure out what the .com price cap should be, which the most recent instance of the contract was to keep it the same as the previous contract.

That's my one-minute summary.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: I do think if you look at the Project 3 document, and if you look at "legacy raw" – and once again, these numbers may not be correct but they will give you order of magnitude sense of what they are. They're low.

KAILI KAN: Mostly in the $6 to $8 price range. So that is the price cap.

JORDYN BUCHANAN: Yes, correct.

MEGAN RICHARDS: We don't know what the price cap is but we know that there is one. We know that there is a price cap but we don't know what it is.

JORDYN BUCHANAN: We know these are in the right [ballpark]. None of them are going to be like $25. The $6 to $9 range is correct as well.

KAILI KAN: And also you mentioned that they are different from [cc]TLDs for TLD, and how that is decided?

JORDYN BUCHANAN: In most cases, I think at the time the TLD was delegated initially the registry operator and ICANN agreed on a price. And in the case of .net, in the agreement there's a specific mechanism that allows Verisign to increase the price cap periodically. And in the case of .com, the U.S. Department of Justice basically decided.

KAILI KAN: Well, the question is [if it is] the two sides negotiate and then agree with or something that's based on no data or is that contract the price cap itself evolved over time?

MEGAN RICHARDS: I don't know anything about how the price caps are established by ICANN and the registry. But I suspect, because we do it in our particular case with .eu which has a price cap, because it's a non-profit, private sector but non-profit organization and it's not allowed to make a profit, so the price cap we set with them is based on the cost of doing their work plus a very small margin so that they have enough reserves to manage in case of a disaster.

So that's how the price cap works in our case. And in fact we've been reducing the price cap, so it's the opposite. The price cap used to be about six or seven Euros, now it's closer to four Euros – four or five Euros, I've forgotten the exact [amount]. So I suspect – but I don't know how it works in ICANN – but if the Department of Justice is involved just for .com… But I suspect again, it must relate somehow to costs, not monopolizing the market. In the old days, amongst the handful of real legacy gTLDs there were only a very few so you had effectively an oligopoly situation. So it must have been related to –

JORDYN BUCHANAN: I have some more context to put Kaili [inaudible].

KAILI KAN: [Inaudible] you just mentioned your .eu is non-profit. But the case for the United States, they are for profit.

JORDYN BUCHANAN: Except for .org.

STAN BESEN: From my perspective, the really important thing here, and I thought up until about a week ago, that all of the price capped gTLDs were at their caps. I believed until a week ago that for the price capped gTLDs, their prices were at the cap throughout the period we're analyzing. If that is the case, we will not be able to detect any effect of the entry of new gTLDs on the prices they charge or want to charge, period.

KAILI KAN: Whether they are trying to achieve that secret –

STAN BESEN: No, it has nothing to do with… If you're allowed to charge $10 and you want to charge $20 before the new gTLDs and then after they enter you want to charge $15 but you can only charge $10, we can only observe $10. That's all we're going to observe.

KAILI KAN: But in that case, there's the wholesale price or we can make no other reason but for the retail price. There should be there.

STAN BESEN: [Inaudible] talking about the wholesale price.

JORDYN BUCHANAN: Yes, for this conversation we are only talking about the wholesale price.

Alright, we're going to wait to find out whether or not it is in fact the case that the legacy gTLDs have in fact been operating, charging essentially at their price cap or not. If they have not been, then maybe we can learn something. Otherwise, we're just going to learn that they're constrained by the price cap and not by competitive effects.

Go ahead, Margie.

MARGIE MILAM: So as I understand the request, we don't have the data to correct, Greg. I'm just trying to understand where we are from the data perspective.

GREG RAFERT: That's correct, unless it just happens to be residing somewhere in ICANN which it sounds like it doesn't.

MARGIE MILAM: We just have the notices that Eleeza talked about. So the question is, do you need that information? Because what we have to do is we have to go back to the registries and that was a huge hassle I recall to go back and ask them for additional data. And my question to you all is, is it absolutely needed and what are you going to learn from there that you can't learn just from the understanding that at least we had the notices.

JORDYN BUCHANAN: If they can charge a different price from the notice, then those notices aren't helpful. The question that we want to get at is whether or not they're constrained by the cap, and we don't know that until we know what they're actually charging.

STAN BESEN: If I can make the following observation, I think it's [passing] strange that ICANN has price caps but the companies subject to the price caps do not report their prices to ICANN. I find that peculiar.

JORDYN BUCHANAN: The registry's customers know what the price cap is so presumably they would complain to ICANN.

STAN BESEN: No, but ICANN is the entity that is setting the caps.

JORDYN BUCHANAN: But it is public information. All the registrars that buy from the registry understand what the price cap is, and presumably if a registry were to try to charge more than the price cap, ICANN would learn about that very quickly.

STAN BESEN: Every regulatory agency I've ever seen that regulates prices, they want to monitor the prices that the entity it's regulating charges.

MARGIE MILAM: I'm sorry but ICANN is not a regulatory agency.

STAN BESEN: [Inaudible] that presumably has some legal authority.

MARGIE MILAM: And we have a contract. We're just explaining these recurrent situations.

STAN BESEN: [Inaudible] that you do not know as a routine matter whether the prices being charged are at or below the cap.

JORDYN BUCHANAN: Currently they do not know the answer [inaudible].

MARGIE MILAM: The instruction from the group is that this is information you want, so you do want us to go back to the registries and make another request. I'm just trying to understand.

JORDYN BUCHANAN: Yes, this is very important. Even if we were to find that after the introduction of new gTLDS that any of the legacy providers had started charging less than the cap whereas previously they had always charged

up to the cap, I think… But I found if they charged less than they had in the past that would be a very significant finding in terms of price competition, I think.

KAILI KAN: Also, we have the price cap is the ceiling. Do we have [the floor] to forbid say the dominant, say Verisign, dominant player to for in order to squeeze out the competition, do we have [the floor]?

JONATHAN ZUCK: They could be doing it now by staying at the price cap. The price cap is so low that even charging the maximum they're allowed to charge, they could be squeezing out competition.

JORDYN BUCHANAN: The answer to your question, Kaili, is as far as I know, no. There is no limitation on a registry charging less than the price cap or less than any number. They could charge negative dollars if they wanted to.

Margie?

MARGIE MILAM: I have a question for Eleeza. So just from a timeline perspective, how long does it take to get the request out, get the notice to the registries, get the data back?

GREG RAFERT: So getting the request out, quick. How long it takes to respond varies. I think for the registries that we requested data from before the median response time was something like two or so weeks maybe. But for some it was three or four weeks. We obviously want to get as many of the requests out this time which is helpful, then we can bug them. Maybe people on ICANN and the community can help to move things along as well. So if we get lucky it's probably something like three weeks from now, I think, when we'd be getting data.

WAUDO SIGANGA: I wonder is there a formula or a method that ICANN uses to set the price cap. I'm just interested in that because to know how it relates to the rest of the price setting in the market.

MARGIE MILAM: I don't have that information. I don't even know how we get there. Jordyn seems to know more than –

JORDYN BUCHANAN: If you scroll up to the top of the chart you will see that in like 2002 or wherever we start recording data that .com and .net charged $6 each. And then some new gTLDs were introduced in the 2000 round and some of them charged the exact same as .com and .net at the time- and .org – and .biz and .info decided they wanted to have a cheaper price. So one of them was like $5.30 and one of them was like $5.85 or something like that. So one of their notions of being competitive was to be cheaper than the existing offerings.

And then if you look, there's been a few cases where people have come back and renegotiated their contracts with ICANN and they've gotten modest price increases in that process. But as far as I know that's just a bilateral negotiation with ICANN.

And with all these contract changes, ICANN puts it out for community consultation. So mostly they're really close to $6 because at the dawn of time for new gTLDs Verisign charged $6 and so that's what everyone does. But that's basically the answer to your question.

Go ahead, Kaili.

KAILI KAN: just a thought from Jonathan's new comment that current price cap is already so low that it is squeezing out the competition. So do we have the cost figures showing economy of scale and so forth? Otherwise, how can we say that the price cap is already so low that it is squeezing out competition? And also, after the discussion right now, do we agree that right now we do not know exactly how the price cap is decided? Is that, do we know?

JORDYN BUCHANAN: To be clear, the price cap for everything except for .com and .net, the price cap is just decided either the registry volunteered a particular price or subsequently they've renegotiated their contract with ICANN and they've set a price.

KAILI KAN: Is that price cap decided based on what? Based on cost or based on just [where] they had a good deal, a good [day] or last night I had a big fight with my wife? So that decides the price cap?

JORDYN BUCHANAN: In most cases, it is a price that the registry volunteered at the time it [submits] its application.

KAILI KAN: Based on what does ICANN say, "Okay, that is it." Based on nothing?

UNIDENTIFIED FEMALE: [inaudible].

KAILI KAN: So therefore we do need some cost, when talking about competition, the smaller scale competitors whether that cost has a significant economy of scale. So without… To determine a price at least we've got to have some rough idea of the cost and so forth.

JORDYN BUCHANAN: So ICANN did prior to the 2012 round, ICANN put together some documents that modeled expected costs for registry operators that we could look at, or could ask the registries what their costs are. I suspect the costs vary widely. Google registry's cost structure and Verisign's cost structure and [affiliate's] cost structure probably have very little to do with each other.

KAILI KAN: I sort of suspect there's a significant economy of scale. That's why most of the competitor new gs they have a backend of [source], too from major players. And also that's the case I see in [China]. Is that true?

JONATHAN ZUCK: I was joking. I wasn't trying to make the assertion necessarily that that was the case. I was just joking because there are certainly new gTLDs that are priced higher than Verisign's price cap and I was just suggesting that it's possible that a company like Donuts might be happier if Verisign didn't have a price cap and let their prices go to market levels to really see whether we're competing against. And yes, there's going to definitely be economy of scale. It's costing Verisign much less per domain for sure to manage the situation. There's no question. There's other variables. I think they have higher SLA requirements, for example, than the new gTLDs do in some cases. But I think that's definitely going to be the case from a cost standpoint. But just from a pricing standpoint, if the cap is too low it could make it difficult for market entry. That's all.

KAILI KAN: Agree. As I remember at the beginning [inaudible] the cap we do have some cost collection from our cap. Just wonder where are we now on that?

JORDYN BUCHANAN: So we have no projects related to collecting cost data.

KAILI KAN: But I remember there were [tasks]. We did discuss that [inaudible].

JORDYN BUCHANAN: I do remember discussing that but it has not translated into any actual projects.

KAILI KAN: That is too bad.

JORDYN BUCHANAN: If you can describe a project and we can figure out how to put it in the schedule, then we can do that. I think it may be most helpful just to look at the documentation that's been put together .

Do you know the one he's talking about, there was like some modeling… I'll figure out where it was. There was something like four applicants to figure out – When you apply, be aware. When you're doing your financial models, here's some [stocks] that we did to figure out what your costs might look like. It was in the application material, but it was not in the Guidebook.

Waudo.

WAUDO SIGANGA: I think about a week ago Stan also asked a question about what it takes for the new gTLDs to break even. And I don't know whether that was

translated into a project but I think it's related also to this price cap question.

MEGAN RICHARDS: If I'm not mistaken yesterday when Andrew Mack was making his presentation on why people didn't apply for the new gTLDs from the global [inaudible], one of the numbers he raised was – I'm not sure if it was fixed cost – but the approximate cost of running a registry, and he said $2 million as I recall. Whether that's an annual amount or not –

JORDYN BUCHANAN: [He said] that none of the people he talked with talked about running costs into consideration.

MEGAN RICHARDS: But he had it in his [inaudible] an approximate cost. And, as I said, in our particular case – in the ccTLDs except from Google's perspective, the costs of course are based not just on fixed costs but also the volume. So the more registrants you have, the more money you have coming in, and the more renewals, etc., etc. So that's the reason why we could reduce our so-called cap. But that must be a factor in determining how you establish the price cap – approximate costs, etc. but I don't know.

JORDYN BUCHANAN: For most of the ICANN price caps I don't think that's probably the case. I think in the case where you see the numbers having increased over time it's possible that that went into the conversations.

STAN BESEN: By the way, it turns out that the price caps that are applied to telecom carriers in the U.S. are not cost based. In fact, they replace a rate of return based approach that was used previously and they basically are sell at the reference price and you raise price by inflation minus an assumed rate of productivity increase. And that's how the cap is changed. But the regulatory agencies in the U.S. have moved away from caps based on cost. [Inaudible] very hard to do.

JORDYN BUCHANAN: Can I actually suggest to maybe take a step back from this. The price caps apply to the legacy gTLDs. It sort of doesn't actually matter to us. As long as the legacy gTLDs are in fact all bound to their price caps then we're deriving no useful price signal from it. And maybe they're derived in a really good way or a really stupid way, it doesn't really matter because we're not trying to investigate whether we should change the price caps for legacy gTLDs or not, we're just looking at the effect.

What we're trying to figure out is, has the new gTLD program affected the prices that are charged to consumers including in legacy gTLDs? And if all of the legacy gTLDs are just charging the maximum they're allowed of their price cap, that may be an interesting fact for some future economist or some future study of the legacy price caps but I don't think it affects the outcomes of our work in any meaningful way.

Alright, in terms of cost information though, Megan's commentary made me think of something. Does .eu actually publish any financial information around its costs? Could we look to the non-profit ccs as a

source of information? It will be hard to get the for-profit gTLD operators to give us much detail about their operations, but many of the non-profit ccs may be more transparent.

MEGAN RICHARDS: [We] certainly have to provide audited accounts under Belgian law, and I'm sure some of them are on the public record. They must be. We see them obviously because they have to report to us. I'm sure some of them are on public record.

JORDYN BUCHANAN: To what extent it's public as opposed to just for the regular –

STAN BESEN: Actually Megan's comment reminded me of something I discussed with Jordyn yesterday and we actually did some calculations a while back. The question is, as you know we've observed at the new gTLDs many of them have very few registrants. Even if we take out the brand ones. And so the question that raises is, are they big enough to be viable? I think it's too late in the game for us to do an analysis of minimum viable scale. If we wanted to do this we should have done it a lot earlier than now. But I think we should present a table and I think I did calculate and circulate a table a while back that at least reports the size distribution of the new gTLDS, that is, how many have above a certain number and how many they have below it. At least be able to say something half speculatively, that it appears that many of them are quite small. And it is possible that over time unless they grow substantially, they may

either exit or consolidate. And I'd be prepared to say something like that.

That doesn't require cost data. It's more speculative. But I think that's an interesting piece of information because the new gTLDs are not uniform in size. They vary a lot. It's a very long tail. And very many of them have fewer than 10,000 registrants at present. And so I don't think that's on our project list, Jordyn, but we have a table about that and it'd be easy to in fact incorporate [inaudible].

JORDYN BUCHANAN: I added it to the other tracker yesterday.

STAN BESEN: Okay, good. Alright. I think that would be an interesting statistic to present to people, its [effect]. And we could make some commentary [in that].

JORDYN BUCHANAN: Yeah, thanks. Alright, that was a very long discussion about the thing that we don't actually have correct data for.

STAN BESEN: I was [inaudible] projects there's a brilliant footnote that says in [inaudible] to the price cap project it says, "This will show no change if the price [caps] we're finding both before an entry of the new gTLDs."

So it says, this anticipated the possibility that this project would yield nothing useful.

JORDYN BUCHANAN: Alright, are we supposed to have a break in 10 minutes? In 25 minutes. Alright. No, I was going to keep going anyway, I was wondering how rapidly we had to move through 1.6 which is the last of our projects for price competition, which is "Registry Market segmentation Analysis." This is Project 5. This one's Stan's so he can [report].

STAN BESEN: [Inaudible] Greg has told me that the earlier chart here has been changed and the HHIs are substantially higher than they were in this. Is that correct, Greg?

GREG RAFERT: Yes. Pamela, if you could pull up the Project 5 Excel file, it's probably going to be helpful. This is the one titled, "Registry Market Segmentation Analysis Project 5." And Stan, what we've done is essentially just added a single column onto what we previously circulated.

STAN BESEN: But I guess the point about this is even with the newer numbers, if these are markets, some of them would be classified as quite concentrated. That's [inaudible] Point 1. Point 2 is the second chart in this package which is response to a project that I proposed, which was to calculate

the relationship between the concentration ratios and the average prices. I now believe we should not use this analysis for a very simple reason – there were not enough observations. When I proposed this project I assumed we would have in fact data for a lot of groups. This apparently based on 13 observations, and I don't know if Greg agrees with this but my inclination at this point is not to use this. He's nodding yes.

GREG RAFERT: I agree for the record.

KAILI KAN: Just to make sure that I understand correctly, Stan, you're suggesting that this Project 5 we wipe it out.

JORDYN BUCHANAN: Just the second half, is that what you're talking about?

KAILI KAN: [Inaudible] half.

JORDYN BUCHANAN: So the one that's called, "TLD Family HHI," not throw that out – keep that. Keep the one that's called "TLD Family HHI," which is the thing that Pam is presenting right now.

So just ignore the second half and only look at the first half.

KAILI KAN: My question comes for this page whether to keep. I think it was the last meeting in D.C. or something I have a question here about the home market. My question was, assuming that it is a [hot] market, does that include both sales and rental in the same market? Because there's a definition of being in the same market and competing against each other, the definition for that is substitute, substitutability. Also the same for car. Is that used to mean car sales or car rental?

So if we group them into the same – put them, put both car sales and car rental in the same market, to what extent do they substitute each other and so forth? So I think for many of these, I think last time we talk about cleaning versus gardening or housekeeping. Are they all in the same category of help? Do they substitute each other? So that's why I didn't quite agree with this. [Inaudible].

GREG RAFERT: So they're clearly subjective groupings. I think the intention in putting them together and putting the TLDs within a given grouping was to think about TLDs that could plausibly substitute or potentially compete against each other. We're not saying that they are per se because we don't have the data to be able to do so. But in the absence of having good transaction level data and thinking about how consumers actually substitute back and forth across TLDs, it's an approach to thinking about groups that might compete against each other. It's something that you run into in anti-trust analysis certainly when you don't have the ideal sort of data.

JORDYN BUCHANAN: But I guess Kaili is asking, probably the right way to do this, in your report you don't just [view] without the TLDs in each category, right?

GREG RAFERT: Yeah, that's correct. It's the third tab that says, [inaudible] set raw, I believe in that file. You can actually see which TLDs are grouped into which families. And to the extent that the group would like to come back with alternative sets of TLDs in those families, it's an easy change for us to make.

JORDYN BUCHANAN: So Kaili, I don't want to spend a lot of time right now talking about the groupings. If you want to take a look at the groupings independently and –

KAILI KAN: Not the independently. I suppose in principle, I do not agree with the grouping. When we say we discuss [inaudible] HHI concentration, legacy TLDs versus the new gTLDs or ccTLDs, that's fine. We can put it this way. But here we don't know, we are throwing everything together and there's no absolutely subjective. You can say this way, I can say another way. That means that calculating the HHI according to different grouping will be entirely different. You have one grouping, I will have another grouping. So this doesn't mean anything. It's only your calculation is only valid in the [new] grouping method while I could have

another grouping. And I have calculated my HHI. So this has no objectivity at all. That's what I'm trying to say.

JORDYN BUCHANAN: Right. I think Greg acknowledged that it was subjective. Eleeza wants to say something so let me let her jump in. Okay, finish up, Kaili.

KAILI KAN: Why do we need this anyway? We've just calculated the new g versus the legacy and versus, versus… Why do we need this anyway?

JORDYN BUCHANAN: Stan requested this project, so I will let him answer that question.

KAILI KAN: I don't see, for example, we have quite a few I will say general [inaudible] in new gTLDs. For example .xyz, where would we put the our say .vip up top? And also what I will say which family does .vip belong? I don't know.

JORDYN BUCHANAN: Alright. Stan, do you want to answer the question of why do we want this?

STAN BESEN: There are several answers. One is that in fact if you looked at the Analysis Group's first report, it in fact has groupings. The only difference between this and that is that this calculates HHIs. Is that correct, Greg?

GREG RAFERT: Yeah, that's correct.

STAN BESEN: So we in fact did that. So this is nothing more than let me ask a question, I'll give the answer. [Inaudible] done in that way. What I was proposing here was taking the original grouping [I actually proposed] some additional groupings and provide some summary statistics. That's all the purpose here is.

More generally, we have a question of exactly how to define markets. And right at the outset I said you should define markets – since we're entirely sure – we could define markets in a variety of ways. When we proposed a market that consisted of just gTLDs, people said, "Oh, no. That's too narrow. You should be including ccTLDs." So we will in fact produce such calculations. Other people believe that in fact competition occurs across narrower groups of entities. So as an alternative, we've produced that. We're not going to fall on our sword about any of these. I think it's appropriate for us to provide information for a variety of these.

Finally, this is not different from what is conventionally done in many of the anti-trust analyses that I have done. Sometimes you have data – I gave a presentation on market definitions – sometimes you have

documents, sometimes you have the econometrics, sometimes you make judgements based on observing the entities. This is not an unreasonable thing to have done. I agree with Jordyn, if you have some other proposed combinations, propose them. But I don't think you could say this has no information.

JORDYN BUCHANAN: Alright, Kaili.

KAILI KAN: Just to answer you, Stan. First of all, what I hear is your comment was that the reason we do this is because just to continue what Analysis Group did in phase one. As I remember –

STAN BESEN: [Inaudible].

KAILI KAN: Okay, right. But anyway, as I remember even during our first meeting [seeing] Analysis Group's [inaudible] phase one, I think I questioned the grouping. The example I talked about was housecleaning versus [cleanliness] so far. So that itself in my understanding of that, that approach to even was a question about even to begin with, number one. So anyway, why do we need this? I still do not quite understand.

Well, if also Stan what you mentioned, this is in line with the traditional, conventional ways of the DOJ what they do. My answer to that is

Department of Justice is [involved in] cases, that however the Department of Justice is not using this method to judge the entire market. They're only are case study. For example, I remember last time you mentioned there was the office supply and that is Office Max versus Office Depot or something like that. That is not used. This method is used for this single case study. It's not to judge the entire retail market including from food to clothing to office supply, to housing, to everything. However, so what we're doing here is trying to use this method to solve a global question. What I see is DOJ is using this to solve a micro issue. So my understanding these two are entirely different.

STAN BESEN: At the risk of extending this conversation, I'll just say one more thing. I find your position very odd since when I first met you, you said that every gTLD was a natural monopoly. I would have thought that somebody who had that view would have opposed the idea treating the market as one big market. Going to these narrower markets goes in the direction that you had proposed. If you believe they're all natural monopolies, you should be in favor of narrow markets, not very broad ones.

KAILI KAN: I think that you are trying to put our current discussion on other issues that we're not discussing yet. I agree that I did raise the question about whether gTLDs are natural monopolies, yes. But first, that is still discussed still without [inaudible] it. So anyway, let's come back to this

current issue that I will say I still have questions about this current grouping or categorizing the entire market into [a dozen]. I think there's no [inaudible] grounded.

JORDYN BUCHANAN: Alright, so we've got Megan and then I'm going to make a comment.

MEGAN RICHARDS: Can I just make a proposal? Kaili, I hear what you're saying. I don't necessarily agree but that's another issue. Can we just leave this aside for the moment? For me, it seems to be a useful approximation of concentration and we can always come back to it. We don't have to deal with it now. With the data that we have it's a fact on the ground. It gives us an interesting assessment for a certain way of looking at the way the market works. And if Kaili comes up with something better, more interesting, more useful in the future, then we do.

But we have a lot of other things to do and quite frankly I think to spend much more time on this point is not the best use of our time. It's not that you're right or wrong. That's a completely different issue. But I think we should go on and park this – did you like that word?

KAILI KAN: Greg, yesterday you had two statements. One is there's no indication that for the overall market the introduction of new gTLDs has increased competition. Another one is there are cases for example the .edu yesterday is that [entered] competition was indeed introduced. So I buy

that. For the overall market, there's no indication. However, for cases, there [aren't] cases that competition be introduced.

Well, that, I think there's nothing wrong with that. But again, the issue is exactly why do we want this grouping and this calculation of HHI? I still do not quite understand. Well maybe I [inaudible]. I must recognize that I come from an engineering background, engineering major. I am not fully economic [disciplined] person. Although I did teach economics. But at least I need to understand why are we doing it? Now you'd better park it now.

JORDYN BUCHANAN: I'm going to suggest this as a path forward. I guess on the one hand I agree with Megan this is interesting. On the other hand, I look at this and I'm not 100% sure what conclusions I would draw from it because especially since we can't do the second step and look at whether there's any effect on price or not. This says that none of these markets are super-unconcentrated. So by registry level here, Greg, you mean as common ownership. Is that right? So there's in the case of education if you look at it on a TLD by TLD basis, it's much less concentrated looking than if you realize the fact that one registry operator owns all of the TLDs and so, in fact, there's not actually any competition.

GREG RAFERT: That's right.

JORDYN BUCHANAN: But since we can't say some registry operator has all of the relevant terms in the marketplace, what is the effect on price? I think we should park this largely because I'm not that sure what we're going to do with it. And if we get to the point that we want to start to draw inferences from this, I think, Kaili, if you have concerns we can document them in the report as well.

I'm going to do the same thing we did yesterday on non-price competition. Those are all the projects that we have in play, other than the one that Stan mentioned yesterday which is basically just to look at how big all the registries are.

STAN BESEN: We have other projects involving concentration among registrars.

JORDYN BUCHANAN: This is all the registry price competition related projects that we have in play. I actually think there's not a project underway that's something hopefully that would be an easy project or that maybe Analysis Group is already doing which would be to look at volumes versus price.

Because one thing that seems true to me is that we haven't looked at data is many of the very largest of the new gTLDs, I believe have some of the lowest prices of the new gTLDs as well. And if that were true, I think that would probably be an interesting observation to include in our report. So maybe, Greg, I'll talk with you offline and see if there's something we can put together based on data you already have as opposed to collecting new stuff.

So I'd like to propose that as one new project, and I know Stan, I'll have to define it better than I just did. But is there any other information that anyone really hopes that we have before we start to write down our findings on price competition?

JONATHAN ZUCK: Any help that we can get trying to reach out to aftermarket, like SEDO or somebody like that.

JORDYN BUCHANAN: It's really just SEDO, right? Because we've heard from [inaudible].

JONATHAN ZUCK: They just said no. One of the transaction data which isn't that helpful. It's almost like what we need is the difference in "buy now" pricing, before and after, three years apart or whatever it is we want to do. Because I think that's the one area in which, because of price caps, we may actually see price movement is in the aftermarket where you actually have market-driven prices.

JORDYN BUCHANAN: Could we actually get transaction data? Because maybe we just get transaction data and look and see if any identical string has ever been transacted more than one time.

JONATHAN ZUCK: In that three-year period?

JORDYN BUCHANAN: More than once and enough of them to draw any inferences from.

JONATHAN ZUCK: I don't know. I guess we could potentially get it. I just expected that there wasn't enough turnover for that.

JORDYN BUCHANAN: I don't know. If we got the data we could look to see whether that was true or not. It could be that there's some domains that get sold all the time. I think that's probably unlikely. I've heard numbers like only 2% of portfolio get turned over in a year so that would make it unlikely that we'd see very many [inaudible] selling more than one.

Margie?

MARGIE MILAM: So this is the area where we're not able to get data from the providers of [services]?

JORDYN BUCHANAN: So far we haven't gotten any of the aftermarket providers to agree to give us data.

MARGIE MILAM: Is there any anecdotal data. Because I've seen some websites all the time. Is that useful to you?

JORDYN BUCHANAN: What we need to do is compare same strings. I think the thing that we want… The ideal thing that we would have is for every moment in time for the past five years or something like that, what were all the names that were listed for sale and what the listing price was, and then to see if there's been any trend to that.

JONATHAN ZUCK: Even just having two sets of data.

JORDYN BUCHANAN: [Inaudible] and then everything that's sort of like more less granular than that is less useful but still not unuseful.

JONATHAN ZUCK: But at the very core if we could have data from a couple of years ago that was all the buy now prices [inaudible] the vendor and then that same data today, there's likely to be about 80% overlap and we might be able to track what the asking price difference is. We'll have to discuss what we can infer from that, but it feels like the closest thing we'll get to actual market base pricing.

JORDYN BUCHANAN: Noted. That is on our list. Whether we should complete that project or not I guess is the question. Are there any other projects that anyone

else would like to… Last minute additions to the project list before we say this is all the data we're going to have. Kaili?

KAILI KAN: I don't know if that's [invitation] or not. A few occasions I mentioned and put in e-mail for the registrars how important is the price?

JORDYN BUCHANAN: I think we talked yesterday. It's either covered in the Registrant Survey or we're not going to get that information because that's our only touch point with registrars.

KAILI KAN: However, that is related to what we're discussing now. That is lowering the price, even if it is because or not because of competition from new g, how important is that? That would relate to our future recommendation [inaudible].

JORDYN BUCHANAN: Alright. Thanks, Kaili. WAudo?

WAUDO SIGANGA: What about this other project on the effects of competition on competition within registries? Are we going to discuss that later?

JORDYN BUCHANAN: Yes, we'll discuss that later. We're just talking about the projects listed related to price competition between registries. Our two hours that we're wrapping up now has been focused just on that one area. And then we're going to talk about the remainder of our other projects next. After we have a delightful break.

Alright, so we'll use that to segue to the break, so everyone feel free to take off and we'll come back in 15 minutes. That's 10:33.

[Break]

JORDYN BUCHANAN: We're going to start again in one minute in any case, so resume your meeting posture.

Welcome back everyone. We are going to move beyond registry competition discussion and start to talk about some of our other projects. We're going to talk about whether the benefits have exceeded the costs, as the high-level question. So this is Section 5 in our Competition and Choice Project List.

The first of these is "Have brands switched to their brand TLDs and moved away from their legacy TLDs?" So I think this is the Trademark Observatory data that Eleeza had suggested we take a look at. And Waudo, I think, was taking an initial look at that. So Waudo, how's that going?

WAUDO SIGANGA: This project on brands, I've just had it for a couple of days basically so I was just starting. Probably I'll give a proper report in the next conference call.

JORDYN BUCHANAN: Okay, thanks Waudo. So we don't yet know how brands are actually using their TLDs.

STAN BESEN: [Inaudible].

JORDYN BUCHANAN: No, that's the next project. You're slightly ahead of schedule. So 5.1 just to clarify, Stan, is, of the brands that got their .brands, what are they doing with them? Are they actually using them or do they just get them defensively basically? There's a Trademark Observatory that's a third party data set that Waudo was going to look at to see whether or not… We didn't draw inferences. Did you have a comment on that, Waudo?

WAUDO SIGANGA: Dot brands, Observatory says that most of them are active actually – 83% of the 557 brand registries are now live. So I think that would be a starting point for the report that I'll give next time.

JORDYN BUCHANAN: Yeah, sure. So I think it would be helpful to see what fraction are live versus redirecting to their .com or whatever and then some fraction of

them, some very small fraction I think, are now the canonical addresses that they want everyone to use instead of their old TLDs.

ELEEZA AGOPIAN: All of you can look at the site, it's observatory.domain. I'll put it in the chat, but they also have case studies on that which might be interesting to look at.

JORDYN BUCHANAN: Great. Thanks, Eleeza.

WAUDO SIGANGA: I haven't really had a deep look at those case studies, but I noticed that there's a membership to that site as well. So I don't know how much information I can be able to get from the non-membership aspect.

ELEEZA AGOPIAN: I think what they have available on their site is probably sufficient for what you need. I've seen some of their proprietary research which is good and it's probably more detailed than what you need for your purposes. We can see and we can certainly talk to them about getting more from that, but I think there's quite a lot on the site that'll be useful.

JORDYN BUCHANAN: Waudo, if you find that the membership would be helpful or required or you did not get any information you need, let me and the staff know

and we'll figure out what, if anything, we can do about that. But I like that they have a "Free Access" button.

So we'll expect more on that soon. So now we're on to 5.2 which is, "The frequency of brands/trademark registration across the new gTLDs and to what extent do we see trademarks being registered in the new gTLDs?" So this is something that we thought was going to be captured in the TMCH Review and I think that's probably true. And then there's the separate related project to this which I think is the one that you're referring to, Stan. Is that the new table?

STAN BESEN: It's the first row of this new table called "Summary of Trademark, Strings Registered" which I think is a relatively new table.

JORDYN BUCHANAN: Is that in the latest e-mail that Greg sent around?

ELEEZA AGOPIAN: [Inaudible] sent this on August 27th. It's a pdf file.

GREG RAFERT: Pamela has it as well. It's the one file that's already a pdf and not an Excel file. I can find the name in it.

JORDYN BUCHANAN: "New gTLD registrations of Trademark strings." That's the file name – 8/16/16.

We didn't know this was done I think when we made our last assignments so we hadn't assigned anyone to look at this. So maybe Greg, are you familiar enough with this to talk us through this data?

GREG RAFERT: Yeah, I am. Stan's right, I think that probably the first row is the row that you're most interested in. But let me describe just a little bit because it's not the most transparent table in the world and I think an example will probably help.

So let's say I trademark my name Greg and registered it in TMCH. And let's say I then went and registered it .com. So then I would show up in this first row in this 19,642 total as a trademark holder who registered Greg and a legacy TLD – .com in my example. Just going down to the second row quickly, there could be non-trademark holders. So maybe you Jordyn didn't own the trademark to .Greg but you decided to register it in .net. So greg.net would show up in that total of 15,145 and that's the legacy TLD registration by you. That's the first column in those first two rows.

And now if we go back up to the registration by trademark holders – So I've registered Greg in .com and I show up in the 19,642 total and now I, for example, decide to go register it in greg.sucks for whatever reason. Then I would show up in that total of 10,579. But if I didn't register it in any new gTLD, then I wouldn't show up in the 10,579, I would be a

trademark holder who decided not to register my trademark in a new gTLD.

JORDYN BUCHANAN: So nearly half of trademark holders who have brand – is this just .com or is it all legacy?

GREG RAFERT: All legacy.

JORDYN BUCHANAN: Who have brand.some legacy TLD, about half – a little more than half – of those people have also gotten at least one new gTLD registration.

GREG RAFERT: That's correct.

MEGAN RICHARDS: A supplementary question. There are, of course, a number of trademark holders who have their own new gTLD, so they're .greg, for example. How have you calculated for them? Because you as greg.com and greg.sucks would also have done .greg. That for me is an even more interesting figure.

GREG RAFERT: So whether or not I registered in my brands .greg? So they would show up in the total but we didn't make the distinction between –

MEGAN RICHARDS: To me, that's important because for me that's one of the most interesting aspects. Because whether they register under legacy or new TLDs, of course it's an interesting thing. But on a supplementary aspect which is almost as important is whether they took their own –

JORDYN BUCHANAN: I think it would be helpful in this table to have a third line which is registration by trademark holder that also has a .brand. Then just do the exact same computation and then back those people out of the top line.

MEGAN RICHARDS: The non-trademark holders – that's a very difficult figure to get, isn't it? If I'm, I don't know, Kellogg's brand and I'm obviously not the trademark owner of Kellogg's but I'm going to register kelloggs.com? I would have a kelloggs.com. How do you know if it's me or if it's Kellogg's? Did you look at all that [data]?

GREG RAFERT: Yeah, so we have the WHOIS information so we know –

MEGAN RICHARDS: That's a lot of work.

GREG RAFERT: We had done a lot of it for the TMCH Review and so it was relatively… yes.

STAN BESEN: By the way, this is for an existing sample that they'd already constructed for another purpose, and so they actually know the identity of the registrant as well as the name.

JORDYN BUCHANAN: Greg, just to clarify that, if there's like WHOIS privacy in place, does that count as a non-trademark holder?

GREG RAFERT: I believe they'd be excluded entirely from this analysis but I can double-check.

JORDYN BUCHANAN: Sure. Okay.

STAN BESEN: There may well be other trademark owners that are not in here. If they were not in their database they're not here. This is 19,000 from the database that they have constructed.

JORDYN BUCHANAN: Alright. So Greg, do you want to explain the rest of the table?

GREG RAFERT: Sure. I guess the far right panel that begins with "Number of new gTLDs in which strings were registered," that's really designed to give you a sense for the distribution of trademark holders who registered their string in a gTLD. So for example, the median trademark holder registered their string in three new gTLDs, some of which could have been their brand TLD to Megan's point.

I think the last row probably isn't of much interest but just to continue my example. So I registered Greg as a trademark but didn't register it in any legacy TLDs. Then if Jordyn you came along and registered in .com and .net, you would show up in that total of 13,738. And then we've undertaken the same analysis looking at of those entities, did they then go on and register that string in new gTLDs as well?

STAN BESEN: [inaudible] 206 gTLDs.

GREG RAFERT: I would assume so since that's what the table said, but we can certainly check.

JORDYN BUCHANAN: For context, Stan, we register several marks in every single new gTLD.

STAN BESEN: I'm just struck by that number.

JORDYN BUCHANAN: We have a lot of marks that we either don't register at all or we only register selectively, but there's a Google.whatever, you could imagine would be registered in a lot of TLDs.

Alright, so this is helpful. And it does feel like there is a relatively small number of trademark holders that are really dominating the scene here because the mean is higher than the 75th percentile.

I would say one follow-up piece, Greg, that I think would be helpful would be maybe even to extend out those percentiles a little further just to get a sense of what that distribution looks like – like a 90th or 95th percentile might be useful. So this also shows that there's – I was going to say about the same number of registrations by non-trademark holders as trademark holders – but it actually looks like there's quite a bit more… The mean is very confusing.

GREG RAFERT: That's a good question. I was actually looking at the same thing myself so I think we'll need to double-check it.

STAN BESEN: We discussed this on the telephone. We talked to these guys about this project. I had remembered that the first row is the one that I felt we were going to do, and you had proposed another project which I guess is one of these other two but I'm not sure which one it is. This is the one that the same name is being registered but it's being registered but not

by a trademark owner. How often does the same name appear in more than one? Is that it here? Irrespective of who the registrant was.

JORDYN BUCHANAN: Actually, if you sum the first and the second I think you get that. Because the second is the non-trademark holders. You don't actually get it by summing. On the number of strings it should be right. Numbers that are one are probably not –

STAN BESEN: I'm sorry to be so dense here. I thought the question was – you registered some name in .com and I register the same name in .xyz, I thought we were going to calculate that as well. How often does the same name appear irrespective of who the [registry] was. I thought that was the other project we were discussing.

MARGIE MILAM: Do you mean the same name or same trademark string? Are you talking about trademark strings only?

STAN BESEN: We discussed this. You were on the call as well. We were discussing how to do this, and I had in mind that what we were going to do is do essentially row one here which is how often – we know the identity of the registrant, how often does that registrant register the same name in a new gTLD? Jordyn at that time proposed – I thought the idea was – how often does the same name appear in a legacy and a new gTLD

irrespective of who the registrant was? So If you register the name in .com and I register it in .xyz, I thought you were proposing that we want to know how often that name appears in both.

JORDYN BUCHANAN: I think I did, but I think the way it's presented here is better than… Because this has a distinct breakout of how often the non-trademark holder in particular is registering it.

STAN BESEN: This is the same entity registering in both.

JORDYN BUCHANAN: No, that's line one.

STAN BESEN: That's a trademark owner. In my example of, "I registered in .com and you register in .xyz," where does that show up here?

JORDYN BUCHANAN: It doesn't exactly.

STAN BESEN: I thought that's what you were proposing.

JORDYN BUCHANAN: He's saying that the incidences of where… So line two would capture either what Stan just said or if he did not register it and someone else did, it would now be captured in line [inaudible].

STAN BESEN: I thought that was the other project you had proposed.

JORDYN BUCHANAN: It was but like I said, I still think the way that they've actually done it is more useful.

STAN BESEN: I accept your amendment.

JORDYN BUCHANAN: Okay.

ELEEZA AGOPIAN: In addition, separate from trademark strings, we also have data on duplicate names that are registered at the second level across multiple TLDs so we could tell you what the percentage [of this or that] if that's of interest.

STAN BESEN: I thought that's what Jordyn had originally proposed. Take the same name that appears in both, irrespective of whether it's a trademark or whether it's the same registrant –

JORDYN BUCHANAN: We may want to add that as a third column just like, "What's the incidence of for each mark, how many TLDs is it registered in regardless of who the registrant is." That might be useful as well.

Alright, it sounds like we'll get that additional data but we have this data. So your project is complete, Stan. Is that right?

STAN BESEN: By the way, I think this is very useful. That first row is a very useful piece of information.

JORDYN BUCHANAN: I actually think both rows are very useful.

STAN BESEN: But this one says, a lot of people duplicate registration, but a lot of people don't.

JORDYN BUCHANAN: What I'm trying to figure out, we talk about the TLD, if we talk about cost-benefit analysis, when I see a number like 406 that seems like a significant cost that that company is bearing in order to register across all these TLDs. When I see a number like seven, I sort of say, "Well, what's the fuss?" So that's why I asked Greg to extend out the percentiles a little bit to get a better sense of how heavy that tail is. And if it's just like one company being crazy, then we probably don't care

that much. But if we see that there's actually a pattern of 10% or something of companies are registering over 100 names, then we might conclude that there is quite a bit of defensive cost.

KAILI KAN: So that means that there are a few companies that have just a lot [interest] while the vast majority there is no [fair].

STAN BESEN: Yes, the mean is eight.

KAILI KAN: The mean is much higher than the median. There are a few companies registered in [hundreds] but the vast majority is single digits.

JORDYN BUCHANAN: I don't want to jump to conclusions yet, but one thing you might say is if it's really just a tiny handful – if there were like five companies – registering more than a hundred names, then you might say those companies are just behaving weird and so we don't need to worry about [them].

KAILI KAN: Let's just say you just mentioned Google, because Google does have a [few]. We have a result. That [inaudible] misleading. Second thing, Google has the need without you feel that Google is important enough not to be hijacked by somebody crazy.

UNIDENTIFIED FEMALE: [inaudible].

JORDYN BUCHANAN: No, these are in new gTLDs so they could be quite a bit more expensive. But in any case, I agree generally with what you say, Kaili, but I think the Google example is sort of acting weird. I think it's totally rational, but it's an outlier. It's not how most companies are behaving and so when we try to describe the cost of defensive registrations we would say there is a small number of companies that are bearing a relatively high cost but most people are not registering their marks defensively to a significant scale.

STAN BESEN: What specifically have you asked Greg to do – the 90th percentile or something like that?

JORDYN BUCHANAN: I would probably like to see the 90th, 95th, and the 99th.

GREG RAFERT: And I think we'll also just put together an Instagram so you can see the data, too.

JORDYN BUCHANAN: Perfect. That's probably even better.

KAILI KAN: However, I would say that over half of the trademark holders register for at least one new gTLD. I just presume they are out of defensive purposes.

JORDYN BUCHANAN: But they're only registering three names, so they're leaving most of the new gTLD space open with their brand it seems like. It seems weird that we have Google but we do not have google.google.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: No.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN : Some people think that country codes – those two-letter codes – shouldn't be used at the second level but there's never been a discussion of –

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: I said some people, I didn't try to characterize –

MEGAN RICHARDS: Just to correct the record, it's not that they shouldn't be used it's that there's a first right of refusal to determine whether the use at second level for the country code is appropriate or not.

As an example – I'm making this up now so I don't think it's real – sex.eu – and this is not the case – might be considered an inappropriate use of .eu, for example. It doesn't mean everything is refused. Oh, no, eu.sex might be considered an inappropriate use of .eu. And that's the concern of some of the gTLD [inaudible]. It's not a blanket elimination or a blanket [inaudible] and I think that's been misunderstood.

JORDYN BUCHANAN: I agree with your very reasonable characterization of what many people think. I think there is an extreme view that – as articulated actually in some correspondence that we've certainly received – that is more prohibitive than what you're saying. But that's the only example that I can think of of where a top-level domain can't be registered within another top-level domain.

Waudo.

WAUDO SIGANGA: This is true of using the same name on the second level. I think I saw some study somewhere that showed that it's confusing consumers. So many of the TLD holders were not really using it so I'm not surprised when you say you don't have google.google. Netflix tried it – Netflix.netflix – and most of the consumers were so used to Netflix.com that they just never caught [up]. They basically gave it up.

JORDYN BUCHANAN: Thank you. [Not] getting too sidetracked on this discussion, but if we break out the .brand stuff I think that would be interesting in any case to see if the registration behavior differs. I think Kaili is correct that half of brand holders have registered at least one on average, depending on what you mean by average, they register about three. A very small number of people are registering a lot and that is skewing up the other kind of average. I would generally conclude it doesn't seem like most brands are not registering in large numbers of the new gTLDs. That's probably a fair summary of what this chart says. And about half of them are choosing not to register, even though they did in the legacy gTLDs.

That's what the data tells us. We should talk about conclusions from that soon. Is there anything else on the trademark front anyone would like to see in terms of follow-up projects here?

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: What do you mean by exclusive with each other? Yes, they're not the same registration.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: So the first line is, for Greg's example before, if he registered greg.xyz and he's the trademark holder then that will be in line one. And if you register greg.lol, then you're not the trademark holder so that would show up in line two. If he owns Greg and you register greg.lol, then you'll show up in line two.

STAN BESEN: I can't find it here, but at one point I circulated a small summary of the literature [about] basically asking how many trademarks that were in .com were also in .biz. So if we're going to write this up, we probably should precede this more comprehensive analysis with at least a brief description of what people did before.

JORDYN BUCHANAN: The other thing that might be useful and easy to do would be to show the median and the mean for the number of registrations in the legacy TLDs for the cohort of 19,000 just to compare. So get some statistics – so we know there's 13,000 mark holders registered in the legacy TLDs, is that right?

GREG RAFERT: Yeah, they're trademark strings so it could be a single by non-trademark holders.

JORDYN BUCHANAN: And in the 19,000, all of these people have registered in at least one legacy, is that right?

GREG RAFERT: So the 19,642 is I think it's actually what you were asking for potentially, Jordyn. So it's the number of strings that were registered in legacy TLDs for the sample. It's not the number of trademark holders that registered. So if I had Greg, going back to the example, and I registered in greg.com and greg.net, then I would show up twice and I would contribute to the 19,642 total. Does that make sense? I think one thing that would be helpful is to know just how many strings we're talking about.

JORDYN BUCHANAN: Yes, that would be helpful. Kaili?

KAILI KAN: Just to clarify, just like we talked about the trademark strings like bmw, first line I am BMW the company. If I registered in BMW on first line. I think like if I am not the BMW company and I register for BMW [be down to] second line. Does that mean that who will be this guy? Not

BMW but is registered for BMW. What are these guys doing? They are supposedly the bad guys. [inaudible] trademark.

JORDYN BUCHANAN: Many trademarks are also generics in other contexts. So if someone's registering apple.farm, that's probably not because they're trying to sell counterfeit electronic goods.

KAILI KAN: But I would say if we talk about trademarks, Apple is probably a special case. In most cases, trademarks would that be… in that context, Apple is not considered –

JORDYN BUCHANAN: No, they can't distinguish the context of the usage.

KAILI KAN: So you mean the second line many of those in the second line would just be genuine apple sellers – farms selling apples?

GREG RAFERT: Yeah, we don't distinguish between people who are using it for genuine purposes versus who are doing it for nefarious means.

KAILI KAN: So the second line including both the bad guys and the unintentionally –

ELEEZA AGOPIAN: The second line just means that that string which is also in the TMCH is registered elsewhere by a non-mark holder.

STAN BESEN: But that could be a good guy who doesn't show up in the database as the registrant because he's using an agent to do the registration. Footnote three.

GREG RAFERT: We removed proxies for the data that we had in the TMCH. My recollection is that in addition to identifying the TMCH agent for most of the instances it also identified the trademark holders themselves. So we were typically able to know who the underlying mark holder was.

JORDYN BUCHANAN: I'm sorry, what Stan's saying is you used like your law firm and their name shows up instead of your name, you might still end up in row two.

GREG RAFERT: In terms of the WHOIS data? In that case, I'd have to go back. I think you'd probably [at least] possible.

STAN BESEN: That's what Footnote three says. Footnote three says we it could be a third party registering for the trademark owner.

GREG RAFERT: Yeah, that's right.

JORDYN BUCHANAN: I was misunderstanding this data a little bit before. So there's slightly fewer instances of non-trademark holders registering trademark strings and of trademark holders registering those same strings.

STAN BESEN: [inaudible] trademark owners. Because it could be an agent.

JORDYN BUCHANAN: And also they could have a trademark and just not be registered in the TMCH as well.

STAN BESEN: It could be a registrant on behalf of a trademark owner, yet here it's classified as a non-trademark registrant.

ELEEZA AGOPIAN: Maybe it should say, "Those who can't be identified as the registered trademark [holder]."

JORDYN BUCHANAN: But even if you assume that all of these are not trademark holders – I'm now going to interpret data as opposed to just looking at the table – I

would say based on this that trademark holders do not seem to be registering in significant numbers to protect their names across most of the TLDs. And also, that we don't seem to see rampant either speculative or nefarious registrations of those same strings.

STAN BESEN: [Inaudible] a "lot" 54% do but they don't seem to feel the need to register in every new gTLD.

JORDYN BUCHANAN: Is this 54% the fraction of marks of strings that were actually registered?

GREG RAFERT: So in the first row it's the 10,579 divided by the 19,000.

JORDYN BUCHANAN: So that doesn't tell us anything about the number of marks that are being registered.

STAN BESEN: Go back – 19,000 of the trademark owners are registered in a legacy.

JORDYN BUCHANAN: In other words, there were 19,000 instances of a trademark being registered by its owner in a legacy, but if they registered in .com .net, .biz, and .org, that's four. That's not one.

STAN BESEN: That's a problem.

JORDYN BUCHANAN: So that's why I went back and said I really do want my project, because –

GREG RAFERT: Yeah, I agree.

STAN BESEN: [inaudible] the [size] of those, 54% registered the mark in at least one new gTLD.

JORDYN BUCHANAN: No, that 54% is just 10,579 divided by 19,[462].

STAN BESEN: [It is] also registered in at least one new gTLD.

ELEEZA AGOPIAN: That's the strings not the mark.

JORDYN BUCHANAN: We're looking at total instances, too, right? So it's not the same number of strings. It's not even that number of strings were registered. The dude registering 406 times is 406 of those 10,579.

GREG RAFERT: That's correct.

JORDYN BUCHANAN: The person that registered 406 times is the maximum. That is 406 out of the 10,579. So there's actually probably many fewer marks in the new gTLDs than in the legacy gTLDs because there's way more gTLDs to register in.

ELEEZA AGOPIAN: [Inaudible] string is in at least one new gTLD.

STAN BESEN: Exactly. So the point is that if it's one or 10 or whatever, it shows up as a one there because there's at least one.

GREG RAFERT: I'm pretty sure it's not right. Why don't we go back and we'll make sure the –

STAN BESEN: Then it's a misleading heading.

GREG RAFERT: I would agree.

JORDYN BUCHANAN: It would definitely be interesting to know the number of unique strings for all of these calculations.

I think, Stan, your correction of my general statement is true, that people care to register their marks at least a little bit but not that much.

STAN BESEN: I remember years ago when they were discussing the possibility of expanding the number of gTLDs, it was the trademark owners in the community that I was on – trademark lawyers – who were concerned on behalf of their clients that the expansion in the number of gTLDs would substantially increase their cost because they would feel the need to register in all the new gTLDs. And what this is telling us is a fair number of them do, but they don't seem to register anywhere near all the new gTLDs that have come into existence, at least most of them [inaudible].

JORDYN BUCHANAN: Most of them register in three or less. It's a [median], right?

STAN BESEN: [Inaudible] register more than three and [half] less.

WAUDO SIGANGA: I think that would be expected because a lot of the new gTLDs are for specific purposes. I would not expect BMW to go for bmw.beer.

JORDYN BUCHANAN: Agreed, but to Stan's point earlier, there was an argument made prior to the launch of the program that brands would be forced to register dozens or hundreds of TLDs in order to protect their brands. That does not actually seem to be what is happening in practice.

KAILI KAN: I think Jordyn's point you were making really depends on the nature of the business. For example, it's true that BMW wouldn't bother to getting the beer, but Google might [inaudible] if somebody doing search in beer, you want to make sure it's Google.

JORDYN BUCHANAN: I don't disagree with that.

KAILI KAN: Depending on the nature of the business.

JORDYN BUCHANAN: Obviously there's a small number of brand holders who are registering a lot. We see that in the data as well. But it seems to be a small number and not widespread.

STAN BESEN: Your example you gave was a trademark owner registered in more than one legacy, that shows up more than once in the 19,000 number. So an observation is a trademark, not an entity.

JORDYN BUCHANAN: It's a registration not a trademark.

STAN BESEN: Yes, exactly. That's actually confusing because that observation can show up multiple times on the right. You're at .net and .com and then you registered in a bunch of others, that appears multiple times in the count.

JORDYN BUCHANAN: Correct. Greg's heard that we want some amendments to have [inaudible].

So that was our Trademark 5.2. 5.3 is the INTA Survey which is happening eventually, but we don't have now and have not even gone into the field yet. It will be interesting to compare 5.3 to 5.2, what people say they're doing and what they're actually doing.

5.4 – "How easy is it to register a name that you're satisfied with?" Which I think we got from the Nielson Survey, and we did basically. There was definitely questions about [this]. So someone just needs to write this up in terms of a summary. Any volunteers to write up this summary of this question from the Nielsen Survey? So Waudo's got it.

Alright, "Are there more registrations than in the past?"

ELEEZA AGOPIAN: So for this one, I referred you to the CCT Metrics page, the Metrics 2.9 and 3.8, and there's a number of tables there that you can download that'll help you see where this breaks down. For 3.8 it's actually looking at the number of unique registrations per TLD, but you can look at the inverse of that and get the percentage of how many registrations in each TLD are not unique, so are registered in some other TLD.

JORDYN BUCHANAN: Okay, and then you're saying 2.9 has total number of registrations in the universe?

ELEEZA AGOPIAN: Yes. Well, for gTLDs not ccTLDs. But you have that.

JORDYN BUCHANAN: I'll just sum up all of the [inaudible].

ELEEZA AGOPIAN: So what you see on the page is just a sample. But there's an Excel file at the bottom of each metric so you can download it.

JORDYN BUCHANAN: So you're saying that will have the legacy TLDs [inaudible] like .com will be in there.

ELEEZA AGOPIAN: Yes.

JORDYN BUCHANAN: Okay, great. So I will take the write-up for this.

"gTLD growth versus ccTLD growth." This is already covered in previous projects. Although I guess we've never looked at all gTLDs versus all ccTLDs. I don't think anyway. I think it's [fine] what we have. I'm just going to [exit] that because that's not a real project anymore.

5.7 – "Is the TMCH reducing the cost of possible UDRP/URS cases? Is the presence of the string in the TMCH an indicator of fewer trips to the UDRP [inaudible] or URS or are there fewer transgressions as a result?" We were going to revisit this when the TMCH Review is complete, which is done.

Greg, do you know if the TMCH Review speaks to these questions of whether having your name in the TMCH has an effect on the number of UDRP cases for that brand?

GREG RAFERT: I don't think we touched on that. If we did it was really tangential. So no, I'm pretty sure we didn't.

JORDYN BUCHANAN: So I guess the question is do we want to get this information from how, I have no idea how we get that.

ELEEZA AGOPIAN: Well, I can tell you that we have a number of metrics where we captured the number of cases in UDRPs and URSes who filed them who prevailed in the case. So that kind of gives you a sense of trends and the volume. But I don't think that we have the data to match that back to [inaudible] or not.

JORDYN BUCHANAN: One thing I guess we could look at is whether the introduction of new gTLDs had an effect on the total number of cases one way or the other. That might be worth looking at.

ELEEZA AGOPIAN: I will include in the Google sheet what metrics you should look at. That way you can take a look and [inaudible] to answer part of this question. I don't think you can [easily answer] the entire question.

JORDYN BUCHANAN: We can at least see, if we see afterwards that there were way more UDRP and URS cases, that might be worthy of a follow-up research project to see if [it's] in the new gTLDs and if we don't see a change in trend then we'll probably say it doesn't really seem to have made a difference.

ELEEZA AGOPIAN: I can just tell you now that the numbers are fairly steady over the years. You can take a look right now at the chart.

JORDYN BUCHANAN: Okay. 5.8 – "Percentage of registrations that are pointing to identical old addresses, redirects for each domain are going, coming, compared to legacy strings." Which I don't have a description for. So Nielsen did ask basically what are you doing with your new gTLDs. So we'll take a look at that and I can write that up.

5.9 is – so we have two basically identical projects – 5.9 and 5.2. So 5.9 and 5.2 seem to be essentially the same project. Let me just make sure of that. Yes, I think that's true.

So those are all our questions on the cost-benefit analysis. We're waiting for write-ups on a few of these things. We still don't have the INTA Survey. We need some more analysis from Analysis Group on some of the trademark stuff. And on the UDRP/URS cases we may or may not have data we want or need.

So let's assume we finish all this stuff which will hopefully happen soon –

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Right, unless there's a cost-benefit question about registrars.

So once we have this data on cost-benefit we will know how often trademark holders found themselves registering a new gTLD, to what degree other people are registering those marks in new gTLDs, whether that has led to an increase in disputes over marks – that's I think roughly the universe of trademark related costs that we'll know… We won't know whether or not because we don't have the Nielsen Survey from before the new gTLD program was introduced, so we won't know how the effect of the program has changed whether people are satisfied with the domains they can get. But we can certainly look at the current trend to that. So we'll know whether people can get the names they want, we'll know whether or not the new gTLD program has led to more registrations overall, and we'll know whether or not people are using their new registrations for some [inaudible] how they're using them.

Is there anything else we need to know in order to understand the cost and the benefit? Basically, the only costs we're looking at are trademark-related behaviors, and the benefits we're looking at are possible easier to get names… I guess the Nielsen Survey articulates a few possible benefits to registrants that we'll be able to look at that.

So basically, we're looking at is it easier to get a name versus the screwed trademark holders. That's the entirety of our cost-benefit analysis.

MEGAN RICHARDS: Just a question. Here we're looking really at the cost and benefit for consumers obviously, and earlier we were talking about the costs for registries. Because by definition when you have more gTLDs, you're

going to have increased costs if you have more than one TLD. So are we going to factor that in as well somewhere? Obviously, it's not a consumer choice issue, but it's an overall cost. Perhaps we address it in the other question [inaudible].

JORDYN BUCHANAN: The high level question we're trying to ask here is, "Have the benefits of more choice in particular exceeded the costs of the more choice?"

MEGAN RICHARDS: But to whom is my point. And so when you talk about choice, we're talking about consumer choice. That's what our mandate is.

STAN BESEN: Actually when Jordyn summarized it he talked about the benefits to registrants. I think you're quite right. We should also be talking about the benefits to consumers.

MEGAN RICHARDS: Exactly. And if I'm not mistaken, in our consumer survey didn't we include – "consumers" was a very broad group as I recall.

STAN BESEN: [Inaudible] users [inaudible].

MEGAN RICHARDS: Yeah, but it wasn't even users it included registrants. It was a funny definition.

JORDYN BUCHANAN: It was both. It was two classes of consumers, one of which is registrants and one of which is our end users.

STAN BESEN: Megan's question is exactly right, the place to look for this would be the Nielsen User Survey, and the question is, are there questions there that identify the benefits to users from the increase in the number of domains. Does anybody remember?

JORDYN BUCHANAN: I think that makes sense. So I think similarly there, we could look for [potential] causes related to confusion or if… One thing that I think the other group is probably touching on that we'll want to incorporate into this analysis is [inaudible] survey presumably [is another] cost [inaudible] program.

STAN BESEN: But we should have somebody go back and look at the consumer survey to see whether we can extract information about the benefits as perceived by users.

JORDYN BUCHANAN: I agree. Who is that somebody?

STAN BESEN: I think we had a volunteer just a moment ago.

JORDYN BUCHANAN: Named Megan?

WAUDO SIGANGA: Those benefits may in that report may just be appearing as [inaudible] narratives not actually in terms of figures. So how do you compare?

JORDYN BUCHANAN: I don't know. We'll have to see what the finding is.

MEGAN RICHARDS: [inaudible].

JORDYN BUCHANAN: So can you take a look at that, Megan? Alright, so this is a new project called Project 5.10 which is benefits versus confusion basically to end users.

Alright, anything else that we would like, that we want to know in making this cost-benefit analysis? No?

So now instead of just asking do registrants have an easier time finding names versus trademark holders getting screwed, we will also add to that analysis whether new gTLDs are more confusing or more helpful to

the end users as well. Those are basically the two axis on which we'll be looking at cost-benefit analysis.

Kaili.

KAILI KAN: I have a [question over] factors. For example, yesterday we talked about IDNs, how many IDNs cannot [yet] still be searched or accepted by various applications. I think we noticed that this similar situation occurs for new gs. How do we count that?

JORDYN BUCHANAN: At the moment, we are making no attempts to grapple with IDNs. I'm not saying it's right or wrong.

KAILI KAN: I'm saying it's similar to the case of IDNs, we have such cases for new gs. How do we count for that, because that for a new g will mean that it could not be searched. [Inaudible] application. I'm not happy about that.

MEGAN RICHARDS: [inaudible] give me an example [inaudible]. In China, for example, where you have IDNs in Chinese script, is it Baidu is a big search engine that you [inaudible]?

KAILI KAN: Yes.

MEGAN RICHARDS: So in Baidu, are you telling me that Baidu can't search Chinese script?

KAILI KAN: [inaudible].

MEGAN RICHARDS: Even Baidu can't [inaudible]. I thought you meant Google and some of the other, or Yahoo.

KAILI KAN: Also not accepted by Alibaba, very popular applications.

MEGAN RICHARDS: How does Alibaba work? In English, in China?

KAILI KAN: No. [inaudible]. They're just a accounts, various accounts.

JORDYN BUCHANAN: I also think, Kaili, I agree that like as I described it we are looking at a very limited range of the possible benefits or the possible costs of the program. These are also the only things that we have collected data on. So if you think that there's other aspects of either cost or benefit that

we should be looking at, that's fine but we need to articulate right now what it is what's the data we're going to look at is. Because otherwise we're just going to be speculating.

KAILI KAN: I was just raising the question saying if it's because if it cannot be searched, for example, then [inaudible] are not happy. How do we account for that? That's a time factor or whatever.

JORDYN BUCHANAN: We're not presently accounting for that. If you think we should, then you need to suggest something we could do to measure it.

KAILI KAN: I'll think about that.

JORDYN BUCHANAN: Why don't you think about that and if you can come up with a measurement that we could use then we can see if we can do it in time. I agree it would be great if we could… Universal acceptance is a limitation on the benefits of the new domains. I think [that] is a true statement. We can even call it out in our report and say, "Here are things that might be other considerations that we did not look at because we didn't have time to." I think we'll probably have a big list of those eventually. And as Eleeza says, there are several other groups looking at universal acceptance. So we've essentially just chosen not to spend our time on that.

KAILI KAN: So maybe we can just borrow their results, their findings?

JORDYN BUCHANAN: Perhaps. Anyway, why don't you think about whether there's anything that you think we could measure here. And the other thing I can do on this is point you to talk to Don Hollander who runs the Universal Acceptance Steering Group within ICANN. He might have information that would be useful. I'll make an intro.

Okay, anything else?

Alright, so that is it for cost versus benefits of choice. That puts us ahead of schedule. Maybe [inaudible] lunch break. Alright, so 45 minutes. So we're actually ahead of schedule, which will give us time at the end of the day to start talking about how we're going to put together a report.

So let's just dive in with… What was our next topic?

We're supposed to be talking about – Stan, you'll be so happy – Registrar Competition. "How the effect of the New gTLD Program on competition between registrars."

So we have a couple of projects here. The first is "Registrar competition within registries," 3.1. And then this is basically to look at concentration within each TLD to see if registrars… what the level… Go ahead, Stan.

STAN BESEN: I think it might be easier to start at the higher level because there is a project which has registrars in all TLDs and provides market concentration numbers assuming the market is all gTLDs. That's the Project 2, and it shows the HHI on that [inaudible]. So that's sort of like kind of an average across all gTLDs. That looks pretty unconcentrated.

The first thing I would say if I were doing this is I would talk about concentration at a fairly high level, and that's Project 2.

JORDYN BUCHANAN: So in parallel to looking at registry concentration in Project 2, Analysis Group also computed what the concentration was for registrars, first of all for all TLDs and then secondly for just the new gTLDs. There wasn't a big difference in the numbers between the two. The biggest difference was probably the [eight firm] ratio between new gTLDs and all gTLDs. But in any case, they generally fall into the range of, regulators would be less concerned – unlikely to be particularly concerned about the concentration levels. And that's true regardless of whether you consider new gTLDs by themselves or you look at the overall marketplace for new gTLDs.

And that's probably unsurprising because all gTLD operators are required to work with any ICANN accredited registrars, and so therefore the same registrars that were selling the legacy gTLDs are selling the new gTLDs as well. So it looks like the new gTLDs have had either a particularly bad or a particularly good effect on competition between registrars – at a high level, looking at the overall market or some definition of overall market.

Separately Analysis Group – this is done, too, right? This is Project 4. Separately Analysis Group looked at what, if you look on a TLD by TLD basis, what does concentration within that TLD look like. So Project 4, they've gone TLD by TLD, looked at the number of registrars in that TLD offering that TLD, and then looking at the concentration ratios and the HHI.

STAN BESEN: I think I would summarize this by saying that in most of them there are very large numbers of registrars for a given gTLD.

JORDYN BUCHANAN: I think it's [bimodal].

STAN BESEN: I look at this chart and I say to myself, most of these look like the number of entities in them look like markets that you would [expect] to be very competitive, but there are a fair number of ones and twos and threes in here.

JORDYN BUCHANAN: The reason I think it's [bimodal] is because a lot of these either have not launched, for example, I saw .app on there which is one of our TLDs is not launched, so the fact that there's only two registrars is an uninteresting fact. I'm surprised that there are two registrars. I don't know who they are. I don't believe that there actually are two registrars

because we don't have a registry-registrar agreement for registrars to sign so there may be a slight flaw with the data on that one.

But in any case, of the ones that have any appreciable number of registrars, they seem to have a lot I agree. Although the concentration ratios often… Let's look at HHIs, we often see –

STAN BESEN: [inaudible] I would characterize this, is most of them have lots of registrars, but there certainly are a bunch that are in the low single digits.

JORDYN BUCHANAN: Sure, but independent of the number of registrars… So look at accountants, it has 70 registrars but the HHI is 3,800 [for] 39 so it's still quite concentrated it seems like and the ratios are 89% and 95%.

STAN BESEN: There's a literature on relationship between pricing and the concentrations, and some of literature suggests that markets can be fairly competitive if the three and four firms – the third and fourth biggest firms – are relatively significant. So it might turn out that even these markets that look concentrated from an HHI point of view might, based on that literature, be [thought] to be actually behaving relatively competitively. But you're right, there are certainly some where the HHI is high.

JORDYN BUCHANAN: Amsterdam's 24 registrars but 3,500 HHI. I think you're right, Stan, on average it seems like – not just on average – most of them have a large number of registrars participating but we see pretty [decent] variance in terms of how concentrated the registrations are amongst those registrars.

STAN BESEN: I actually have a request for Greg. This is a great table. You could have some summary statistics, like a frequency distribution of numbers or a frequency distribution of HHIs or maybe both as a way of summarizing what's here – a straightforward thing to do.

JORDYN BUCHANAN: I have one more request, Greg. The other thing would be [as well as] the number of registrations in TLD. Because it could be in some cases the concentration numbers are really high because [there's more like] 10 registrations and they're trying to divide up among [inaudible].

STAN BESEN: That question is whether the onesies are basically the ones who doesn't pay anybody [inaudible].

JORDYN BUCHANAN: Exactly. Alright, and so I think Waudo has volunteered to write up the summary of this table. Waudo, have you gotten to the point that you've figured out the questions that you're going to try to address In your write-up?

WAUDO SIGANGA: Maybe just the top-level question – "Has the New gTLD Program increased competition for registrants [in] new registries?"

JORDYN BUCHANAN: Yeah, seems like the question we're trying to get at.

WAUDO SIGANGA: That's the top-level one. I've not figured out the lower-level questions.

STAN BESEN: I'm sorry, I didn't hear the question. Is this about registrars?

WAUDO SIGANGA: Yeah, registrars within registries.

JORDYN BUCHANAN: Alright, cool.

WAUDO SIGANGA: What table is that you're using just now, because the table that I was looking at is Table 13.

JORDYN BUCHANAN: You were looking at Project 4 of the [inaudible].

WAUDO SIGANGA: There was actually a finding that was done in the [inaudible] report indicated that the relationship between the [inaudible] prices and registrations only was not really strong. That was Table 13 of the report.

JORDYN BUCHANAN: We're looking at a separate table that they put together just for us.

WAUDO SIGANGA: I'll combine them later.

JORDYN BUCHANAN: And then they've also looked at the concentration in legacy TLDs as well which is the second tab. And the third tab is some pricing correlation. And I guess the question I have here for Stan and Greg is, do we have enough observations here to believe that this is more likely to be useful?

In Project 4 they did a correlation between concentration and price amongst registrars in the TLDs.

Alright, so we think this table should be meaningful. Can you project this, Pam, actually? I have no ability to interpret this data so it would be helpful for –

So the correlation number, Greg, is 0 to 1?

GREG RAFERT: -1 to 1.

JORDYN BUCHANAN: The weighted average market does not correlate.

GREG RAFERT: Yeah, the weighted average doesn't, the median and the simple do.

STAN BESEN: [inaudible] thing. It should have the number of right observations. It should have significant levels and all that sort of good stuff. It just says, for example, simple average it says the higher the HHI, the higher the mark-up at the first row. I don't know whether that's statistically significant or not.

JORDYN BUCHANAN: And particularly even stronger the higher the four firm and eight firm concentration [rate].

STAN BESEN: No, those go the wrong way. Higher concentration produces lower mark-ups – for the legacies.

JORDYN BUCHANAN: The legacy part of this table is empty on mine.

GREG RAFERT: I removed the legacy price information given the discussion we've had about [inaudible] might not be accurate.

STAN BESEN: I have the original here. There have been a lot of observations, this could be potentially useful. We just need to clean it up and provide a bit more information about significant levels and the like.

GREG RAFERT: My guess on the correlations that are higher in the .32 range are probably significant given the number of observations we have. Yeah, we'll definitely include it.

JORDYN BUCHANAN: So from this we would conclude that having more registrars and more competition within a TLD results in lower pricing.

STAN BESEN: The table I have, that's true in the new gTLD panel. It's not true in the legacy gTLD panel.

JORDYN BUCHANAN: That is odd.

STAN BESEN: Am I reading it correctly, Greg?

GREG RAFERT: Yeah, you're reading that older table correctly. One reason for that might be because of the existence of like a legacy TLD caps. Oh, it's for the registrars. Yeah, I take it back.

STAN BESEN: This is a problem that we discussed a long while ago which is these are percentage mark-ups, correct?

GREG RAFERT: Yeah, these are percentages as opposed to dollar differences.

STAN BESEN: So the following is true – if the same number of dollars in the numerator, if the denominator is small the percentage mark-up is higher. Legacy TLDs are capped, therefore the denominator would for that reason by itself would suggest the denominator is lower, which as an artifact would make the percentage mark-ups for price capped legacy TLDs higher. And we've talked about this before.

JORDYN BUCHANAN: Still, within a given legacy TLD –

JONATHAN ZUCK: Is that the dollar [Inaudible] percentage of the base price is going to be higher.

STAN BESEN: Jonathan's exactly right. I actually propose as an alternative for additional calculations doing it in dollars rather than percentages.

JORDYN BUCHANAN: If we're looking within a given TLD, so let's say it's .com, what [inaudible] dollars or something like that. Something with an easy round number.

STAN BESEN: The observations are across gTLDs. On the left-hand side is the mark-up and the right-hand side is concentration.

JORDYN BUCHANAN: That's comparing between gs and legacy.

STAN BESEN: Let's take the new gTLDs, you have concentration among registrars on the right, you have the mark-up on the left, and we're asking what the correlation is. It wouldn't affect those because they're not price capped. But for the legacy guys, the price caps tend to make the mark-ups –

JONATHAN ZUCK: I think Jordyn's point, though, is within the legacy TLDs the difference between concentrated and less concentrated registrars is measurable

even though that both [inaudible] the new gTLDs, there should still a correlation between concentration and percentages [inaudible].

STAN BESEN: Because the denominator is more similar across the TLDs. There's an issue about how to measure the mark-up and we should be thinking about that.

JORDYN BUCHANAN: Yeah, I'm not convinced that it explains why you get negative correlations in the [inaudible].

STAN BESEN: Welcome to economic analysis.

JORDYN BUCHANAN: Yeah, alright. We'll have to go and spend some time looking for data to [inaudible].

STAN BESEN: Can we talk about registrars?

JORDYN BUCHANAN: No. But you want to not talk about registrars.

STAN BESEN: I don't know whether it has any effect to this community to work, but I've just been struck all along by the wide variation in prices across registrars for the same registry. These are mind boggling disparities. Especially if I go to a page which has on the top – "This is the place to go to find the best deals." You would think that that would have the effect of making the guys with the high prices lower their prices. I just have a couple here with me. This is .live ranges $8.99 to $27.80. And this is .deer, this is $19.99 to $34.90-something. These are enormous ranges. And I don't know what to do with them, but I find it very interesting.

MARGIE MILAM: It's a question of, [domains] are not just a good it's a service and so what you may see in some of that price differential is someone's getting a higher level of customer service and reliability and all that kind of stuff, but the corporate ones tend to give special treatment and procedures to protect the name and so that's why you may see a variation –

STAN BESEN: You're exactly right, it just still seems to me to be very large. When I look at a market in which consumers are well informed about the alternatives – economists talk about something called "the law of one price" which is a market in which consumers are well informed and can freely choose among alternative consumers. Competition would drive all firms to offer – assuming they're offering the same product – offer the same price because why would anybody buy the product at a higher price if they can get a lower price from somebody else?

You're right that there may be quality or service differences here. I'm still struck by how wide the disparity is.

JORDYN BUCHANAN: Right. I was going to make a comment to that effect. But I'm going to let Kaili go first and I have a comment.

KAILI KAN: Exactly as Stan mentioned that assume that if there is a big price difference then maybe [non] price competition dominates rather than price competition.

STAN BESEN: [inaudible].

KAILI KAN: Exactly. Also we talked about the [bundles] of sales that could be they have sold in different [bundles].

STAN BESEN: Another way to describe my conundrum is when we look at the average price, the average price may be hiding a lot of information. [Is it a] average of entities offering very different things [inaudible] your explanation.

MARGIE MILAM: I can give you a [look at] explanation from the brand perspective. You're just buying a domain name so it's still a domain name but you may have a dedicated Customer Service Representative, you may be able to get that person 24 hours a day, you might get their cell phone number, so if anyone tries to transfer the name away you get a personal phone call immediately and it's part of a bigger package that they're providing but the per domain name price is maybe higher than what you would be from a –

STAN BESEN: I guess you guys who have been doing this longer than I have. Do these numbers surprise you?

MARGIE MILAM: Not me, no.

JORDYN BUCHANAN: I've Jonathan on the queue after me. I think there is, only at the very, very, low end of the mark-up range is the product that you're buying actually a domain name. In every other case you're getting a bundle of stuff, and for the corporate registrars the bundle of stuff is mostly customer service is what you're getting in your bundle, and in the middle and the sort of general retail middle some of the things may be useful some of them maybe not. Google domains gives you free privacy service, some people give you free e-mail addresses, some people give you free hosting, but there's some combination of things that are coming along with your domain and that combination of things varies

wildly but ends up being part of what is called the price of the domain name.

I also think I would be surprised I guess, Stan, if a very large fraction of the purchases went through the pricing aggregators like domain prices. And so it could be to an extent that consumers have less good information than you would expect.

STAN BESEN: The theorem "the law of one price" assumes that the products are homogeneous and consumers are well informed.

JORDYN BUCHANAN: I suspect both of those things are not true.

JONATHAN ZUCK: I think the notion of consumers being well informed is probably a bigger issue even than product differentiation. I think perceived product differentiation might be a bigger issue. Because if you look at Network Solutions, they project a different image than a GoDaddy with girls in bikinis in Super Bowl ads and things like that, and I think you get a different customer base as a result and charge different prices when in fact the actual level of customer service and everything is not that different.

I think you do get, sort of like between brands and generics in a grocery store or something like that, that the same product is selling for different prices because of perceived differences that aren't real. That

affects me. I'm often looking at my own behavior and trying to figure out how irrational it is, and I pay more than I ought to for domain names and part of it also is Kaili's original observation about salt way back when is that the overall price is low enough that it's not making an appreciable difference in the cost of managing a website that it doesn't make spending $30 instead of $5 actually isn't an appreciable difference for most people buying domain names.

STAN BESEN: My question is, is this a project? Want to say anything about this in the report or not?

JORDYN BUCHANAN: We could write something, we could say we've observed from the Analysis Group Data this happens and here are some possible explanations.

Greg, do you remember does the registrar price dispersion difference between the new gTLDs and the legacy gTLDs?

GREG RAFERT: I don't recall but we could certainly check.

JORDYN BUCHANAN: So if we found that this registrar price dispersion was the same, this has nothing to do with the new gTLDs. If on the other hand we find that there's a big difference, then I think we probably would want to write

about it. Because it could just be a quirk of the market. Greg will tell us whether we need to write something about it or not.

Registrar price dispersion in the new gTLDs significantly different from in the legacy gTLDs? If it is, then I think we have to explain or at least acknowledge it. If it's just wacky in both places, then you could say that's just how [inaudible].

MEGAN RICHARDS: Is that logical to have a link to the HHIs?

STAN BESEN: That's more about the level of rates across gTLDs. Our markets in which [our gLDs] for which there's less competition among registrars they on average have higher prices. This is a different question. This is, given those levels, what explains the dispersion across prices for the same gTLD. They did ask this question in the original report, didn't you? You reported some price dispersion stuff, didn't you?

JORDYN BUCHANAN: That's why I asked him the question. They already have this information. I was just trying to figure out –

STAN BESEN: Your question is, the hypothesis would be, prices are more dispersed when there's more or less competition? I might have a theory about that.

JORDYN BUCHANAN: Alright, so if we find that there's a difference in levels of price dispersion between legacy and new then we'll spend a little more time thinking about how we want to address it. If there's not a difference it's just like part of how registrars behave and it has nothing to do with our remit.

STAN BESEN: It does affect how you interpret the average price which we do use.

JORDYN BUCHANAN: Sure, so it's something to keep in mind.

JOHNATHAN ZUCK: This is sort of an ill-formed thought but one of the things that we're going to see is less homogeneity in a price within a particular registrar across TLDs, and I don't know the significance of that but in other words, you had vast differences between registrars of what were essentially the same product, but now you're going to have very different prices across products within the same registrar on top of what was already a fairly dispersed across registrars. I don't know what the significance of that will be because their wholesale cost varies so much now.

JORDYN BUCHANAN: Stan, I actually have a question to follow up, so you said this changes how we think about the average price. The analogy that's going through

my head during the few minutes when we were talking about bundles was hotel rooms. You could get a room at the four Seasons or you could get a room at Motel 6. Those are both a hotel room, but obviously they're priced wildly differently and you get quite a different bundle of stuff with them. But yet I would also expect that, like I often see, the average price of a hotel room in New York is $250 or something like that and it's essentially going to include both of those numbers in there. So do we need to pay that much attention to it?

STAN BESEN: If a room is $100 and a room is $1,000 and you say, "I want to buy a hotel room for $500," you're not going to get one. So when we do analysis, we use the average price for a given gTLD for that price is the average of a wide range of prices. That's different from a situation in which everybody's charging the same price. It just simply adds some noise and complexity to the analysis. You can certainly calculate the average. That's not a problem. The question is, is it meaningful?

JORDYN BUCHANAN: So in your $100 versus $1,000 example I can totally see why the $500 is a tricky number, but I think more what we will see with these registrar prices is that there's a range and the price in the middle is probably pretty close to one of the [places] prices you could buy at –

STAN BESEN: I remember this [early] example from a book of "How to Lie with Statistics" about the guy who drowned in the lake where the average

depth was only two feet. Averages can hide information and you've got to be careful. That's all I'm saying.

JORDYN BUCHANAN: We'll just have to be conscious of it and see if we're lying with statistics.

So once we complete all of our registrar work that we've currently assigned, we will know what the overall level of registrar concentration looks like, what the per TLD level of the registrar concentration looks like, how the per TLD levels of registrar concentration affect price on a correlative basis, and that's all we will know.

STAN BESEN: [inaudible].

JORDYN BUCHANAN: Sure, then we'll also know the range of the registrars participating in each –

STAN BESEN: [inaudible].

JORDYN BUCHANAN: Okay, great. So we'll know how many registrars are offering each TLD in some generalizable way, and we'll know something about price dispersion. Is there anything else we need to know about registrar pricing or competition – competition amongst registrars? No?

On registrar competition we have a much more satisfying set of metrics than [inaudible]. Even though I feel like this is a sort of secondary topic to our overall purpose.

STAN BESEN: I don't think it's unimportant because the impression the impression I get from looking at this I would say is – there are a few TLDs for this [instance that] may not work – but this looks like a part of the market that looks very competitive. I would tend not to worry about the registrar side of the equation.

JORDYN BUCHANAN: I agree. I think what we're going to conclude is that the new gTLDs – once again, I am now interpreting data, you don't have to agree with me – but my opinion at the point is we will conclude something along the lines of the introduction of new gTLDs had very little effect on competition between registrars because that was already a robust and healthy, competitive marketplace. And so that's good.

In any case, we'll mostly conclude that the introduction of the new gTLDs was a [no-op] for this and that's fine because registrars already were competitive. And that's good. And we'll have some charts to back up our statement.

JONATHAN ZUCK: You could [have had a hypothesis] that it could have had a negative effect.

JORDUN BUCHANAN: It could have had either. It could have been like, there was some registrars that were so dominant before and then the new TLDs came along and they gave –

JONATHAN ZUCK: [inaudible].

JORDYN BUCHANAN: It could have gone either way, but it seems to have [not that much].

STAN BESEN: I would basically say, if I'm an entrant as a new TLD, it does not look like it would be difficult to find registrars to represent me. You might think a barrier in entry could be that I've got to do all these things and it turns out the registrar market looks sufficiently competitive that I should be able to buy those services and have somebody else do it for me. Which brings me to the next question which is the backend guys, and we'll [inaudible] that later.

JORDYN BUCHANAN: That actually raises for me, I guess I now suddenly have a question that I didn't until you made that statement which is whether the number of registrars operating your TLD has any relationship to the success of your TLD.

So, Greg, maybe one more thing to add to the chart is number of registrations and maybe see if there's a correlation between number of registrars and number of registrations.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: I totally agree. You wouldn't know which direction the cause and effect was.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: We probably would want to kick out TLDs with less than X because they probably are abnormal. Either they haven't launched their .brand or something is going on with that.

ELEEZA AGOPIAN: Maybe you should decide now what X is.

JORDYN BUCHANAN: I would say X is 100 because registries are allowed to do their own registrations within the TLD up to 100 registrations. So you're not even relying on registrars [inaudible] at that point.

ELEEZA AGOPIAN: Anyone with over 100 registrars [inaudible].

JORDYN BUCHANAN: Anyone with over 100. Just kick out everyone under 100 for the purposes of this analysis – 100 registrations, yeah.

Those are all the IDNs. The ASCII wave reprenting non-[flattened] characters.

UNIDENTIFIED MALE: [inaudible].

JORDYN BUCHANAN: Yeah. They'll get kicked out naturally by virtue of our filter. And probably for whatever [inaudible] reports we do, we should figure out how to turn them back to actual characters.

We're five minutes away from lunch and I think done with this topic unless anyone else has any other registrar-ish things they want to talk about.

UNIDENTIFIED FEMALE: [inaudible].

JORDYN BUCHANAN: So we have two more high-level questions. I expect that conversation not to take very long. And then I want to talk about how we're going to start to put together a report. How does that sound?

UNIDENTIFIED FEMALE: [inaudible].

JORDYN BUCHANAN: Sure. Yeah. I guess we can make that last thing moving on from here. And I can include – put in the other report.

JONATHAN ZUCK: [inaudible].

UNIDENTIFIED FEMALE: Community. [inaudible].

JONATHAN ZUCK: [inaudible].

JORDYN BUCHANAN: I think that there are a number of areas where we'll actually be pretty solid on our findings in Hyderabad and I think it would make sense to present those to make sure that we're sanity checking them. And B, to start saying… in [inaudible] form. Like this registrar thing, we'll be ready to say, "Hey, look. We've introduced new gTLDs. It had no effect on competition among registrars and therefore we're probably going to

recommend no changes related to registrars in the new gTLDs. So let us know if you think we're doing something wrong."

And similarly, I think even on the high-level competition question we'll be in pretty good shape.

JONATHAN ZUCK: We'll be able to make observations. I think the question is the point at which the report becomes normative. It's in answering the high-level questions it's where you're going to start to see more controversy than on the observation type of [inaudible]. It's like Stan saying it's not a large change in market shares. That's the kind of vocabulary that's going to be important to the community is what the "binary" answer is here about whether or not it's [inaudible] competition.

JORDYN BUCHANAN: Right. I would want us to be able to present interpretation of the findings in addition to… The findings will include interpretation of data. It's not [just, "Here's some data." In reality to a large degree if we just wanted presentation of data, we could have just left it at the Analysis Group and the Nielsen Surveys.

JONATHAN ZUCK: [Inaudible] people have the desired outcome.

JORDYN BUCHANAN: I agree. My point is on in some areas I think we ought to be to the point where we can present that in Hyderabad.

[END OF TRANSCRIPTION]