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Keynote Speech —

Thank you, Alexa, it is a great pleasure to be here with you and your wonderful team at the Public Interest Registry (PIR). I am delighted to be able to join you and the members of the PIR, .org and the Internet Society community here in Washington, DC, today. And I salute you Alexa, for your outstanding leadership at the helm of PIR and your active support for both the overall Internet ecosystem of players, as well as for me as the new CEO of ICANN. Your friendly welcome and support has meant so much to me.

1. The PIR Community

You, this enlightened and forward-thinking community, embody so much of what is powerful, transformational and universally beneficial encompassed by the Internet today. As you describe yourselves, you are a “worldwide community of mission-driven organizations that are making the world a better place”: to my mind, this is what the Internet is all about and you are a beacon of aspiration and achievement for the wider Internet community who strive to meet the same objective. I salute you.

On the .org blog, one of the latest entries is your instructions in how to use .org and its list of humanitarian and philanthropic agencies to support the critical Haitian relief effort. And I note from your Facebook page that one of your prominent registrars, Go Daddy, donated a half-a-million dollars to help the Haitian victims the very day after the earthquake struck. Your community exemplifies solidarity in action.

This morning I have been asked to offer you some thoughts on the future of ICANN. Needless to say, this net (a physical net!) can be cast as wide or as narrow as you wish. Our plans, assessments and decisions will affect our ICANN and DNS community – and they also take place in the context of the universal Internet and all of its impact

on society, the economy, the lives, hopes and aspirations of the close to two billion computer users of today's Internet, and even more through phones that touch Internet protocol networks. 25% of the world uses the Internet by computer access today, with a global population of about 7 billion. World population will grow but the Internet penetration will grow even faster. The Internet will make it to the next billion and eventually spread to almost everyone on the planet. Indirectly, it touches almost everyone already. Internet users access approximately 100 billion web pages every day. This and other Internet activities invoke more than one trillion domain name system lookups per day. Just during this one hour speech, right now, 11,000 people who had never used the Internet before will join this world movement. A miracle of sorts is happening. We are all becoming connected through this amazing new global nervous system – this new fabric of our society and global economy. One of the most important things we need to do is simply do our best to keep the system working and stay out of the way.

I am sure that this community and ICANN share this same worldview and philosophy. You, as we, are dedicated to

strengthening the safety and integrity of the Internet, improving access to technology and expanding into underserved markets.

I appreciate the commitment you expressed, Alexa, in your end of year/New Year blog at .org, that this community should “ support multi-stakeholder governance models like ICANN and help them to operate better”.

As you are aware, one area where we work very closely together is in the publication of protocol parameters. The IETF, the Internet Engineering Task Force, is as you know the amazing network of engineers that has developed most of the Internet Protocols we rely on today. The IETF publishes protocol standards and within those standards specifies protocol parameter values. All the different values are published on behalf of the IETF by ICANN in its role as the Internet Assigned Numbers Authority or IANA function operator.

So the IETF is the standardizing body and, as a partner, ICANN provides a publishing service so that anyone in the world can have access to the IETF protocols and parameters. And of course we work closely and collaboratively with your “parent” body, the Internet Society, which funds many IETF activities. ISOC has a very

important role – and a global network of end users – and you accomplish a great deal of capacity building all over the world. Moreover, you at ISOC have your own ecosystems: you, ISOC and IETF, have very key roles and we are indeed partners in this core Internet community.

2. Pipes and Values

We are the embodiment of the Internet and we share what you might term a central duality: we are an infrastructure and we are also a set of values. We are an engineering construct – in fact an engineering miracle, if you ponder the twenty million times per second that the DNS system is used worldwide – per second – twenty million – forty million – well, you get the picture. And we are a values-based organization. The Internet itself is a construct and a vision. In both cases miraculous.

The values we espouse and work for are:

- Universality – reach the world (be global)
- Unity- keeping the Internet together as one whole
- Connectivity- allowing all people to connect

- Transparency – open to the entire community
- Innovation – create conditions to foster it
- Inclusiveness – for all stakeholders
- Security- making sure the Internet keeps running
- Stability – safeguard this global artery
- Reliability – since so much is at stake

3. The virtual and the global

European Union Commissioner Viviane Reding said last year that the real world and the virtual world are moving to converge. “The exponential increase of information, the further development of social networks, the accelerated growth of online video traffic, and the emergence of the Internet of things, will progressively cause the online and real worlds to become inter-linked”. This has implications for the world and it has implications for the Internet.

In parallel to the Internet, global society has been growing ever more complex and interdependent with every year that passes.

Governments, multilateral organizations, the private sector and civil society alike have come to acknowledge that they are often powerless

acting in isolation: the global issues, threats, opportunities, challenges they face surpass the capacity of even the most resolute and powerful of them to manage alone. Think of climate change and the Copenhagen Calamity: or as my Danish friends ruefully acknowledge, from Hopenhagen to Nopenhagen... That enterprise of course continues and some progress was signaled: it is far too important to fail. But perhaps something was at fault with the process itself: the gigantic whirring and clanging of the machinery of intergovernmental negotiation, the deals frantically wrangled over in all-night conference rooms with exhausted delegates... with civil society angry and isolated, and ultimately the world's citizens left as the victims destined to explain their generation's inaction to their children and their children's children.

Climate change, public health menaces, population and immigration, energy and sustainability, clashes of civilizations, terrorism and poverty, food, agriculture and the environment – these are resistant to the best efforts of single actors, single states, even the largest. And more and more, we see the influence and potential of the Internet rising in every sphere. Science and innovation grown through the web expand to confront these challenges, while the universal

arteries of Internet information spur development, dynamize economies – and offer platforms for commerce, culture, communication whether for good - or even for ill. The Taliban, it is said, are as adept as the West in driving propaganda through the web.

It is hardly surprising that the virtual world, the world of interactivity (maybe hyperactivity, if you have teenagers around) and Web 2.0 grows daily more complex and more critical to global society. Our model, our structure of multi-stakeholder governance, of openness, of transparency, of dogged persistence in the pursuit of consensus and agreement, is indeed under fire and at issue. We are being asked to examine the Internet's availability, heterogeneity, scalability, mobility, manageability, security, trust, openness and neutrality.

The stakes are higher every day. More money is at risk, more lives depend on us, more interests see the Internet as their lifeblood and are more prepared to fight for these interests to prevail. We cannot sit in our sometimes introspective, comfortable, familiar meeting rooms and derive our familiar solutions any more.

We have become simply too important. Not that this is entirely welcome. But it is reality. And we must be prepared to take an ever-more sophisticated, inclusive, multi-stakeholder course in defending the achievements and the values on which they are based in the common – that is shared, universal, not partial or sectoral – interest.

4. Multi-stakeholder

This form of governance, with its features of decentralized control, of inclusive and at times unruly processes, of attention to voices of importance as much as voices of power, is what underlies ICANN and indeed Internet governance today. I know that you in this community are as committed to its values as I am. One of your panelists and renowned experts, Michael Nelson, noted at an OECD meeting that we had faced a “clash of models” between traditional policy governance and the present governance of the Internet: and I note that he came down squarely in favor of preserving the open and decentralized architecture of the Internet in order to maximize choice, innovation, and creativity. I agree: the next billion users will arrive, provided that we don’t start building walls that make it more expensive, or more restrictive, or more difficult for them to do so.

I would submit that just as the global challenges we face today are not susceptible to single actors, not even single groups of actors, managing on their own, nor is Internet governance. The management of complexity is the challenge for the real world and the virtual world – converging as they are. The modern form of governance is multi-stakeholder. We at ICANN together with you, our friends in this community – have arrived at this solution. It is the correct one, it is the modern one, it is the only satisfactory one. An intergovernmental forum on its own will not take forward the complex and conflicting concerns of diverse stakeholders in a sustained manner. Nor would a 100% commercial organization, however international it might be. Nor would an assembly of civil society. Only a multi-stakeholder system can address the needs of key multi-stakeholder constituents, reconcile them, seek compromise and aim at a consensus that recognizes the universal value of the asset.

This path, the path we are already embarked on, will of course not be easy. It will become ever more complex but is suited for managing complexity. We at ICANN will do whatever we can to

improve our processes, render them ever more streamlined, open and accountable – accountable to all the stakeholders.

In this respect, ICANN’s new Affirmation of Commitments, which supports ICANN’s model of multi-stakeholder bottom-up governance of the global Internet addressing and naming system, will help ensure that we work on a basis of fact-based policy development affects our activities and operations. We are asking ourselves how we should change what we are doing in light of the agreement? How should we change our processes and work or how should we change our accountability in how we explain the decisions we make? How should it change our transparency?

The Affirmation — which was agreed between the U.S. government and ICANN last September — is of long standing and is not limited to the three-year term that defined the previous agreements. This is good.

And it establishes beyond doubt that the ICANN model is best equipped to coordinate this vital resource and places reviews of ICANN’s performance in the hands of its global stakeholder community.

Under the new Affirmation, the U.S. will remain committed to participation in ICANN's Governmental Advisory Committee — which advises the organization in its crucial mission of ensuring that Internet naming and addressing systems remain stable and secure.

The new agreement mandates that ICANN's accountability to our global stakeholder community be reviewed at least every three years by a committee made up of representatives of the community.

Our proposal for review structure, protocols, and timetable is out for public comment at this time. The reviews provide a mechanism to assess ICANN's progress toward four fundamental organizational objectives:

- Ensuring accountability, transparency and the interests of global Internet users
- Preserving the security, stability and resiliency of the DNS
- Promoting competition, consumer trust and consumer choice
- Whois policy

5. International Internet, International ICANN

So here we are in the nation's capital – fraught as usual by partisan politics and feverish commentary on the vagaries of today's up-and-downs in the shadow of Capitol Hill. We worry about innovation, about science and technology in our schools, about falling behind in investment for the future. I guess we can be forgiven in this context for taking a little pride in the American role in the development of the Internet and its transformational practice and potential for the world. Our offices in Marina Del Rey are in the same building where Dr. Jon Postel used to sit in the original University of Southern California Information Sciences Institute office. There he handled Internet root zone delegations, network address block allocations, protocol parameter assignments and other tasks with considerable wisdom and benevolence, generating a trusted, multi-stakeholder group globally that still engages in ICANN policy making and Internet governance today.

As you here will recall, it was in 1969 that the U.S. Department of Defense funded the development of the DARPA net, so it was very much a U.S. phenomenon then and the work to develop the Internet was largely done there. However, as someone educated me after the ICANN international meeting in Seoul in October, “Yes,

Rod, but the fundamental concepts of packet switching were actually developed internationally as well.” So international credit is also truly due.

Accordingly, ICANN is becoming – we hope – more international in our operations and in everything we do every day. This is essential. We know we lie at the heart of a global asset that is quite simply integral to the future progress and well-being of the world. Our international path reflects reality. The role of the Internet in stimulating exponential economic growth, in inciting and catalyzing development, in bringing the benefits of communication and information to all people and all continents is perhaps the core promise of global society today.

I mentioned Internet penetration: the past decade saw this growth at 174% in North America. But it saw growth of 1,392% in Africa and 1,648% in the Middle East. Yet that penetration is still at only 7% in Africa, so there is a huge unanswered need, a huge unmet hunger for information and access that can only challenge us for the years ahead.

We at ICANN have striven to meet the demands for an ever more universal, globalized and accessible Internet and all its benefits. In this respect the IGF - the Internet Governance Forum - has been a critical and important voice in advancing the international ecosystem and ICANN in particular, constituting a consistent and constructive platform for making the Internet more international in every respect.

We achieved some striking results last year in this global and globalizing arena and much more lies ahead.

IDNs and the Fast Track Process

We are all very proud of the launch of IDN ccTLD Fast Track Process last November. It's the result of 11 years of technical preparation and 7 years of policy development. IDNs represent the greatest advance in the use of names on the Internet since its inception 40 years ago.

For the first time in Internet history, non-English speakers across the globe will be able to see Internet addresses completely in their own language. To date, 16 requests representing six languages have been accepted, with four having reached the point where they entered the standard top-level domain delegation process.

In the coming years, we will continue developing a more permanent process for implementing IDN ccTLDs.

The technical basis of that work will be the IDNA protocols — these are being finalized by the Internet Engineering Task Force.

Policy development will be founded on work now under way in our County Code Names Supporting Organization, together with accommodating lessons learned from the fast track process.

Developing a long-term policy for both generic and country code Internationalized Domain Names is even more important when we understand that more than half of consumers obviously prefer to obtain information in their own language — and that websites offered in only one language can address at most 30 percent of the total online population.

Globalization of the organization

The addition of IDNs and gTLDs is going to change the makeup of the ICANN community by increasing the number of registries and registrars around the globe. Supporting these constituencies increasingly will be a priority for us. We are working to make the constituencies' procedures and operations more transparent,

accountable and accessible in a way that promotes increased global participation in — and understanding of — their activities

The ICANN community is growing globally in other areas as well. Several countries joined the Governmental Advisory Committee last year, including China, Georgia, Iraq, Mongolia, the Philippines, and the Russian Federation, bringing the number of countries represented to just over 90.

The Governmental Advisory Committee will have an even higher profile in the ICANN of the future.

The GAC will play a major role in how the international review teams are organized — and in selecting review team members.

The At-Large community added roughly 20 individual Internet user groups, or At-Large Structures, including the first from Pakistan, sending the total worldwide past 135. That means individual users and user groups will be able to participate more fully in ICANN's policy and decision-making.

The Country Code Names Supporting Organization also welcomed notable additions such as Russia (dot-ru) and the European

Union (dot-eu), boosting its membership to 100 country code operators.

Just last month, ICANN and the Swiss-based Universal Postal Union signed a historic agreement giving the UPU managing authority over .post as a top-level domain. Bringing this about required long negotiations, public review through ICANN's public comment process, and consideration by ICANN's Board of Directors. Getting it through the UPU required an equal effort. But it was worth the effort. The result is new top-level domain that UPU and member states can use for providing new and exciting services.

ICANN also entered into an important agreement with another U.N. entity — the United Nations Educational, Scientific and Cultural Organization. This agreement will help expand the inclusion of as many language groups as possible through IDN implementation. In doing so, will help ICANN fulfill its mission of global inclusivity by expanding our wide arena of international stakeholders.

To reach out to the ever-increasing and diverse number of individuals and organizations, our global partnerships arm will continue to

- Lay out key projects and initiatives with stakeholder groups
- Provide training and education to the Internet community in the growing ICANN regions
- And conduct one-on-one briefings with governmental and regulatory representatives on local and regional levels.

This work runs the gamut from promoting and facilitating participation in ICANN processes by drawing people to ICANN meetings — to broad-based educational and promotional activities among the various constituencies.

We must and will continue to globalize all aspects of ICANN's operations that support our multi-stakeholder model in a way that appropriately and effectively services the needs of a multilingual global stakeholder base.

6. Other key directions for ICANN

New gTLD Program

The ICANN community also made a lot of progress this past year toward implementing new generic top-level domains, which will create greater competition, consumer trust and consumer choice in the domain name space.

The applicant guidebook reached its third revision, with each revision reflecting careful incorporation of public comment and the recommendations of many experts.

We continue to work on the resolution of a few remaining outstanding issues. Our focus in 2010 will be to continue work on operational readiness, to further explore the possible introduction of a model for expressions of interest/pre-registrations, and to resolve outstanding issues in a way that accommodates the legitimate concerns of stakeholders.

IPv6 – To 4,294,967,296 and Beyond!

You've probably heard a lot in the past few years about the need for all network and service providers to become IPv6 enabled. There are several reasons why deploying IPv6 is becoming increasingly important. Let's do the numbers.

Giving everyone in the world full access to the Internet is a worthy goal — but it cannot be achieved without expanding the numerical addressing system — the IP addresses — that underlies the domain names we all use every day. The Internet has grown up on IPv4 in the past 30 years — but we are approaching the point where that address space will be fully allocated. You see, there are 7 billion people around the globe and less than 4 billion useable IPv4 addresses.

As you may know, earlier this month ICANN allocated two IPv4 blocks to APNIC, the Regional Internet Registry for the Asia-Pacific region. That left a free pool of unallocated IPv4 addresses of less than 10 percent of the total. What that means is there are now just 385 million IPv4 addresses left for new Internet users — and there are still several billion people who don't have access.

If we're going to give them access to the same Internet we use — the one where it's easy to use point-to-point technologies like video conferencing and VoIP — then they'll need Internet connections with unique addresses. The only way to do that is by deploying IPv6 to as many people as possible as quickly as possible.

The good news is that with IPv6 we have more than enough Internet addresses for all people in both the developed and developing world. With IPv6 are enough addresses for everyone. Under IPv6, every single person on the planet could have trillions of addresses for their own home or business. In fact, all 30,000 ISPs and business in more than 190 countries that are members of the Regional Internet Registries – the parties that distribute addresses- can obtain a block of trillions of IPv6 addresses by merely demonstrating need. There is more than enough for all.

And adoption is important. That's why the root of the DNS can be accessed over IPv6. That's why ICANN's networks and services are accessible over IPv6. And that's why all of .ORG's nameservers are accessible over IPv6.

But ICANN, .ORG, the other TLDs, exchange points and so on are just the Internet infrastructure. We now collectively need consumers, businesses, ISPs, hosting providers, content providers and networks of all kinds to enable and utilize IPv6 on their networks so that new users can share the same network we rely on.

7. Cybersecurity and cyber-challenge

The real world and the virtual worlds are converging. Managing complexity becomes our greatest challenge for both. And just as the potential and the importance of the Internet for the real, complex world, grows rapidly - so do the dangers. The Internet has lost its innocence. And by that I do not mean any reference to porn sites! These are probably still innocent by comparison – by comparison to the threat to cybersecurity. The wretched phenomena of cybercrime, cyberconflict and cyber warfare have dominated the headlines in increasing number. Some have talked of a new Cold Cyberwar, while as we know the threats grow exponentially. The danger is posed equally to individuals with cybercrime stealing identities and ruining lives, to nations with security attacks even in ostensibly peaceful periods – and to entire systems of international management, finance, energy, transport, supply chains, communications – even medicine, with the otherwise promising growth of emergency diagnostics. We are at a new phase of cyber danger and cyber warfare. We need wholly new mindsets to combat it, to minimize the risk, to plan and take account of the peril of cyber ills as much as the promise of cyber potential.

At ICANN, we were of course involved last year with dealing with the Conficker worm, a particularly widespread and thus threatening botnet. We took a leading role in the DNS community's response to Conficker by facilitating information sharing between security researchers and TLD registry operators. This work highlighted both the value of a collaborative response by the broad DNS community — and the challenges of doing so in an ad-hoc manner.

So we are now collaborating with our partners in the Conficker Working Group to improve the security, stability and resiliency response capacities of the DNS community, and to ensure these efforts are linked with the broader cybersecurity community.

Last May we published our first-ever *Plan for Enhanced Internet Security, Stability and Resiliency*. This document sets out our role in Internet security, stability and resiliency. It's a living document, and we plan to continue updating it to reflect the dynamic nature of the security issues that continue to threaten a stable and resilient Internet.

There are now more than 900 ICANN-accredited registrars — and we collaborate with them to ensure the Internet’s security, stability and resiliency. Our relationship with these registrars is through a Registrar Accreditation Agreement, or RAA. It sets certain standards for data collection and retention. It also contains policies that help support the security, stability and resiliency of the Domain Name System. These policies were developed by the ICANN community, and some of them cover

- The Inter-Registrar Transfer Policy
- The Whois Data Reminder Policy
- And the Restored Names Accuracy Policy

Our registrar liaison staff monitors the registrars’ compliance with RAA requirements. They do this through informal resolution of registrant complaints and inter-registrar disputes, and through accreditation reviews each time a registrar’s RAA is renewed.

We have also developed several ways to address potential registrar failure — and this also helps maintain a more stable Domain Name System.

For example, we have a Registrar Data Escrow program that requires registrars to regularly deposit backup registration data with a third party.

And our De-Accredited Registrar Transition Procedure facilitates the timely transfer of registrations from a de-accredited registrar to an accredited registrar.

Also, we have several internal operating processes that help maintain a healthy domain registration environment and prevent disruption to registrants and Internet users if a registrar fails.

For the future, we plan to continue policy development toward enhancing registrar accreditation and data escrow requirements by improving the RAA. We will also continue to develop procedures and processes in the current contractual and policy frameworks to protect registrants and ultimately enhance the security, stability and resiliency of the Domain Name System.

For example, work is under way to —

- Tighten accreditation application procedures

- Establish heightened RAA eligibility requirements and disqualification rules
- And develop procedures to allow registrars to exit the registrar marketplace in a responsible manner.

We also plan to strengthen our future compliance enforcement efforts. This will allow us to terminate a registrar's accreditation where a registrar's actions threaten the security and stability of the Domain Name System.

In the future, we will continue to build a strong registrar community through outreach to share industry best practices — and we will implement new communication channels to help registrars with timely reporting and responding to critical security threats.

Ensuring the stability and security of the Domain Name System and other unique identifiers remains an overarching priority for ICANN. For example we have recently completed a significant upgrade of the “L” root server operated by ICANN, including upgrading all existing anycast instances and adding a new global anycast instance in the Czech Republic last October—the “L” root server can now easily handle over 1 million queries per second. We

will continue to maintain and improve the “L” root server to ensure security and stability in the DNS service over the coming years by —

- Continuing to upgrade network capacity, routers and DNS servers
- Simplifying and increasing the performance of the L-root server architecture
- And deploying improved “L” root server Anycast instances along with greatly enhanced monitoring and management systems.

We also continue to improve the security and resiliency of our operations of the IANA functions through pursuing industry standards in business excellence, information security, and operations, investing in increased capacity and implementing more effective processes.

We continue to work to enhance Internet security on several other fronts. After successfully operating DNSSEC — the Domain Name System Security Extensions — in a root testbed environment for more than two years, we are now working with the Department of Commerce National Telecommunications and Information Administration (NTIA) and VeriSign to ensure that a DNSSEC-signed

DNS root zone will be fully available in 2010. We've already made significant progress toward that end.

A survey of country code operators conducted in 2009, found that 25 percent of the 65 ccTLDs that responded to the survey, had implemented DNSSEC, up from 7 percent in 2007. We also learned that 80 percent of the remaining registries plan to implement DNSSEC in the near future.

8. Conclusion

My friends and colleagues in this cherished community:

I had twenty-five years of experience in Silicon Valley high tech company CEO and investor. I also have about fifteen years of experience in some policy work, but it was primarily environmental policy and about two years in cybersecurity. I have also spent three years networking CEOs for peace and Track II diplomacy work globally.

So I'm actually new to Internet policies and governance. For me, this assignment and this challenge is truly where my life comes

together. Internet governance is the confluence of the many different things that I've touched upon over the past two and one half decades of my career. I feel truly fortunate to be here.

It is a huge privilege to be part of your community. As I learn, I will be enormously grateful for your guidance, your insights and your experience. It is as you know a task that is of critical importance for the future of humanity. I do not want to be self-aggrandizing here – the Internet can be fun too, apparently 1 out of 8 couples in the US met online last year.... But we do have a global responsibility.

Last year was a truly historic year for the ICANN community and for the global Internet community. The Internet came closer than ever before to fulfilling its potential as a global commons for the next billion users and beyond. And our stakeholder community is evolving to mirror the Internet's global reach and diversity.

The next few years will no doubt prove equally pivotal. We are just beginning to understand what ICANN will do now that the Affirmation of Commitments is in place. We do know that ICANN will continue to support the essential work of individual stakeholder constituencies — while working collaboratively with them to ensure

that the Internet of the future remains a transformative technology that empowers people around the globe, spurs innovation, facilitates trade and commerce, and enables the free and unfettered flow of information — and continues to reflect the public interest.

One World.

One Internet.

Everyone connected.

Thank you.

I'll be happy to take questions in the time we have remaining.