DURBAN – GAC Top Level Domain Market Briefing
Thursday, July 18, 2013 – 09:00 to 11:00
ICANN – Durban, South Africa

CHAIR DRYDEN: Okay. Let's get started, everyone. Good morning. We have until 11:00 this morning to receive a briefing from Architelos about the domain name market.

So I will hand over, without any delay, to John Matson and Alexa Raad at the end of the table who will take us through the briefing. So please, welcome. And thank you for coming.

ALEXA RAAD: Thank you very much. My name is Alexa Raad. I'm the CEO of Architelos. And, first and foremost, bonjour -- [Speaking foreign languages]

Thank you. I know you have had a late night last night. And thank you for making the time to come here this morning. We've got a very packed agenda. So, if we can go to the next slide.

The idea is to give you an overview of the domain name market, where we've been and where we're headed and what some of the potential outcomes of the new gTLD program might be.

So next slide.

First, an introduction to who we are and why we're here. We've actually done this type of market briefing for a couple of different

organizations. Architelos was founded about 2 1/2 years ago by myself and John. My background is I was CEO of dot org for about three-and-a-half years. Prior to that, I was the CMO of dot MOBI. So I helped launch dot MOBI in the last round of TLDs. So I've both launched a TLD and managed a large registry.

And the rest of our partners, each of them, what distinguishes them is having had a track record in actually building, managing a registry or a TLD. So I'll have John talk about himself.

JOHN MATSON: Good morning. My name is John Matson. I'm the COO of Architelos and very pleased to be here. As Alexa said, we've done this briefing for several organizations. And a few of the GAC members have seen this discussion before individually. And they encouraged us to offer this briefing to the entire GAC. So we're really pleased to be here.

My background is I don't come from this industry. I come from aerospace in the business side. About five years ago, though, I was a consultant with KPMG. I was a partner with KPMG at the time. And I got involved with ICANN on the new gTLD program.

From there I did several projects with ICANN and I met Alexa, and we formed this company. But we're very excited to be here today, and we look forward to sharing our market perspectives. One thing that we'll try to reinforce is that we're trying to share business and economic considerations. We are not here discussing policy and issues. We're trying to share with you market dynamics of what occurs in the DNS market and our perspectives. And we look forward to a dialogue. We

very much would like you to stop us and ask questions. We'll be asking you questions. And we look forward to an interactive discussion.

Next slide.

Next slide, please.

So we understand you all can't read these slides from where you are. And we do have a subset that we'll hand out. But one of the concepts we try to get across before we start any discussion is a framework that we like to share with people.

And that pie has three slices to it. The first one in the upper about from 12:00 to 1:00 is what you know you know. What you know you know is a very small piece of everything.

What you know you don't know is the next part. So there are many things you know you don't know. And we've got a mathematical formula up there. But there are many things in the world that -- you know, I know I don't know particle physics. But there's a much, much, much greater portion of what I don't know I don't know. And that is the things that hurt us. Those are the things that cause unintended consequences. They can cause obsolescence and disruption. So one of the things we're trying to do today is share some things that you may not know you didn't know or try to give you some insight on some things you know you don't know. So this is our framework.

Next slide.

So just to kind of put a little fun around it -- excuse me -- we like to go back in time. So this is 2000. You remember 2000? How many of you

were involved in the DNS in 2000? Pat. So there's two people in here that were involved in the DNS in 2000. How much has happened since then? So, since 2000, well, Napster actually came and went. We had 40 million domain names in 2000. 40 million. We have over 258 million today. If you look, Google did its IPO in 2004. That was only nine years ago.

I'd come from aerospace. One of the things that fascinates me is that today, if you want to, for $200,000 you can go to a travel agent and buy a ticket into space. You can reserve a ticket. And there are galactic travel agents that will take your money. I didn't know that.

But the world continues to move. And what we want to try and look at is, as we go forward, what might happen. One of the things that we didn't know was how many new gTLD applications would we get. I was involved in much of that start of the evaluation process. And we thought 300? 400? Maybe 500 applications we'd get.

Almost 2,000? That was quite a surprise.

Next slide.

So what's the next several years going to look like?

Well, we don't know. But, hopefully, a new gTLD will get delegated this year, the first one. There may be political changes in the world. We may see Cuba having some openings. Space tourism might take off. There could be some crises on the Internet that we don't know about. There could be some disruptive technologies that come in.

The one thing that you can't see on the end is it says in 2020, I will be 60. I can be confident about that.

But what we're going to try to talk about today are our perceptions and our learnings about what we think might happen in the DNS market over the next several years and try to give some context.

Next slide.

So we look at this as a time of innovation in this industry. A lot of opportunity both in the current registries to be innovative in new business models as well as new applicants coming into the market. But that innovation can always bring growth or decline.

And we want to try and also make this discussion personal. Because each of you may have ccTLDs in your markets. And they are undergoing change because of the market, not just because of new gTLDs. And we'll talk a little bit about that.

Next slide.

So let's go into just the basics of the DNS market. Alexa?

ALEXA RAAD: Thank you. Next slide.

Okay. So just -- as John said, just to start the basics, you've got to understand how large the market is not only in terms of domain names but in terms of registries. And a lot of times I've heard, you know, this is the first expansion. It's not. It's actually the biggest expansion, this last round of new gTLDs that is affecting the Internet since its start. So

there are 257 million domain names. As John said, the domain name market has seen almost a meteoric rise. And, year-over-year, 8 to 10% growth. By the way, for, you know, those of you who have had experiences in other industries, what other industries do you know that through financial disasters, market disasters, the housing slump still grew at 8 to 10% a year? How many?

Not a lot of examples, right?

So the original TLDs were selected not based on -- nobody did market research. Nobody said, okay, was this the -- you know, are these what consumers will go and be attracted to. They were essentially arbitrary. Com, net, org, dot mil,dot gov, et cetera. In 2000 we had the first round, again, not really driven from the market but stakeholders, interested stakeholders, sponsors who came together and said we think it would be great to have a dot aero or a dot coop or dot biz. 2004 that's when I got involved in launching dot MOBI. And that was for the mobile Internet.

If you recall, the last slide, you know, what you don't know you don't know, one of the things killed the dot MOBI business model, at least for me, was the iPhone. Dot MOBI was meant to be the identifier for mobile sites.

Well, guess what happens when you have a phone that comes out, smartphone, that enables you to go to any site -- com, net, org, dot CO, dot UK, and be able to expand. And the user interface of the iPhone essentially made the initial premise of dot MOBI obsolete. What you don't know you don't know are the kinds of events that completely change your industry.

Okay?

So, again, what we don't know we don't know. We knew the new gTLDs were coming. We had no idea how many applicants there were going to be. So today, if you break it down very academically, you have seven of the original TLDs. You had what back then was called a sponsor TLD. In other words, a group, industry came together for dot MOBI, for example, the mobile industry. We have 255 ccTLDs and 40 IDN top-level domains. And this is the largest change that's going to happen to the naming structure of the Internet.

Potentially, a thousand new top-level domains are going to be added. Okay? Next slide.

So let's talk about the structure of registries. Because what we've -- the lexicon is very important. The lexicon is the lexicon -- the choice of words that we have underline our assumptions of how we talk about business models and, obviously, policies and so on and so forth.

So, originally, there were registries and registrars and resellers, right?

So a traditional registry in the old model would have multiple registrars. The registrars could either go directly to the registrants and sell or they could sell through resellers.

And this is the model back then of VeriSign and Afilias when they did dot Info and NeuStar for dot biz. Okay. Next.

So the traditional -- now you have a back-end registry that not only has their own dot info, for example, in this case; but they also provide back-end services, in other words, excess capacity, if you will, for various

other top-level domains as well as other ccTLDs. So you've seen this happen with Neustar. You've seen this happen with Afilias and VeriSign. So Neustar, for example, supports dot co, which is Colombia. It's a ccTLD but marketed as a top-level domains, as a new gTLD.

Next slide.

What we've seen, as a result of this market opening, new players coming in. And they're changing the structure and the business model of these registries. So minds and machines, as an example, is a back-end provider. They've also applied for their own top-level domain. And they're brand-new to the market in the sense that they are competing not only with other applicants in terms of some strings, but they're also providing back-end services and competition with the old providers.

Any questions so far? Next slide.

gTLD contract holders: So I make a distinction between a gTLD contract holder and a registry. Often times in discussions, even at ICANN, the two are used as one and the same. They're not. A gTLD contract holder is simply that, a front office -- a business that has a contract with ICANN for managing that top-level domain. They do not have technical services. They do not run their back end. They do not run the infrastructure. They rely on somebody else to do that.

How many of you remember the telecom industry? Ah, great. In the telecom industry, there were players who didn't necessarily build their back end but entered and simply bought capacity. And they were the marketing arm, if you will. So same thing. Next slide.

And, by the way, most of the new entrants have chosen not to build back ends. They've chosen to simply outsource that to a back-end operator.

Next slide.

Next slide.

Okay.

It's important to talk about registry functions. Now I'm using registry in the strict sense of you've got a back end and you've got a front end. Registry functions are two -- really are two lines, right?

The one is the shared registration system. That's registering domain names. That's what we know. Is a domain available? If not, there's a response that comes back, sorry, it's already taken.

If the domain is not available, it's a very simple system. Look up on a flat file database. If it is available, then great, enter it in and it becomes live.

However, just because you've registered a name, that doesn't necessarily mean the name resolves. That is this part, the resolution system. This is the part that you need to, as a back-end operator or even as a provider, you need to have a way to make sure that that name resolves within the specified service levels, that you have the capacity to make the names that you've now registered actually work regardless of where you are on the Internet, in the world.

Now, notice that the revenue comes here. This is your cost structure.

So the reason why new gTLDs did not -- new contract holders did not go ahead and decide to build their own back-end infrastructure is not because of this, particularly, but really this. This is an expensive system to build because it is -- you need economies of scale. On top of that, you also have to make sure that it's secure, that it can withstand attacks. So the difference between a registry that has maybe a thousand domain names and one that has 100,000 domain names in terms of resolution cost is not that much. Because you still need staff to operate your data centers. You need to have resolution. You need to have security, et cetera.

Okay.

Next slide.

Hand it over to John.

JOHN MATSON: I'm the one who loves the data. So I don't expect you to be able to read this slide. What we want you to do is get a sense of the curve or the slope of the slide in different quadrants.

So on the left this is the total market. And the red is gTLD portion of that market. And the blue is the ccTLD portion of that market. And this is just what Alexa talked about. The market just continues to grow overall at an aggregate level. And, if you look at economic factors over that time, if you go back to 2007, the economic experience of each of our markets or industries within our markets would be up and down and up and down. But this market has just continuously grown. And remember that fact. Because many of the business operators who are

in management today have only been in management over those seven years.

So they've only known an industry that has continued to grow overall. That's very different than many other markets that you're aware of. That's the top point.

Down here at the bottom, this is the split of 100% of market share. And back in 2007, the gTLDs had about 63% of the market share. ccTLDs had 37%. Today gTLDs have 57%. ccTLDs have 43%. So in an aggregate view overall, the ccTLDs have taken market share from the total gTLD markets over those six years.

If we look at the top, it looks like the total domains under management has grown in both ways. In other words, there was no significant difference, though, both markets experienced good growth. What we also, though, saw is uneven growth, though, in different markets. So let's just take one. Next slide.

And Pat, we appreciate that VeriSign publishes data. And so this shows just for three TLDs, com, net, and org, the year-over-year percent change in domains under management, and you can see that the trend line is beginning to slow, and this is 2012 versus '11. And so what we began to see in the market back in 2012 was that the market seemed to begin to slow in the aggregate of domain names being sold. So we looked elsewhere. Next slide.

Again, we don't expect you to read them all, but this is Europe and these are European ccTLDs. This is denic, de. It was at about 5%. It's growing now down almost 2, 2 1/2%. Much slower. And you can see

that the slope of these are all going in the same direction. And so one of the things that we want to make sure you understand is that even before new gTLDs come to market, something's happening.

The market was changing before new gTLDs from an aggregate view. Things were slowing down. Next slide.

Why is that? Why would this market suddenly slow after all these years? It's grown at 8%, 9%. Why? Well, some of the things that we see is that is there market saturation? In certain markets, the German market, let's say, is it at a point where the actual generation of new business and generation of the demand for new names is just being saturated and that registrants' need or ability to buy is slowing? It's not the same. It's lumpy because if we look at Russia or China or other markets, they're growing substantially bigger. So there's opportunity. But it's lumpy or it's not even across the world. We see a decrease of relevance of domain name navigation. I've got two boys, 14 and 10. They'd never type in anything direct. They don't know what a domain name is. They just know how to navigate and get anywhere they want to on the Internet without a domain name. So how is the relevance of a domain name impacting what we see? Global economic difficulties. You know, could the economy finally be having an impact on us and that actually be starting to draw down our volumes? Speculators, also known as domainers, hold significant portfolios of names. There's significant capital that they have. That capital can only be allocated for certain things. It's not like there's an unending supply of capital that can buy domain names. So that capital may be chosen to be withheld and be applied to new gTLDs in the market. So possibly when renewals are coming up, maybe portfolios are shrinking. But there's any number of

factors that we see that are credible explanations for why we would see a slowing in the overall market. Next slide.

ALEXA RAAD: So what could change the domain name market dynamics? One of the things we continually forget is even we talk about it sometimes, you know, end users. Ultimately it is the end users that drive demand. Their behavior, what they anticipate, what they want, what they don't think they even want. They drive demand. Take the iPhone. People didn't know -- or the iPad. People didn't know they needed one until they saw it, and their behavior, their love of that device, of that navigation, has had significant impact, certainly on dot mobi but also on how we navigate the Internet. That's where the apps come from. So Internet end users, their behavior and how they browse, how they look, how they look for information, how they want to inform -- identify themselves, communicate, drives behavior.

I grew up in a generation where when e-mail first came out, that's how we communicated. If you -- how many of you have kids? Okay. How often do your kids use e-mail versus text? It's changed. These guys are now -- even though we were the ones who made e-mail the killer app of the Internet, things like Twitter, things like text are changing the behavior of the next generation. So those are the kinds of things we need to keep in mind and think about, because ultimately those changes affect our industry. Disruptive technologies -- oh, sorry. One more thing. There's a law that holds true for consumers. They want something that is better, cheaper, and faster and easier. That has -- that is ultimately what's driven adoption and innovation, better,

cheaper, faster, and easier. So disruptive technologies, these tend to come in because there's some sort of an inefficiency, either in the -- in the space or because the behavior of the end users, the need to want something better, faster, cheaper, has driven the need for them. So think of Twitter. When Twitter first came out the folks that I knew who were 50 and above laughed at the notion that you had to put your message in 140 characters. Why would you do that.

>> [Speaker is off microphone.]

[Laughter]

ALEXA RAAD: Remember, he's going to be 60 in 2012 so -- but it was the fact that Twitter allowed somebody to communicate, self publish very quickly in small snippets that made them successful. And in fact, if you think about the news, it was Twitter's ability or Facebook's ability to report on things that were on the ground. People didn't rush to do their faxes to send something, news about the Arab Spring. People were communicating via Twitter and Facebook. Entirely different.

So the other thing that changes is the means to access. I believe there will come a time when we will tell our grandchildren that not only did we have to walk to school, uphill both ways, we also had to deal with all of these wires and a keyboard and we had to switch keyboards based on which country we were. If you were in another country, the keyboard layout would be different. All of those things are opportunities for innovation and change. What have you seen with the iPhone Siri. Being

able to talk your search. How many of you remember the Boolean search commands of the early Internet. And, or, if. Now you can simply put in -- the search algorithms have evolved so you can simply put in in a natural language search. So the same thing, so input methods actually changed. PC versus mobile has significantly changed the data traffic on the Internet, where it's coming from. And then lastly regulation versus deregulation. How much -- how much is a space deregulated, think about the airline industry. The deregulation of the airline industry not only changed rates and routes and prices and tickets and the profile of the people who are now traveling, but it also -- how many of you flew Pan Am here? Do you remember Pan Am? It was iconic, wasn't it? No longer there. Why? It was ineffective -- the deregulation that happened, opening up the markets, they could not compete fast enough. Okay? So icons sometimes go away. But bottom line, change is inevitable. It will come. It's just a matter of timing. Next slide.

But first let's talk about a domain name. So what is it really? You know, I sometimes think domain names are like stock. You know, the value is this one day, the next day it rises up 50-fold. Why? There's some sort of a psychological value we attribute to a domain name. It's valuable because. But ultimately the domain name is really a utility. It's a pointer. It's a human recognizable label on an IP address. That was the premise behind it because machines could understand and point to resources by remembering names but -- by remembering numbers. We can't. So we understand names, so by being able to identify resources via names, at least you could enable people to use this a lot more effectively. The market value of the domain name, however, has less to do with its basic utility than it has with what we perceive it to be. Okay?

Does that make sense? That's a very important distinction, because that distinction underlines the business models that you've seen, speculator, secondary market, traffic, you know, monetizing traffic, and why my site, Alexa's best cookies, will not be the moneymaker -- if I tried to sell it, I'll certainly not get as much for it as, let's say, Alexa.com, by the way, which is a working site and has lots of traffic. And it's not mine. So bottom line, it's just -- it is just a label. It is the IP and the DNS underneath it that matters. Not the label itself. It's not the symbol that matters. It's the ideals behind it. Okay? Next slide.

So apologies to Pat but we're going to use VeriSign as an example. Because everybody knows dot com, right? So let's take a domain name, wish more people could enjoy the fun at ICANN. Highly valuable, right? You could actually buy it, last time I checked, you could buy it for about $9.99. VeriSign will get about $7.85. By the way, Google, which is one of the most highly trafficked sites on the Internet, the value to VeriSign, $7.85. How much do you think they spend in terms of supporting resources for wish more people could enjoy the fun at ICANN.com versus Google.com. Do you remember the distinction we made between shared registration services and resolution? The shared registration was a revenue. The resolution was your call center. Okay? Gambling.com which is not a trademark is worth to VeriSign $7.85. In 2005 it sold in the secondary market for $20 million. What market do you know that you can go buy a car at a dealer, drive it off the lot, utility of the car is the same. It still has -- it's a Mercedes, it may be black versus the ones they have on the lot, and then tomorrow or the next year, be able to sell it for millions of dollars.

>> [Speaker is off microphone.]

JOHN MATSON: I got a refrigerator market where I go and I buy thousands of refrigerators and I put them in a warehouse because I know five years from now I'm going to sell those refrigerators for 100 times what I bought them for.

ALEXA RAAD: That market exists, right? People have made money on it.

JOHN MATSON: So one of the things we want you to understand is, markets have efficiencies and inefficiencies. And business' objective is to identify and understand efficiencies and inefficiencies and take advantage of them appropriately where possible. And so what we're pointing out is that the current market structure has some inefficiencies. Because you all have a refrigerator warehouse somewhere in your country, right, that someone keeps and resells refrigerators at ten times the price they bought them for. You get the analogy.

ALEXA RAAD: Now, this -- this model works, if you've got a mix of names that virtually have no traffic you're getting revenue for and you've got a few names that have a lot of traffic that you have to spend a lot of effort and resolution and security and so forth for, this model works if you have longevity, you have reached critical mass, and you have that mix. But how many gTLDs really have that? Okay? Next slide.

So let's talk about why are these disparities. And as John said, you know, there are efficiencies in the market. And how did these efficiencies come about. If you remember the -- our concept that we had, unintended consequences. There's things that sound great when we do it, we do it for all the right reasons, and it has unintended consequences that you just can't imagine at that time. So back in the day, in 1999 when the domain names were still -- people -- you know, newspapers were still covering stories about what the Internet is and people started to buy domain names, the idea was names had value. So brands started to have to buy their domain names. And that's when the beginnings of the IP and trademark practice on domain names started. Brands have -- names have value, you have to get your name. That's when also speculation started. Because if I could get in and I could get a search.com, that maybe I could turn around and sell it at a multiple of that. Names have value. There were services back then who -- who evaluated how much your name was worth based on how long it was and how many generics you had. Names have value. But as we went along, people realized it's not just that names have value but it's like having a house in the middle of nowhere with no roads leading to it. So what? No one's coming to visit you, you have access to no infrastructure. It's not that names have value. Traffic has value. Yes, traffic has value. There was enough names now on the Internet that you needed an intermediator to help you direct that traffic. That's where the search engines came from. Do you all remember Lycos and Excite, right? Those were search engines that started to first create a directory. Oh, you're looking for sports? Click on sports. Here's how you go. Directories are gone. Traffic has value. What Google stumbled on and what killed the other guys was traffic has value and I'm directing

search, I'm directing traffic to it. Ah, what if I combine the two in an advertising model. At the same time the speculators thought if I'm getting names why can't I direct traffic to it and I can monetize it. So unintended consequences, domain tasting. The idea that you would have first served -- first come first served generated a unintended consequence of domain tasting which for the registries was an intense -- their infrastructure was constantly being hit to see what domain names were going to come available.

So Google caught on and said.

So Google caught on and said, wait a second, I'm going to change my AdSense model. And Google changing their AdSense model effectively put an arrow in the heart of those guys who were making money buying names directing traffic to it as an advertising model, almost overnight.

So fine, traffic has value. So how many times did you click on a domain name or misspelling of a domain name, came to a site that had all these links? Was that useful? Did you click on those links? Traffic, in and of itself, doesn't have value. That's what they started figuring out. It's not about page impression. Advertisers started initially paying for eyeballs. How many people will you find today who will pay you for eyeballs? It's not eyeballs they're looking for. They're looking for action. Give me directed traffic that results in something, right? And, if you're just sending me traffic, I don't need that. I'm not going to pay for it.

So what happened was communities had value. By the way, that's when gambling traffic has value. That's when gambling sold for 20 million.

Then Facebook started. Google didn't take note of Facebook at all. If you walked into Google's offices and said there's a company started by a couple kids out of their dorm to rate who's hot and who's not and they're going to -- you would have been laughed out of the room. What Facebook figured out was, if I could bring a community of people together, friends -- right -- your social network, if I could bring them together and they could self-publish very easily, they could express themselves very easily and give them the tools, that would have value. So now what happened? Brands who previously were paying a lot of money for speculative -- you know, generic names on the secondary market started to now advertise not under necessarily their dot com, but under Facebook. So Toshiba and Toyota were doing Facebook.com/Toyota. If you had gone into Toyota's offices and said three years ago, "You will subjugate your brand to a company that was started by three kids in a dorm room," they would have kicked you out and said you were crazy. But they did.

So brands were now chasing traffic, chasing community at Facebook.

By the way, coincidentally, that was the same time that gambling.com sold for 2 1/2 million. Why 20 million a few years ago and 2 1/2 million now? Did the utility of it change? Did it stop directing traffic? The value, the market value of it changed.

What happened here is a revolution. We started to use Internet on a mobile basis. So we had not only Facebook that started to take traffic, but in 2011 -- in 2008, iPhone came out. In 2011 gave rise to the need for apps. You know, you want to get -- buy apps or download apps to direct you to whatever site you want to go.

In 2011 there were 10 billion apps downloaded from Apple. In 2012 only 46 billion apps. Doesn't that hockey curve sound similar to what happened in the early days of the Internet?

Somebody was downloading them. Somebody was using them. And, by the way, when was the last time you saw a domain name when you clicked on an app to go to a Web site? Okay.

So now community has value. And Facebook was able to trump Google in charging for advertising. First time ever.

Advertisers and brands who were chasing traffic -- in Facebook chasing communities in Facebook were trying to track how many "likes" do I have? Ultimately, they figured out, you know, it doesn't matter how many "likes," because those also are like eyeballs. They don't translate into units bought. Just because I put in a "like" on Toyota that doesn't necessarily mean that in six months I'm going to go out and buy a Toyota car. So likes alone don't matter. So what does have value? Is it those communities that are put together with a specific -- drawing specific people in mind. So causes, for example. If you have a community of people who are auto enthusiasts who are really interested in classic cars, you may be able to find them on Facebook. But they're disparate.

But, if you had a community, don't you think the advertisers would love that? Because that's their targeting. And it's highly likely that somebody who is interested in restoring classic cars, who talks about it, who has friends who do it, if you've got something to sell to restore classic cars, that they are your market and not somebody who is on Facebook talking about how much they love animals. Right?

So community by itself doesn't have value. What has value -- next slide -- is the type of community that has consistent, constant, trusted communication.

One thing that the Facebook guys missed was trust. Remember all the privacy issues? People getting turned off. People -- you know, I have almost a thousand friends on Facebook. How many of them do I really know? How many of them, if they said, you know, pay me -- if you can just give me $5, I would actually do it? I don't have the trust. That's what's missing.

So, if you can bring a community of people together that you trust that you've helped bring together that you have constant communication with, that is worth gold to an advertiser and, clearly, to you because those are the kinds of people you want to talk to. If you're auto enthusiast, you don't want to talk to somebody who is into gardening.

Next slide.

One of the concepts -- the other concept we talk about is distinguishing the why from the what and the how. Okay?

How many of you still have VHS tapes? You're quite the rarity. How many of you have 8 tracks? Do you remember 8 tracks? All right. The reason is that there are multiple ways to satisfy a need. So -- sorry. Let me go back.

The why is really about why are you doing it? Why do you want this? And the needs has to do with really needs. Human needs don't change. We always have a need to identify ourselves. We always have a need to communicate. We always have a need to inform others and inform

ourselves and entertain. That's why, for example, if you put somebody in solitary confinement, that's one of the worst punishments. Because humans have a need to self-express, to communicate. Okay? The what is the means we use to satisfy those needs.

In transportation we need to inform our need to communicate. That means we need to move.

We moved with -- you know, we had carts. And now we have airplanes. The means have changed, but the need is still the same. Think about search engines and Web sites. These are the how. The domain names are the means. Now you use a domain name to create a Web site. But these are all means of satisfying an end. I need to create a Web site to tell people about the products that I sell, the services that I offer.

But there are now potentially other ways that can satisfy my need. If they come in and they're better, faster, cheaper, I'm in.

So next slide.

So are there other means that could make domain names less relevant? John talked about direct navigation versus search. If you remember back when we had early days of the Internet, people on their browsers had favorite's list and you would save that on your favorite list and you would go back to it. How many of you actually routinely use a favorite's list? Versus search?

So it's really now search -- and search you don't even type -- if you type in CNN in search -- don't type in dot com, dot co, dot uk -- it will give you a list and bring you to that site. Previously, it would give 404 error.

Right? The technologies of search have evolved such that you don't really need to remember the TLD. Next slide.

We talked about mobile and mobile Internet and mobile usage. Look at how things have changed only in about four years. 2008-2012. We don't have the numbers for 2013 yet. But already between 2010 and 2012, you've seen a more than a 2-fold increase in the amount of traffic, Internet traffic that's going on mobile. And, if you recall, I said, when you use Internet on mobile, it is less likely that you are going to see a domain name. It is less likely that you go and type in a full domain name.

Just because the input method has made it easier for you not to have to do that. Okay? Next slide.

So, if they're less visible and if things like new technologies, disruptive technologies, people's need for better, faster, cheaper, i.e., I don't want to type and remember a whole lot of addresses, is it going to make the domain names less useful? The domain name is also a means of navigating to a site, to a page, to some bit of information.

QR codes have now almost put a mask on the domain name or the IP address. Because you can go and you've now seen more and more QR codes on products, on even hotels, coupons, deals. The kinds of things that you used to see either in the newspaper or print out from the Internet, you can click on a QR code here, on a bottle of wine. And you can now find out everything about that wine that -- winery, et cetera. And all it takes is for you to take your mobile phone, take a picture, because the cameras have improved, click on it. In the meantime, by the way, you don't see a domain name one bit.

Remember what registries do. They resolve traffic. So what happened here is somebody's resolving traffic to this. Are they getting paid for the domain name? Next slide.

And, by the way, there's many others.

We tend to be an industry that look at ourselves and explore how all the different variations of domain names and so forth. In the meantime, the world outside has come up with disruptive services that fill in where domain names couldn't. So Facebook, for example, capitalized on the fact that they could easily give an individual an identity. They could allow an individual to easily express themselves, publish. Same with Twitter.

So you have bar codes now, 3D bar codes that do the same thing as a quick response code. We have short codes, SMS. For example, in Africa, the way that mobile Internet was initially used was on short codes, to send and receive payments.

You have geo codes, lots of social media. There's not just Facebook now. Obviously, there's Flikr, myspace, et cetera. And URL shorteners. Because, as we added more -- as a site grew and we wanted to direct navigate to a portion of that site, you didn't want a long link, there were services that now allowed you to just make it very short and quick and memorable. And, of course, mobile apps. Next slide.

So before -- let me stop. Any questions? All right. Have we seen this before, by the way, in other industries? Next slide.

Just in the time span that I'm talking about, which is just in the last 10 years, by the way, we have come -- we have taken it for granted that massive changes that we've seen that have changed other industries.

So back then, if you wanted to get a computer, laptops were pretty expensive and rare. And computers came with large amounts of accessories. You have to install your own software, and you have to set it up. And they were expensive. Now, you can get a smartphone for about $100-$199 that has more capacity than your computer did in 2004. Okay? Next slide.

The news industry has completely changed. Previously, you would find out about the breaking news on the morning's paper.

An interesting anecdote is, in the recent events in Egypt, Morrissey, when he wanted to put out a statement, didn't call the CNN reporter. He put it on Facebook. He put what he wanted to do and his views on Facebook. Unheard of. But, because of the fact that it was better, faster, cheaper to deliver news and you could have people on the ground delivering immediate news, now, instead of waiting for the next morning's headlines, you have Twitter. People follow Twitter feeds to see what's going on immediately.

And that has changed completely. In fact, click on to the next slide. "Newsweek" printed its last issue after 79 years. "Newsweek," whose reporters had received Pulitzer prizes, an icon in the American news media, stopped publishing its news in print. Again, if you told the editors of "Newsweek" eight years ago that it was little companies like Twitter and Facebook, they wouldn't have believed you.

Next slide.

Again, the need is -- in this case the book publishing industry has changed. The need hasn't changed. The need is still to inform, communicate and entertain. The small book sellers were being pushed out by the large chains. And guess what's happening to the large chains now? They're shutting down. Why? Because better, faster, cheaper. I can have 20 books and carry 20 books with me on a little tablet that is now costing me maybe $100, $199. And I can find samples. You couldn't go to a bookstore and pull out a chapter. You can do that online. You can go out and download a sample of something before you buy it. Okay? So the publishing industry has changed. Next slide.

Music industry has changed. Why? Back in the day, if you liked a song, you would go in and you'd buy the album.

And there were stores that, you know, you could go and just go through the albums and pick it. Now all of that, it's all gone. There's no physical media. You can now sample things, you can create, you can share music. Sometimes illegally, unfortunately. But the fact is that the Internet and the technologies to distribute, download music has significantly changed the fortunes of companies that for so long were making huge amounts of money identifying talent and allowing them to publish.

Next slide. Same with video entertainment. How many of you remember Blockbuster or your local video store and having to go and get a video, rent a video? Where are those stores now? Gone. In only a span of a few years. Why? Because you can now download -- you can sit here and watch a program on TV or a movie on your tablet. Your TV

can now stream on-demand movies. You don't have to wait for a movie. You don't have to wait at the movie theater, if you don't want to. You can stream on-demand movies. And, by the way, if you want to take a break, you can pause it. So better, faster, cheaper beat out a very successful business model. Next slide.

So why would we be so immune? Why is it that in 10 years there hasn't been much changes. Or have they? So we just showed you 250 million domain names. And they seem to be growing. But, if you pull back the covers and you look at what are the trends, there are changes that are afoot in either markets or in technologies that have taken advantage of our inefficiencies. So bit.ly and tinyURL take advantage of our inefficiencies to allow a customer or allow an end user to navigate a short URL that is still within the same file name structure. Because, when Internet first started and it when it took off, there was just a morass of content on the Internet. It gave rise to somebody to say, well, I can help organize this as a directory or a search engine. If the Internet were really organized and all the content was exactly what it was, Google would not have had the opportunity it did.

The fact that Google became successful gave rise to a whole new industry, search engine optimization. Did you know any search engine optimizers back in 1999? No. These guys use tools to effectively -- I don't know if you want to call fool, trick, you know, engage search engines to bring you up higher because that's important.

But, all in all, advertising is still out of sync with online usage. More and more and more people are online via mobile, via tablet, via PC. They're online. But advertising dollars are still on TV print media. Why?

Because it is hard to identify that the -- your target market. You can get page impressions. You can get eyeballs. But can you actually effectively identify the guy who wants to get a part for his reconditioned car? Next slide.

So impact of new gTLDs. John?

JOHN MATSON: Thanks, Alexa.

We said this is interactive. It's more than just raising your hand. So, if you do have any questions on what Alexa just covered -- before we move on, are there any questions? We know you're a really shy group. I'm sure that all your conversations are very quiet and respectful. That's all right.

Your gTLDs. So one of the things we're hoping to get to because of this last conversation we had is to try to put new gTLDs in context of a complete market.

Sometimes because people talk so much about new gTLDs, it gets overblown like it's the whole market. It is not. It is not. It is one facet that's being brought to a living and dynamic market every day. Is it an important one? Is it the biggest one I'll see in my lifetime? Probably. But as Alexa said, change is inevitable. And you've all been an important part of delivering that opportunity for change. So now let's talk about new gTLDs. Next slide.

So what's happening? Reduced barriers to entry. If I wanted a new gTLD, if I wanted a TLD two years ago, I couldn't get one. I now can

apply for one and get one. That fundamentally defines a reduced barrier to entry. Unanticipated new players. As I said, several of us obviously contemplated who's going to apply. You know, I don't think everybody anticipated the reactions and the applications that we've gotten. More choice for suppliers and consumers. Fundamentally that's one of the drivers behind the whole program. How do we provide more choice, more competition? We're definitely seeing that. Now incumbents in markets that are changing tend to react slower. Incumbents in this market jumped in very quickly to offer capacity and back-end resources. But is yet to see how the incumbents will fare in the eventual changes in the market. Historically, though, incumbents tend to underestimate upstart competitors. High risk, high reward business models. You know, I think -- I don't think I ever saw a venture capital at any ICANN meeting before three or four meetings ago. They wouldn't even understand the DNS industry. Why? If you aggregate all the revenue from all the domain names sold it's maybe $2 million. It wasn't an industry that the capital markets paid a lot of attention to. Now suddenly, hmmm, there may be some opportunity here. Competition and opportunity. Integration along the value chain, we'll talk a lot more about that in a few minutes. But one of the big things you need to understand, and you need to be comfortable with, is that balance of power will shift because that's what happens. It's a natural evolution. And we will see profits and margin move along the value chain with the implications of the new gTLDs. And we say this one big success can change everything. If you think of all these applicants, if just one gets it right, fast followers will come into the market quickly. So there's a lot of ambiguity about what will happen. Next slide.

So this is what we call the stack. Again, I don't expect you to read them all but we've got this regulatory authority, the registries, the resellers down here at this level. Then we have contract holders, registrars and resellers and support services. The enabling layer. And then finally we get out to the end users, registrants, and advertisers. If you were to say where is the big money in that stack, where is it? Is the big money at the bottom? Or is all the money at the top? It's at the top. Advertising roughly is off -- about 50 billion in advertising is spent on the Internet and about 50 billion should be spent more if time on the Internet versus time in other media equated to advertising. So there's a significant lot of money and capital in that upper band. But the challenge is, how do you get to that upper band? Well, you get it through a registry, a contract, a registrar, a registrant, all of the things that are very important to what we've been talking about. What we had prior was what we will call controlled supply and artificial scarcity. I apologize for that being off to the side. But we have what we would call artificial scarcity, and that's why you see a secondary market. As we talked before, things are a little bit out of balance. With the new gTLD program, you're definitely going to see an increase in supply of domain names. Increased supply. But we have uncertain adoption. We're not sure what's going to happen. You know, Alexa talked about a lot of things that said maybe a domain name isn't that important. If everything is masked, if everything is masked, well, why do I need an intelligent domain name. Can't I just have gobbledygook dot whatever and that resolves with a QR code and I don't need it? What's the price of that technology? And then the future where we're going is markets are always efficient and so the real interesting question is, what

inefficiencies and new efficiencies will the new gTLD program enable? And how will inventory and supply settle out? Next.

These are numbers you know. 1,900 applications, 1,400 unique strings, about 100 voluntary withdrawals so far, some will fail evaluation, some will lose contention set, and roughly we'll have 1,000 to 1,200 new strings. That's a lot. That's a lot. There's some people that think ten years from now we will have 50,000 strings. I don't know. I do know that if some of these are very successful they could change things as we know it, how TLDs are managed and operated. About 600 of them are going to be brands. A great opportunity for a brand to figure this out. I remember when I was in consulting in the mid '90s this thing about a Web site came out and no corporation had any desire for a Web site. Why do I need a Web site? Why would I need a Web site? And we'd go around and we'd educate them, and we'd talk to the marketing group and we'd say hey, someday all of your brand is going to be online. And they'd say no, it isn't. Say yes, it is. Well, today could a major brand consider any part of their marketing strategy without a Web site? What -- we would ask the question, if you're looking to control your presence online and not subjugate yourself to Facebook.com or some other provider, why wouldn't your own TLD provide you opportunity, control, flexibility? So if some brands really get very successful in how they use their technology, would other brands now move to follow? Don't know. Again, read the words "conventional wisdom." In any new business venture, any new business, not to do with Internet, business, 50% fail. And in three years, 70, 75, 80% fail. So why would we think that our industry would be immune or any different? So we're not pointing out saying oh, there's going to be massive failure of new gTLDs but new

businesses tend to fail. And so ICANN was very smart in creating a backstop that said, we have a process for how registries are going to be able to be transitioned because it may not work, this registry may not work. A very well-designed program to allow the market forces to act and choose success and failure. Next slide.

You can't see it so let me read it. So if you remember the stack, we had end user and registrant all the way down to registry and regulate. So we now have laid it left to right. So this is the end user over here and you have got applications and platforms, social media, search, web services, registrar, contract holder, registry, regulator. So that's how we would view the information chain or the value chain of this market.

So let's look at some players. Well, we know VeriSign, they're the registry and the contract holder. We know some are just a contract holder, PIR. Some are applying to be a contract holder and a registrar and do vertical integration. Some didn't really look to apply. You've got some that are registries, the want to move up market and become a registrar and vertically integrate. You've got some that are registrars and want to move down market and get into the registry business. You've got large, large players in the market that are now going to have the opportunity to operate a registry. But what do you observe? From a business standpoint, a very interesting observation is, there's only one player that has taken the opportunity to say hmmm, I have an opportunity to work completely across seamlessly this whole value chain. What an amazing opportunity to provide integrated, easy to use services to the world. Hmmm. Going to be interesting to see how that plays out. Next slide.

Alexa.

ALEXA RAAD: Thanks. So there's a lot of discussion about are these going to be successful or are they not? We don't know. We don't have a crystal ball. But in the very least you can put out potential outcomes. The very best outcome and the very worst outcome. And the reality will likely be something in the middle.

So let's say the worst outcome is this was a horrible experiment. All new gTLDs failed in one way or another. So why? Well, maybe the market rejected them. There have been technologies that -- or products that came in way after their market had already moved on. Well, maybe there are other substitutes that fill up the demand that potentially new domain names and identifiers provide. Search, QR codes, and maybe there are others that we don't even have. We don't know, we don't know. And what if they make names irrelevant? So on the other hand, what you can't see is, what if there's at least one really major success. And I would pose to you that that major success will very likely not be the business model that we all are familiar with. Names have value, I sell out names, and that's it.

So if there's one major success, that means the -- they did something right. They got something better, faster, cheaper. Someone got the value price -- value proposition right, somebody got the distribution right. What if they were free names? The whole registrar market is based on the assumption that people pay for the building block of their house. Identity of their house. Web site, hosting, e-mail. People pay

for that. What if it was for free? Could we actually go to commodity pricing? Next slide.

There's a law that applies regardless of what technology, what product. It's called the diffusion curve. It's a law of adoption. Are you guys familiar with it? How many of you are familiar with this? Great. So what it basically says is, if you want to forecast, for example, whether you're going to get to this critical mass, which most registries would want to do, you need to get 16% of your addressable market. But note what I said. Addressable market. Understand who your market is and how you can address it. Get 16% of it, you hit the inflexion curve and you will get to critical mass. If you don't, you would at best be an also ran. You get a few adopters and innovators and after a while your renewals don't come in, people don't use your TLD, search engines don't recognize you, and you're an also ran. Next slide.

So what about adoption? Well, here's some educated guesses. Exuberance, irrational exuberance, tends to also change your perspective, right? We believe adoption will be slower than expected. And there's some reasons why. Not because there aren't enthusiastic new gTLD applicants, but because -- think end user. Applications and application providers will take time to recognize the TLDs uniformly. Uniformly. The reason the Internet is such a killer app is because I can send an app from Zambia to Canada just as easily as I could from Washington, DC to Paris. So if it is not consistent, end users are going to be dissatisfied. And there's going to be confusion, why doesn't this work? It's a domain name, right? I had a domain name before, it worked. How come they didn't get my e-mail. It's going to be smaller for -- it's going to be harder for smaller TLDs to convince application

providers to get -- to accept them and build their code so that your spam filters. If you've got a TLD that only has 200, what is the benefit for a spam filter provider or an e-mail provider to recognize your TLD other than to do you a favor? Education available -- about availability and differentiation of new TLDs. Why is this more important than that? Why does -- what do you mean by security? What do you mean by trust? What do you mean by community? That education will be costly. An IDN adoption will not be the same as ASCII. It will be slower. And the reason is e-mail, which is a killer app, e-mail on IDNs doesn't work uniformly. So if you have a domain name that simply works as a navigation aid, as a pointer, why would you pay double or triple the price? Okay?

So mostly -- most likely they will be used as a pointer to existing sites. And how likely are search engines to pick them up if they can just pick up the existing site? Next slide.

All right. So our next -- any questions so far? Okay. There's been a lot -- go ahead.

>> Thank you very much. My name is (saying name). I come from Denmark. In your business case you said that, you know, you have the two alternatives that, you know, it won't succeed, it will fail or it will be a grand success. You can say there are two trends that -- you could say there's the defensive registration which could actually apply a lot of these, even though their business plan are not maybe the best, that they will actually have some kind of success. On the other hand, you can say the complexity that you're actually introducing the gTLD system,

it is clear that the search engines will become even more important for the use, so you can say your presence on the Internet might be less important so you have these two elements that actually counter each other to a certain degree and then you can say that to what extent does companies actually give up their registration on the Internet? You can say that they make a registration at the quite minor price and in order -- if they have done some marketing and it has become well-known and so on, would they not tend to keep it, even though that they don't use it? Thank you.

ALEXA RAAD: Great. Three-part question. I'll try to answer quickly. Remember, that it depends on what you mean success. So a registry -- if success is just selling domain names, that's a relatively short-term view. Because, unless those domain names are used, actively used, there's content behind it, is something to the benefit of the end user and the registrant, you don't have -- this is one of those cases where the old law applies no matter what. It makes good business sense to run a good business. Okay?

Second part is remember what we said, domain names are simply a label. How many labels can you have on a box? Multiple. Okay? So what if all I wanted was one junk domain name. And my app and my QR code and my -- maybe some other stuff through technology would point to that. Would it matter really if it was dot blog versus dot web versus dot com? Maybe, if you could promise me better resolution, better security. But not because the name is available. Names don't have value any more. Just because it's a good name, that's not valuable.

So does that help? Okay. Great.

There's a lot of questions about security and abuse. So let's go to the next slide. Will new gTLDs lead to greater abuse on the Internet or won't they?

Well, we don't know. But what we do know is how can you measure whether they will or not if you don't have a benchmark today? How can I measure whether you have a fever and how serious that fever is if I don't know the benchmark is 98.6, that all humans, regardless of your culture, your age, where you were born, 98.6 is a benchmark. And, if you have a fever of 99, eh, you might live. If you're 104, that's pretty bad.

So what we did is we took air quality, water quality -- if Internet is a utility, no longer a luxury, if we can agree on that, it's a utility; you rely on it; then there are measures to measure how -- there are ways to measure how good, how clean, how safe, how reliable is a utility? Water quality index. Air quality index. And what they do is they measure contaminants or parts per million. So that's what we did with abuse. And we said, okay, there's a name space quality index. And we look at the range of abuse in millions per domain. So, basically, that creates an equalizer -- because everybody's measured to the same benchmark. And we said, like air quality, water quality, if you have less than 100 abuses per million, you're excellent.

On the other hand, if you have over 10,000, that is a risky category.

So the percent of use, basically, says it's over 1% of your domain names have some sort of abuse. Phishing, malware, spam, botnet.

All right. Next slide.

So how would we rate the Internet today? How safe are we?

Well, if you look at the Internet and 257 million domain names, about 61% -- we looked across all 300+ TLDs and all the domain names they have from January of this year to end of May 31st, 61% would fall under the "exercise caution." 4% would be at the "excellent."

So overall the Internet would be "exercise caution." Does that intuitively feel right? Okay. Next slide. John.

JOHN MATSON: I'm the data guy, so that's where I come in. As Alexa said, we gather data sources, data feeds from many service providers. So one of the things we looked at is we wanted to get an objective view of quality of the Internet. So this is not data that -- or data that we produce. This is data that Architelos collects, normalizes, and then reports.

So what you're seeing here is, from December through May, the trend of overall abuse detection. So, at any one point in time, our system tells us that there's approximately 1 million domain names listed on block lists, et cetera. And those are spam, phishing, malware. You can see that, roughly, over the last five months, the red is new domains detected by those services. The green is domains removed from the block list by those services. And what we've seen is an increase of about 25% of the total domains.

Again, what we're trying to do is provide data to understand where are we? And our goal is to create a community dialogue around what does

this mean? So we also would request feedback and discussion around the information we're presenting.

Next slide.

But what we also did is all these domain names have a home somewhere in a TLD. So we then went out and said, well, let's take all the TLDs, whether it's a ccTLD or a gTLD, that have more than 100,000 domains -- and that adds up to about 99% of all domains on the Internet -- and see what their performance is. And so these are rankings of abuses per million by the four categories we talked about. And so, if a TLD has less than 100, we rated it excellent.

If it has between 100 and a thousand, we rated it good.

If it has between a thousand and 10,000, we rated it caution. And if it has over 10,000, we rated it risk.

And, as Alexa said, our goal is to try to establish a baseline.

And, obviously, this causes questions. And we're happy to discuss with folks an understanding of how this information is created. And, whenever any rating is given, there's some in one area and some in another.

Observations that we'll continue to make as we do analysis is what about price? How does price play into this? Or what about registration restrictions? How does that play into it? So we'll do further analysis on this information. But we want to at least provide you the insight.

Alexa?

ALEXA RAAD: Thanks. The other part of --

CHAIR DRYDEN: Just one moment, Alexa. I understand the room is available to us until 11:00. So, if you want to do a quick wrapup so that we can then allow the next session to start. Thank you.

ALEXA RAAD: Sure. Got two more slides. The other thing -- we anticipated and we built NameSentry based on our own experiences of running and launching TLDs and managing registries and dealing with those problems. So we built it with the mind that abuse is an issue and you need to, A, track it, identify it, detect it. And how can you in a fair way be able to mitigate that abuse? So there are some safeguards that the GAC actually published. So next slide.

So the GAC safeguards, essentially, have to do with, great, you need to implement something. You need to monitor -- next slide. You need to monitor your name space. You need to be able to detect when something has gone wrong -- next slide.

You need to be able to monitor when something has gone wrong. And then you need to be able to notify who it is who has a responsibility to do something about it. You actually need to have some consequence to -- if someone is spreading malware, you need to have some consequence to that notification. If you don't stop, if you don't suspend the domain name, then we will do it for you.

So NameSentry not only does the protection and monitoring but also does mitigation in terms of notifying the registrar, the registrant, et cetera, of exactly what the abuse is. If we can go to the next slide. And automates the whole notification procedure of telling the registrant what the domain name is, what the IP address is, the registrar, the WHOIS information, if it's available, so that they can actually take corrective action.

Next slide.

And it also keeps track -- one of the things about abuse mitigation is consistency. If you have a policy, you have to apply it consistently across, not because you spoke to John and somebody else spoke to Mary. But you need to apply consistent policy. So it also creates an audit and a documentation trail.

So our point was to show you what the baseline is, to explain to you a little bit about the methodology, to talk to you about the relevance to the safeguards. And we're done.

CHAIR DRYDEN: Thank you very much to both of you for this briefing. And I hope that, if GAC members do have any questions, that perhaps we can pass those along to you following today's briefing, especially as we didn't have as much time as we had hoped for the briefing.

So thank you, everyone. And perhaps we can express our appreciation to Architelos.

[Applause]

>> Madam, excuse me. Meeting is finished? Totally? Just one word.

Madam, I think we would wish to express on behalf of everybody our great and sincere appreciation to you, to your vice chairman, to the team for your tireless activities and very good work. And we are sorry at some point in time we put pressure on you, but that was a rule of the game. We thank you very much. We were happy to continue with you at the next meeting and meetings and so on and so forth. Thanks to everybody. And, in particular, for the people working behind the scenes and the interpreters that facilitate that we communicate with each other. Thank you very much, madam. And, if you're leaving, so on and so forth, have a nice trip.

[END OF AUDIO]