JORDYN BUCHANAN: All right, the recording's on. We will go ahead and kick things off. This is Jordyn Buchanan. And we are beginning the – what is today? April 13th, 2016 edition of the CCT Review Sub Team on Competition and Consumer Choice.

Today, we have two identified agenda items. We'll spend the first part of the call with an introduction, an educational session. We'll call it Competition and Consumer Choice University, with Stan and Greg from Analysis Group giving us some background on what it means to define a market. Because we'll be spending the next several instances of our calls, and the work time in between trying to come up with some plausible definitions of markets.

Secondly, just want to do a quick review of the data source analysis that we've put together so far. Make sure we've identified all the data sources that we think we need, because otherwise, we're going to turn to starting to gather and look at that data as opposed to talk about what data we might need.

Are there any other additions or modifications that anyone would like to make to the agenda before we begin? Hearing none, we will go ahead and kick things off. Stan, can I turn things over to you to help educate the rest of us on this topic of the basics of market definition?

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STANLEY BENSEN: That's fine. Pamela, I can't control the slides on my screen, so if you would do that, that would be great. We've divided the presentation into two parts. I'm going to basically talk about content, and Greg will talk about data, particularly focusing on some of the results that appear in Analysis Group's Phase 1 report. (inaudible) talk about things we might be able to do in the future.

Why do economists or anti-trust lawyers do market definition? Well, it comes up in basically two contexts. One is analyzing a proposed merger, market definition is always used to try to determine whether the proposed merger would increase concentration to the point that the merger would likely lead to higher prices.

It's also used in other non-merger contexts, in which a particular type of firm behavior might be questioned. One of the issues would be if the market in which the particular behavior is taking place is very concentrated, you might be concerned about it, but you might be less concerned about a firm behavior if, in fact, that market is un-concentrated.

As a very general part, the more concentrated is the market, the more likely that the merger or firm behavior would lead to higher prices. The focus of these market definition is to ask the question, "Is the merger or that behavior likely to lead to higher prices?" And I put defined in parenthesis there to point out that the answer depends on how the market is defined, and that's not an easy thing to do.

Let me say two more things. Let me say one more thing here. We care about things other than concentration, or at least put slightly differently, we might prefer a market that is somewhat more concentrated if, in fact, larger firms have lower costs than smaller ones. For example, in a merger that increases concentration, it's likely the merging parties, in fact, it's almost certain the merging parties will argue that whatever increase in prices you might otherwise think would occur would be more than offset by economies (inaudible) efficiencies. Concentration isn't the only thing you care about. You also care about the effect of firm size on costs, and that's a factor to take into account.

This is language from the U.S. Department of Justice and Federal Trade Commission merger guidelines. The first quote there is really very important from our point of view. Market definition focuses solely on demand/substitution factors. On customer's ability and willingness to (inaudible) from one product to another in response to a price increase, or a non-price change.

Markets are defined in terms of demand/substitution. In our context, the demanders who might conceivably substitute, the customers, are in fact, registrants. The way we should be thinking about market definition is if the price of one registering and one domain increases, would registrants be more likely to choose another registry in which to register. The focus on market definition is on demand factors.

Again, this is sort of part of, if you like market definition one. The way the U.S. Antitrust authorities, and I believe Antitrust authorities around the rest of the world think about this. They have something called a hypothetical monopoly test. Basically, the way to think about this is consider a possible market, a candidate market, if you like. Imagine that all of the firms, all the suppliers in that candidate market are controlled by a single provider, the hypothetical monopolist. The question is could that hypothetical monopolist raise prices by, and this is again a term of art, by a small but significant and non-(inaudible) increase in prices. This is known as the snip test.

The point is that you do the hypothetical monopolist test by considering the candidate market. Ask where the hypothetical monopolist could raise prices by a small but significant and non-depredatory amount. If the answer is, that hypothetical monopolist could not do so, the market should be broadened to include a larger number of suppliers. The idea is that you keep broadening the market until the hypothetical monopolist can, in fact, past the snip test.

The idea is to prevent the market from being defined too narrowly. You might say that it looks like a monopoly, or at least it looks like a small number of firms could raise prices. But if, in fact, there are substitutes that are not in the market that could, in fact, constrain the hypothetical monopolist. The market has been defined too narrowly. The next to last quote says, “The hypothetical monopolist ensures that markets are not defined

too narrowly, but it does not lead to a single relevant market," and that's important for us.

Markets are going to be defined by both products and geography. We'll (inaudible) in a moment. I've already said that once has to take into account efficiencies. Another thing that's generally taken into account after the market's been defined is the potential for the entry of new firms. It turns out the antitrust authorities don't stop by saying, "The market's defined in the following fashion." They might say, "Even if it looks like that market is very concentrated, it's entry from firms outside the market, that was not currently supplying, could easily enter that, in fact, you have to take that into account in deciding such things as, for example, whether a merger should be permitted."

What kind of evidence can be used to define markets? This is going to be particularly important in the context of our analysis. And you'll see many of these sources of information are, in fact, going to be either difficult or impossible to obtain in our case. Here are just some examples of the kinds of information that one might use.

Sometimes you have information over a long period of time, in which the prices of various products change in relationship to one another. So you might do a statistical analysis, and ask the question, which I pose here, "In periods in which the price of A rose, did firms switch to product B in significant numbers? If that was the case, firm B should be considered a substitute for the product sold by firm A." If you had a long series of

information about the way some particular set of products interacted, you might be able to, from that analysis, tease out the effect of increase of the price of one product, ask the question, “To whom and to what degree do consumers of that product switch to the producers of other products?”

Another kind of information is cross section. I’ll give some examples of that in a moment. Are the sales of A lower, or is price lower where it competes with B as compared to places where it doesn’t compete with B?” You might have a series of different geographic markets in which the number of competitors are different, and you might use that to determine the influence of various kinds of competitors and the substitutability between them.

This has all been done, for example, in airline mergers. Where two airlines might have lots of competitors identified in one set of city pairs, but a different number or different identity of competitors than others, and you’d ask the question, “How is consumer behavior different in those two kinds of markets, where the alternatives available to consumers are different?”

A third kind of evidence that’s often used is documentary evidence. If two parties are merging, their documents will be subpoenaed. The government will look at those documents, and will ask the question, “Do those two firms frequently refer to each other as close competitors?” Sometimes you have buyer information. In fact, I presume this is one of the possible uses of the Nielsen survey is the extent to which customers regard

different registries as substitutes for one another. So buyers are a source of information.

Finally, I think this is something that we will use, and in fact, Analysis Group did use, is you can look at the objective information about product characteristics. I look at two products. Does it appear to me that they are sufficiently similar that consumers would be likely to regard them as substitutes. This is sort of a sample of the kinds of information that one might use to define markets.

I picked this merger. This is actually a pending merger in the U.S. Two big office superstores, Staples and Office Depot are proposing a merger. It's actually the second time they proposed a merger. What I just simply did, to make the previous discussion a bit more concrete, I just took some stuff from the Federal Trade Commission's economic expert (inaudible) he testified last week about the kinds of things – of course she testified against the merger. He said it would be anti-competitive, it would lead to higher prices. What evidence did he look at? He said, "Their documents indicate they are each other's most frequent competitors. Customers say they are each other's closest competitors."

The next one is the sort of objective characteristics of the products. They say they offer specific services to large businesses, including formalized bidding processes, ordering system intersection, customer product offerings, and

negotiated prices that smaller competitors cannot offer. So they're unique. The government claims that they're unique.

The market is for the supply of office service, supplies sold to large businesses, that's the market the government defined, and excludes sales to small businesses, that they've taken out. It turns out the government excludes the sales of managed print services because it turns out that, in fact, Staples and Office Depot apparently do face significant competition from alternative suppliers that manage print services.

The other thing I have at the bottom of the slide is these guys proposed the merger earlier, and there, the Federal Trade Commission actually looked at econometric evidence. And they said Staples prices were highest in regions where it faced no competition from Office Depot and Office Max. And they were lower in geographic markets where they competed directly with one another. So it's an argument for explaining why they in fact, were competitors whose presence constrained each others prices.

Let me say one more thing here, just to give some idea of another very specific example. There's a pending hospital merger in the Chicago area. The argument there is between the government and the merging parties, concerns the geographic market. The government contends that the two hospitals or hospital groups compete in portions of only two counties, not surprisingly, the hospitals argue they compete throughout six counties in the Chicago area. This makes a big difference.

According to the government, the market share of the combined parties would be 55% in the two counties. According to the merging parties, in the six counties, it would be only 22%. Frequently, merger valuations hinge on the definition of the market, because how concentrated a market is will generally depend on how the market has been defined.

The next step here is how to measure competition, or at least this one says, "How not to measure competition." Counting competitors is not a good way to measure concentration. I considered two hypothetical markets. Market one, have already been defined. There are 100 firms each with a market share of 1%. Market two has 100 firms. One firm has a market share of 99%. The remaining 99% each have a 1/99th% market share. Which is more concentrated? Well, I think it's pretty obvious that market one is a lot less concentrated than market two.

Why do I raise this? Because if you go back and look at many of the metrics that we have inherited, they involved simply counting competitors. This example is designed to show that without regard to the relative importance of the number of firms, just simply counting firms can give you a very misleading picture of how concentrated a market is.

How should you do it? Well, there are two methods. One's a little old fashioned, but I want to talk about it anyhow. Years ago, maybe 25 or 30 years ago, the way market concentration will be measured was by something called the n-firm concentration ratio. Most frequently, the four-firm

concentration ratio, or the eight-firm concentration ratio. Those were fairly standard.

Here, I'm going to consider a market with ten firms. I'm assuming the market's already been defined, and the market shares are the ones I've shown there, 25/20/15/10/5/5/5/5. The four-firm concentration ratio here is 70, that's 25/20/15/10. That's actually a fairly concentrated market by that measure. The eight-firm concentration area, of course, is higher, it's 90%.

What's wrong with this measure? Consider a change in market shares that shuffled the shares among the top four firms, but they were still the top four firms. The example I gave here is firm one has 40% instead of 25%. Firms two, three, and four, have only 10. The four-firm concentration ratio is still 70, despite the fact that it is apparent, I would argue, that the market with firm one has a 40% share is more concentrated than the market where the firm one has only a 25% share.

The weakness of this measure, which is still used occasionally, is that shifting shares among the firms in the top four, or even among the bottom six, as long as they keep the total of those categories the same, it doesn't change the measure. That's a weakness of measuring concentration by the end-firm concentration ratio.

We're finally getting to something that Jordyn's interested in, the HHI. This is, by now, the standard measure by which economists and antitrust agencies measure concentration. H&H

are two people, Herfindahl and Hirschman. They independently developed the index, and it's widely used.

How do you calculate the HHI? Well, it's actually very straightforward. Consider the market with 10 firms. It's the same market that I analyzed in the previous chart. The market shares are 25/20/15/10, and a bunch of 5's. What the HHI does is take each share, square it, and sum them up. So 25 squared is 625, 20 squared is 400, 15 squared is 225, etc. The HHI is 1,500.

Suppose I now change the example to the second of the examples in the previous chart. So it's now 40/10/10/10. We saw in the previous chart that that doesn't change the four-firm concentration areas. It's still 70, but now look what happens to the HHI. It's 1,600, plus 100, plus 100, It's now 2,050, substantially higher. So the HHI has the advantage that it takes in – unlike the ten-firm concentration ratio, it takes into account every firm's share, and it gives disproportionate weights to the firms with the largest shares because they're being squared. That's the point here.

Just to give you some flavor for what a high number or a low number is, I'm now looking at the U.S. Horizontal Merger Guidelines, they say an un-concentrated market is HHI below 1,500. They say moderately-concentrated markets have an HHI between 1,500 and 2,500, and highly-concentrated markets have HHIs about 2,500. This is a rule of thumb. The government often allows mergers that result in HHIs that exceed 2,500, sometimes because they think there's ease of entry. Sometimes

because they think they're efficiencies. Sometimes because they think they market hasn't been quite properly defined. But those give you some idea of what the government thinks of as concentrated markets and various measures used, at least by the U.S. Antitrust Authorities.

The last of my slides, and I've gotten through relatively quickly, defining a market is not a straightforward undertaking. It'd probably be necessary for the review team to assess concentration and therefore competitors for a number of different market definitions. It's not easy to do. Second, it's a given that the GLT initiative will substantially increase the number of competing registries under almost any market definition.

But remember what I said earlier? Just counting competitors is not enough, whether and how it will reduce the HHI will depend basically on two things, one it will depend on the extent to which the new GLTs, as a group, capture market shares from the Legacy TLD, that's one factor. That if they capture a large share, that will make the market less concentrated. But it also will depend on which Legacy GLTs lose market share to the New GTLDs. The specific example would be if the New gTLDs capture their shares primarily from .com, that's going to make a bigger difference to the HHI than if they capture their market shares primarily from .biz.

Let me stop here. I'll take questions, or we can just go right to Greg and leave questions for later. Jordyn, your preference.

JORDYN BUCHANAN: I think why don't we give folks a chance to ask questions if they have any. I have one, but let me see if anyone else has questions first. I see Jonathan's in the queue, so why don't we start with him and anyone else that wants to raise their hands in Adobe Connect can get in the queue. Go ahead, Jonathan.

JONATHAN ZUCK: Thanks Jordyn, and thanks Stan, that's very helpful. One of the things that's interesting about this in practice, that perhaps or at least hopefully we can minimize as a political component of all of this, because I think that often leads to strange interpretation of market share. It's either too restrictive, or kind of spoiley, like super-premium ice cream, and things like that, where you're trying to make value propositions.

Some things that I thought of that from my experience in the political world of antitrust that might be relevant to us, I just wanted to raise and get your reaction to. You said you talked a little bit about how mergers can be good if they lead to lower prices by having a larger firm, for example. I remember the EcoStar/DirecTV merger being a very interesting case of this. It was basically two businesses that were kind of in trouble looking to merge to gain economies to scale. That merger was blocked because it would limit the number of providers of satellite TV.

And what I feel like antitrust officials missed was that it was really about the Internet. And what made that obvious to me is that the biggest funder of the campaign against the merger was a phone company, SBC. In theory, why should SBC worry about whether there's enough competition in the satellite TV market? I think it's because it was the wrong market. ALAC has been raising this issue about competition from outside of the domain names for Internet identity or whatever else, I think that becomes relevant here. That's one thing I was thinking about.

I guess the other thing is how do we handle in our own case, the existing domains, versus new ones? And does new domains become its own market somehow? Because it could very well be that the competitors that are in the market are orienting themselves almost entirely not in trying to bring about switches, but about being the best place to go for your new TLD more so than trying to get somebody to change their old one.

STANLEY BESEN: I have written down six questions that you had asked.

JONATHAN ZUCK: Sorry.

STANLEY BESEN: Let me answer them quickly. One is that there's always the issue – and this word comes up. This word may not make as much sense to the non-Americans on this call. But frequently

the government is accused of gerrymandering the market. That is, choosing a market definition designed to permit them to oppose a merger. I think we have to be careful about that. That's your super-premium ice cream example.

I think part of the way we get around this – first we shouldn't be gerrymandering, and second, I think that's why we don't want to hang our hat on a single market definition. Second, I tried to hint at this, but market definition and concentration – the HHIs are the beginning of the analysis, not the end. That's why I raised the points about efficiency and entry. That's really important, and we shouldn't stop at concentration, but it's the right place to start.

Third, you sort of hinted at non-price competition, and I think that's important. That's going to affect the basis upon which people switch. I think you've also alluded to switching costs, because there's the question of whether people switch from the legacy domains to the new ones, that's an interesting question.

I guess, finally, you talked about the fact that there may be competition, essentially, outside the domain name system. That's certainly true, but that's going to make our life really difficult.

I hope people come away with this understanding that this is not cookie cutter. This is not easy. It's something we have to do. It's not easy to do, and at the end of the day, I predict that we will end up with a number of different markets that we'll

consider. I've even left out things like country code domains, and all that stuff. Yeah, you've raised a lot of good points.

JORDYN BUCHANAN: Thanks Stan. Jonathan, did you have any other questions?

STANLEY BESEN: He already had six.

JORDYN BUCHANAN: Yeah, maybe if you do have an additional question, Jonathan, I'll put you at the back end of the queue. Meanwhile, Carlos, do you have some questions for Stan?

CARLOS RAUL GUTIZRREZ: Thank you very much. This is (inaudible) academy type of introduction. It was excellent. I don't have specific questions, just two comments. One was already raised by (inaudible) which is the switching. I mean, I assume that any people will not only switch, they will keep their old domain names, and they will get fancier domains, and they will redirect to the same webpage. This is a question, can we track down, statistically, how many domain names go to a new webpage, and how many domain names that are used only as an address for an old webpage? This is one thing that I think, technically, possible to follow up. I don't know if it helps. That's my question.

The second point I wanted to make is how would we deal with geography? You mentioned earlier in the presentation the importance of the geographic definition. Are we going to think that IDNs are kind of a geography definition? Or are we going to abolish the geography because we believe that there is only one Internet? But, as I said, those are not specific questions, just comments. How are we going to deal with geography and with switching? Thank you very much.

STANLEY BESEN: Just two quick reactions. You've raised something that I didn't talk about, which is I was very fast and loose about how the shares were calculated, that is the 25's and 20, etc. These are often done in two different ways. One is you measure output in physical units. The counterpart, I guess in our case, would be registrations. This is often a merger of two coal mining companies might measure their annual output in tons. It's often measured in dollars.

I suspect, in our case, given the data we have, that we're going to end up with output-based measures. There's another question which has been bothering me all along. I raised it before, which is how to deal with parked domains. It worries me a lot, but I don't know really how to deal with it. On the issue of geographic markets, I think that's very important. Maybe we'll let Greg talk about that later.

Given the kind of data the analysis group is collecting, there will be a variety of ways to cut the data to define markets in various ways. Language groups, geographic, etc. And I'd like to hear when Greg talks about what his plans are to deal with the geographic market issue that you raised. I'm inclined to think from the point of view of the domain name system, there's not just one big Internet. There will be individual geographic markets.

But, in any event, just consistent with the idea that we shouldn't hang our head on a single market, that I would hope that, in fact, we'd do calculations for a number of different geographic markets, and language groups, and character sets, and the rest. I think that's very important. Anyone else?

JORDYN BUCHANAN: Thanks Stan, yeah. Next in the queue we have Kaili, and then we have Waudo, and I'll add myself at the end. Go ahead, Kaili.

KAILI KAN: First of all, Stanley, thank you very much for your education. I just have a few comments, not necessarily questions. The first is that your (inaudible) for the Department of Justice, their definition about the market definition. However, I'd like to point out that the Department of Justice, they most often deal with mergers like here, their definition is more on mergers. However, all case is exactly the opposite. We are introducing New gTLDs, the orders will increase. The increase or create, increase

competition. So that is just other way around unless (inaudible) introducing competition by introducing New gTLDs. Now we (inaudible) question of (inaudible).

As a matter of fact, the '96 American Telecom Act made a big mistake, because they overlooked the wire telephone network. It is an actual monopoly. So, competition into a natural monopoly market does not work. This is about the market definition.

Natural monopoly depends on two issues, two factors. One is the scale or size of the market. And that market size is defined by accessibility. Geographically, once a gTLD is registered, is available (inaudible). However, it has (inaudible) gTLDs they (inaudible) competition are substitutable. Well, that is a real question.

One example is about our cell phone number. Well, (inaudible) a number of portability. I am stuck with my phone number that I have used for many years because all my friends, well, they know my number. It's almost next to impossible to change my phone number and tell everybody. So even though there are other cell phone companies offering a much better service, at a much lower price, I cannot change my number. Whether that is the case for our gTLD, that is, for me, that seems to be the number one issue.

Another thing that I'd like to point out because you just mentioned, and that is (inaudible) data. Well, I do not know to

what extent does the (inaudible) AG understand our domain name system, and our problem or our questions, how much do they understand what we are looking for? Therefore, let's say if I just wonder whether they can provide us a (inaudible) for us or with us directing their analysis. Well, if they just hide the company's name, registrar's name, would that suffice or not? Thank you.

STANLEY BESEN: I'll actually leave to the staff the issue of answering this last question. Let me just give you an analogy which may be helpful here. It is true that the DOJ and the Federal Trade Commission in the U.S. are the ones that produce the merger guidelines, and explain the use of market definition and HHIs. But, in fact, this technique is used by a variety of agencies as well. I do a lot of work before the U.S. Federal Communications Commission.

Going back to Kaili's point, this is actually quite analogous to the following. Up until the mid 1990s in the U.S., there were two cell phone carriers. One was (inaudible) company and one was another company. In the middle 1990s, I believe it was three additional cellular licenses were issued. This is a (inaudible) that involves additional competition, and in fact it's widely used. It's very clear that that substantially reduced concentration in the market in which people bought mobile telephone service. Moreover, there's a significant amount of analysis there that showed that the entry of those three firms led to lower prices.

So it's exactly analogous to what we're looking for here. It's a perturbation that allows entry where one can then, in turn, measure or attempt to measure the effect of the entry of new firms on concentration, and second in that particular case, to analyze the effect of entry on prices. I think that's a nice analogy to what we're trying to do.

KAILI KAN: Hello? May I say something also?

JORDYN BUCHANAN: Go ahead, Kaili.

KAILI KAN: Yeah, okay. I agree with you about the case of cell phones. However, first, the cell phones, even if offered by different companies, they are considered highly substitutable. However, in our case of gTLDs, well, I would hardly say that .com and .gov, they are substitutable. Because they are not purely names, but also they do carry meanings, in that case.

And plus, the cell phones. In many, many countries, including North American, and Europe, and so forth. They introduced number portability. So I can bring my original number to the new operator, and my phone number will not change. However, so where I do not see that in our case for gTLDs. So that not only there's a lack of substitutability, but also we do not have domain name portability either. So this situation, sort of

enhances the likelihood of a natural monopoly or gTLD market. Thank you.

STANLEY BESEN: It's not going to be easy, number one. Second, I hope that the Nielsen survey of registrants will help us deal with your question, among others, including such things as for example, switching costs, and the like. I think that's important. This is not an easy set of questions to answer. There must be other questions, right?

JORDYN BUCHANAN: Yeah, so Stan, I think Margie wanted maybe to answer the other part of Kaili's question. I'm just going to note for everyone we only have 15 minutes left, so I'm going to try to keep the rest of this conversation relatively brief. But Margie, do you want to try to address Kaili's question?

MARGIE MILAM: Yes, thank you. That's exactly what I was trying to do. It would be difficult, if not impossible, to share price information with the group. Part of the conditions of getting the information from the registrars and the registries was an agreement that ICANN would not see the numbers and would not hear the numbers. And only the analysis group would have that data. So I'm sorry, but I think it's given how we collected the data, it wouldn't be possible to give you that kind of specific access.

STANLEY BESEN: Yeah, but it's still the case though that the Analysis Group has reported averages. They could report the results of statistical analysis without actually revealing any individual observation.

MARGIE MILAM: Yes, that's correct.

JORDYN BUCHANAN: Okay, Waudo, I have you up next. Why don't you go ahead?

WAUDO SIGANGA: Stan, thank you very much for that very informative presentation. My question is about the switching costs. How do you (inaudible) seeking costs (inaudible) the definition of markets? I ask that because ICANN (inaudible) but there could be many substitutes, but the switching costs are very high. Maybe you could let uw know how you would factor in the switching costs.

STANLEY BESEN: The underlying basis for market definition is consumer substitution. If consumers can't substitute, then in fact, the markets are going to be much more narrowly defined. I guess you have two answers. One of the questions I hope the Nielsen Registrant Survey will answer is the extent to which registrants,

in fact, can switch and do switch. The second is that there is going to be at least some differences between entities that already have a domain name, and entities that are going to register for the first time.

Even if there's switching costs, if you want a domain and you don't have one, you presumably, at that point, have a number of alternatives, even if after you register in one domain, in the future it's difficult to switch. Switching costs are important. I think I said this in something I circulated earlier. It's the first question I proposed that we try to have Nielsen get information about for us. It's critical.

JORDYN BUCHANAN: Thanks Stan. I'm going to ask my question really briefly. I see Kaili's back in the queue, but I'm going to ask, Kaili, maybe we take your question offline because I want to give the Analysis Group guys at least ten minutes to walk through their remainder of the presentation. My question for you is, is it possible to imagine that there's a a-symmetric market definitions? Kaili always gives the example of tap water being a natural monopoly, and that made some sense to me. You might not think that bottled water would be a reasonable substitute for tap water, because you're probably not going to shower with it, for example. On the other hand, I might think that tap water's a perfectly reasonable substitute for bottled water, and so a bottled water supplier might not be able to arbitrarily raise prices in the same way a tap water provider would. Does it

make sense to think about things that way as these a-symmetric definitions of market where one provider's a competitor to another but not vice versa?

STANLEY BESEN: If you go back to the defining a market slide, I don't have a number here, it says, "The hypothetical monopolist test ensures that markets are not defined too narrowly, but it does not lead to a single relevant market." That's exactly the point you were making.

For some purposes, products may be substitutes, but not for other purposes. You're exactly right, but the guidelines anticipate this kind of problem or issue. We have to do the same thing. That's one of the reasons, I believe, we're not going to end up with a single market.

JORDYN BUCHANAN: Thanks Stan. Greg, sorry that we've spent so much time on Stan's part of the presentation, but I'm hoping to give you, at least, the last ten minutes of the call to go over the Analysis Group information at this point.

GREG RAFERT: Sure, and no worries at all. It was, actually, I thought a really good discussion. Since we don't have a lot of time left, what I was going to suggest is why doesn't everyone scroll to the slide with the table on it? Because I think that's really the most

relevant based on what we've been discussing thus far. This really gets – I don't have a number on Stan's slide either, but on one of his slides, when he talked about what kind of evidence is used to define markets, he noted a number of factors. One of those was objective information regarding product characteristics, and thinking about what consumers might possible think are substitutes.

I think the table and analysis that's really most relevant in the report to the discussion today is this table on the slide where it says registration shares within a sample of TLD competitive groups. What we did here is we looked at all of the New gTLDs that were in our sample, and it was a manual process. We looked at the name of the TLD and thought, "Which ones do we think might, potentially, compete against each other," and then categorized them into what we call TLD families.

For example, if you look at education, there's six TLDs, and I honestly don't recall what TLDs, or where we wanted to keep them anonymous, but you could imagine there being .college, .school, .education, and maybe those words in other languages.

Then, what we did is we just looked at registration shares. So to Stan's earlier point about looking at output versus dollars spent, this is really an output-based approach. We noted the prices to the extent that we had them, and then also how many months they were available, to the extent that new domains might take a little bit longer to or New TLDs might take a little bit longer to

gain market share, where we wanted to make sure that we were at least providing that information as well.

This is something I think we're looking forward to updating. You can imagine taking this a little further, so for example, and I think Stan eluded to this earlier. One thing that we're hoping to do, and I think that we're planning on doing for the phase 2 work, is looking at geographical market definitions as well. For example, we have through some kind of correspondence with the main schools we've obtained a variety of registration data by TLD for various geographic regions.

For example, one of those is the Berlin area in Germany, and we've obtained registration data going back all the way through early 2014 for every single TLD by month to get a sense for whether or not we see any types of changes in registration shares as various TLDs have entered into the marketplace.

I think that's probably already really covered it, but if we go down to the last slide, which is phase 2 analysis, I think we discussed this to some extent before, but the plan for our phase 2 analysis is to update the findings from phase 1. Those that I think are particularly relevant to the discussion today are the table that we just looked at, adding in a geographical analysis, but also seeing whether or not there's been any change in the distribution of registration process or volumes as New gTLDs have continued to enter into the marketplace.

I think I've heard a lot of good ideas come from this team, so it wouldn't surprise me if there are some analyses that we end up deciding make sense to add to the phase 2 work. I will stop there, and then see if there are any questions, I guess, Jordyn?

JORDYN BUCHANAN: Sure, that sounds great. Any questions for Greg? Carlos has one, go ahead, Carlos.

CARLOS RAUL GUTIERREZ: Yes, thank you very much. Just in terms of the timeline of phase 2, by analysis. Where do we stand? Thank you.

GREG RAFERT: Yeah, that's a good question. We have sent out data requests to registries and reigstrars. We have begun receiving some information, really only from registries. Once again, the registrars are proving a little bit difficult to get data from. Assuming we don't obtain any of the retail price data that we're hoping to get from registrars, our plan is to begin collecting those data sooner rather than later, probably at the end of this month. Then, I would anticipate that the analysis would take place in, probably, primarily the month of May, maybe a little bit into the month of June, at which point, we'll begin drafting a report for phase 2, which we'll post for public comment.

I don't have a great sense for exactly when that phase 2 report will be posted for public comment, but I would think sometime in Q2 of this year.

JORDYN BUCHANAN: Thanks, Greg. Any other questions? Megan put a question in chat.

GREG RAFERT: I think I found her question.

JORDYN BUCHANAN: I think it's can the markets of similar gTLDs be considered similar? That is, are they real competitors or similar markets?

GREG RAFERT: I guess I'm a little unclear on the question But to the extent I'm interpreting it correctly, I mean, my interpretation of these competitive groups that we've put together is that, in our view, I would say there's certainly competition within these competitive groups, which to some extent, there's a function of the characteristics of the TLDs. Price is certainly a factor as well.

I would note, one thing that we haven't done here is it wouldn't surprise me that although, for example, the three TLDs that we've classified in the .beer family may compete against each other. There's probably also competition with, for example,

.com and .net. I'd say this isn't our view of what the market per-se is, but it's just a helpful way for thinking about whether or not we're seeing any competition, especially between looking at what we've done in phase one, and then comparing the results in phase two within these families. I hope that was, at least, somewhat on point.

JORDYN BUCHANAN: Thanks Greg. I think, to a point Stan made earlier, I think that we're hoping that the Nielsen registrant survey will give us some insight into, at least, what registrants think are the competitive TLDs to one another. We only have two minutes left, Kaili, I see you've got your hand up, so I'll ask you for a quick question, and then we'll wrap things up.

KAILI KAN: Yes. I just wonder how does it group the TLDs? For example, looking at the table, the education or (inaudible) not substitute for the (inaudible) housework. So, well, I believe in what Stanley just mentioned. Only with a survey of substitutability, and then we can (inaudible). But it seems to me here that as the group, they're just out of their own head, and (inaudible) each other. And that is the case. For example, (inaudible) versus (inaudible) housework, they are clearly not substitutable. And again, that is the case of this grouping and calculations of market share. Well, that data is just of no use at all. Thank you.

STANLEY BESEN: Actually, let me say something in defense of this table, which I kind of like. It is not unusual, often because this is the only kind of information that's available for people to look at the objective characteristics of products in order to assess whether it's likely that they are competitors.

As I said before, when I talked about the Staples/Office Depot merger, one of the bases on which the government's expert testified was by saying that, in fact, Office Depot and Staples had characteristics not shared by other competitors. (inaudible) wrong with looking at (inaudible) characteristics, and in our case, that may be the only thing we can do.

Moreover, this is not the only way we're going to define the market. If this was the only thing we were going to depend on, I'd worry more about it. But, as one piece of the puzzle, I think it's very useful.

JORDYN BUCHANAN: Kaili, we're actually over time, so keep it very short.

KAILI KAN: I just sort of insist (inaudible) justify and provide evidence that their grouping is scientific and objective, not just out of their head. Otherwise, that data can hardly be used. Thank you.

JORDYN BUCHANAN: All right, so we'll have to pick this conversation up in a future call. I know that we did not get to our second agenda item at all, but that was mostly to formalize a review of documents that we'd sent out. I'll just ask, once again, people to take a look at the two documents that we sent out previously, but also I reminded people about last night. One of which defines the general topic areas we looked at. The second of which is the spreadsheet that identifies specific data items that we'll be looking at.

If you think anything is missing from either of those, please let us know now because otherwise we're not going to be collecting that data. If it happens to exist somewhere else, that will be great. But the most important things that we're trying to figure out right now is if there's any bits of data that we think we're going to need in our analysis that's missing. Please look at those documents. We can do that offline. From this point on, I will start to proceed under the assumption this is the data set we're looking at, unless I hear otherwise.

Thanks everyone for joining this call. We will have another call, again, two weeks from today, and we'll figure out the agenda for that between now and then, but I think largely we'll start to talk about how we might approach the market definition topic (inaudible) understand what it is. Thanks everyone.

[END OF TRANSCRIPTION]