The Impacts of the City-TLD Lacuna on Commerce, Innovation, and Access

by Thomas Lowenhaupt, Director, Connecting.nyc Inc.

I am delighted the U.S. Government is taking this fresh look at the Internet. To my mind, next to its contributions to democratic practices, the Internet is America's greatest contribution to the world. But as released from our labs, the Internet was, and remains, unfinished. Security, privacy, an IP number shortage, and an effective governance structure are among today's remaining shortfalls. Each is being addressed through an assortment of independent initiatives and global collaborations, and when complete will present us all with a most powerful medium.

My comments address a lacuna in the Internet's Domain Name System (DNS), domain names for cities. Look as one may, you won't find a .atlanta, .boston, .chicago, .denver, or my home town, .newyork on today's Internet. The release of the DNS without city-TLDs has diminished the utility and operational efficiency of cities in a multitude of ways, resulting in an immense lost opportunity cost. Additionally, the city-TLD lacuna skewed the Internet's development toward a global medium to the detriment of cities. These points are addressed in the following.

… some background …

Cities are amongst mankind's most complex creations, now home to more than ½ of the global population, with demographers projecting that to rise to ¾ by mid-century. And due to factors such as their compact nature, cities play a key role in planning for a sustainable planet. To date, cities have had to make-due with an Internet created for others – for business, for education, for not for profits, for nation-states, etc.

Since April 2001, when my Community Board passed the Internet Empowerment Resolution, my attention has been on the acquisition of a TLD to service the needs of residents and organizations of New York City. (Community Boards are the grassroots governance level in New York City.) In 2006, pursuant to that resolution, I helped form Connecting.nyc Inc., a New York State not-for-profit advocating for the .nyc TLD's acquisition and development in the public interest.

In 2008, in adopting its New TLD Policy, ICANN took note of arguments proferred by a group of advocates from global cities and included cites as entities eligible for TLDs.

But as the ICANN moves closer to issuing city-TLDs, it has become clear that cities have not been adequately prepared with policy and process to facilitate the optimum development of these critical Internet resources.

As 2010 arrived, with several cities independently approaching the task of developing a new-TLD - New York, Paris, Berlin, and Barcelona - no mechanism was in place to facilitate sharing city-TLD development thoughts and operating experiences. In response, on behalf of Connecting.nyc Inc. and in consultation with the Internet Governance Caucus, I proposed a "City-TLDs Governance and Best Practices" workshop for the 2010 IGF in Vilnius. The results of the Vilnius Workshop and one's everyday experiences living in a global city, lead to the conclusion that cities today are ill informed and ill prepared for the unique opportunity the ICANN's New TLD program will enable.

To highlight the need we see for additional planning for city-TLDs, here's something I wrote a few years ago that put the Internet and TLDs into an historic perspective with regard to cities.

> Imagine that in 1983 Vint Cerf had visited a global city like New York, climbed the steps to City Hall and said to Mayor Koch that his associates had begun thinking about an Internet enhancement that would make it easier to find the world's digital resources. And that they were thinking of calling it the Domain Name System (DNS) and using identifiers such as .com, .org and .edu.

> And imagine Mr. Cerf explaining his vision about this new technology's prospect for addressing the multiplicity of city needs and concluding with a plea that the mayor gather the world's smartest minds in New York City – software engineers, economists, anthropologists, governance experts, information architects, police, fire, city planners, transportation experts, etc. – and help detail a desired DNS feature-set, and in the process develop a model that other cities might follow.

> But as we all know, no one knocked on that City Hall door and the DNS was created without considering its impact on cities. And when it escaped from the lab, the technology spread like a virus and changed the world for better and for worse.

Remarkably, with ICANN's impending approval of an Application Guidebook, the 1983 DNS opportunity is again at hand. And with 30 years of DNS experience to draw upon, cities can configure their virgin TLDs to address traditional challenges, advance the role of urban areas in creating a more sustainable planet, etc. But we must issue these TLDs via a thoughtful process that engages expertise and the public in the planning process.

The Vilnius city-TLD workshop identified steps that might be taken to address the opportunity at hand. See the report at http://www.coactivate.org/projects/campaign-for.nyc/vilnius-workshop-report. Some of the thoughts proffered are available later in

this document.

… free flow and innovation …

In terms of the NTIA's Global Flow inquiry, we note that this city-TLD lacuna directly contributes to inefficiencies in intra-city communication and the flow of information between cities. Additionally, this lacuna has resulted in a reduction in innovation of products that would serve the needs of cities and their residents. For example:

1. Think of the prospective visitor to New York looking on the Net for guidance about its resources. Without a city-TLD one can't directly access a resource such as index.newyork, help.newyork, hospital.newyork, or hotels.newyork. Nor can one go to a dedicated search engine such as google.newyork. Today, New York City has $1/10^{th}$ of 1% of the world's population, but when searching for a NYC resource one needs to search through the global database of .com, .org, .net and 200 other TLDs. This inefficient search returns an abundance of inaccuracies with lost opportunities and untoward consequences to the millions seeking good information.

2. Similarly, think of the New York resident looking on the Net for guidance about city resources. Without a city-TLD one can't directly access a resource such as schools.newyork, help.newyork, hospital.newyork, police.newyork, or sports.newyork. Nor can one go to a dedicated search engine such as google.newyork. Today's inefficient search tools return an abundance of inaccuracies with lost opportunities and untold consequences to the millions seeking good information.

3. Think of the young entrepreneur or local business operator looking for a good domain name for a business developing a service for a city or portion thereof. (Good domain names are short, descriptive, and memorable). There are no good domain names to be had and the entrepreneur is forced to select from global TLDs, and is thrown into the global pool, unable to differentiate one's product by location. Further, think of the distraction when the global reach of the TLD is constantly before one, "Shall I focus on the local or go global?" "Shall I focus on the local or go global?"

4. Think of the city official in Miami looking for a domain name to market an early tax payment incentive program. Forced into that global pool, one might waste a good deal of time locating a domain name for that incentive program, and never find one that would be nearly as good as one available in the .miami TLD.

5. Think of the multitude of local advocates, say for a park improvement, unable to

locate a findable name, thrust into that global pool, and lost to the neighborhood.

There's another area where the city-TLD lacuna has hindered information flow and damaged innovation which arises from the global nature of the Net. As exampled in the next paragraph, this might be seen as having misdirected a generation of developers by leading them to see the Net as first and foremost a global medium: Why go local when I'm already global?

The one example of this lost opportunity I'm most familiar with is a New York not-for-profit, Open Plans. Over the last 5 years and I've consistently seen it expand from local to the national in its program development efforts. While this might be a regular occurrence in "The Empire State," this is another area where the city-TLD lacuna has surely limited focused local development.

A third area where the city-TLD lacuna has damaged information flow and innovation is in the development of applications for cities. Without a standard structure for cities, the development of cross-city apps. requires more costly marketing and individualized code development. And without a ready market for city apps., developers invest their innovative efforts elsewhere, leaving cities to plod along on in their inefficient ways.

… in conclusion …

The city-TLD lacuna was understandable in the early 1980s when the DNS was created. Then, suburbia was seen as the future of our nation with cities aging infrastructure, soon to be replaced. Today the ICANN is on the verge of enabling cities to have TLDs and we are aware of the vital role cities will play in a multitude of areas, including the creation of a sustainable planet. However, neither it, the NTIA, nor any other entity has prepared cities for this forthcoming change.

In September 2010, moving toward a development map for city-TLDs, the City-TLD Governance and Best Practices workshop was organized at the Internet Governance Forum in Vilnius. Participants proffered the following suggestions:

1. Proponents should prepare a preliminary definition of public interest city-TLDs. (A draft of this document is printed below.)

2. An organization of proponents of public interest city-TLDs should be formed. That the city-TLD advocacy organization create city-to-city processes and communication channels to share best practices. That amongst the issues it should explore is existing trademarking of city names by product marketers.

3. Literature should be prepared to inform mayors of the world of the utility of city-TLDs, with this information distributed through their best practices organizations.

4. Via petition and other mechanisms, a plan for the thoughtful and rapid approval of city-TLDs should be presented to the ICANN. Such petition to the ICANN should note that the delivery of city government services, the quality of city life, and the sustainability of cities will be improved by the thoughtful issuance and development of city-TLDs.

5. The petition should note the unsuitability of the proposed filing fees, technology requirements, and registry/registrar separation for city-TLDs as proposed in the Draft Application Guidebook, especially for less developed areas.

6. The petition should also note that the acceptance of city-TLDs as a distinct category of TLDs, governed under the existing laws of nation-states; governed by responsible entities, and unencumbered by traditional concerns about trademark stress will free the ICANN to focus on more problematic TLD categories.

7. That nation-states be contacted through the members of the ICANN's Government Advisory Committee (GAC) and other channels and requested to assemble a list of cities with an existing interest in public interest city-TLDs.

8. That a list of cities with public interest TLD plans be submitted to ICANN.

9. That a dedicated unit within ICANN be created to process public interest city-TLD applications.

10. That cities on such a list be processed and approved in an expedited manner.

Today's placeless Net damages the economy, education, political, social, civic and cultural life our cities. The opportunity is at hand for the U.S. to lead the way to remedy this fault and facilitate the thoughtful introduction of TLDs in U.S. cities. At the same time it should take note that the action that limited cities in the U.S. had a similar impact on cities globally, and that cities in less developed countries could similarly benefit from city-TLDs as the Net is broadly introduced into their territories.

Finally, I urge peeking outside the silo of telecom policy and toward urban affairs. What role does the Net have in housing, education, health, security? How might a city TLD help integrate planning and service delivery in these various areas? Huge economic savings and social benefit will arrive with the thoughtful introduction of city-TLDs with innovation enabled by thoughtful planning.

Sincerely,

Thomas Lowenhaupt

Thomas Lowenhaupt, Founder & Chair
Connecting.nyc Inc.

tom@connectingnyc.org
Jackson Hts., NYC 11372
718 639 4222
[Web](#) [Wiki](#) [Blog](#)

Draft definition of Public Interest City-TLDs

For Discussion, as of November 4, 2010

Cities are frequently ancient and always complex institutions that provide basic food, housing, health, safety, and cultural needs for more than half of humankind. They can best serve their residents and organizations if they have access to the most advanced technology. Until now cities have been prohibited from effectively using good Internet Domain Names, requiring residents and organizations to use national or global TLDs for local communication. The ICANN's 2008 new TLD policy opened the door for the issuance of city-TLDs.

The development of city-TLDs as public interest resources will be transformational, providing cities with a Critical Internet Resource, and empowering them to develop their digital infrastructure to the direct benefit of residents and organizations.

The utility of a list of cities seeking the development of public interest TLDs was expressed at the recent IGF Vilnius workshop on City-TLD Governance and Best Practices, where the ICANN's chair suggested that a cities list would facilitate ICANN's operation. The creation of a definition of a Public Interest City-TLD is a first step in developing such a list, with outreach to identify interested cities a next step.

Definition: Public Interest city-TLDs are those which serve the long term interests of city residents and organizations. They serve those interests when:

- they use the name-space to facilitate geographic awareness enabling residents and organizations to readily locate one another to optimize the exchange of services, products, and ideas and revivify the traditional networking role of cities;

- they facilitate the availability of civic collaboration tools – calendars, maps, mail lists, polling, and other organizing tools – making them available for civic benefit on a public access basis;

- they reserve and advocate for the use of domain names for unbiased portals for government, civic, and development use;

- they commit a significant portion of their resources to eradicating digital divides by facilitating civic collaboration, education, and training;

- they allocate names for the civic benefit of geographic sub areas (neighborhoods), civic activities, and public issue resolution;

- they provide names in support of all ethnic populations;

- they strive for name allocation practices that will maintain a flow of good domain names for the life of the TLD;

- they establish allocation policies that avoid pitfalls such as hoarding and typo-squatting using pricing and nexus requirements.

Additionally, public interest city-TLDs are those that:

- are operated in close cooperation with the extant local institutions, to provide a secure experience suitable for residents, civic, cultural and business organizations, and visitors;

- exchange experiences and best practices with other cities operating TLDs in the public interest;

- operate within a broad "urbanismo" framework that considers their geographic, economic, political, social, and cultural impact on their environment;

- commit to develop appropriate channels for inter-city sharing of vital Internet enabled city resources in areas such as education, health, safety, and sanitation;

- commit to working in collaboration with relevant local and national public authorities;

- commit to engaging all segments of the population in the management of their TLDs;

- commit to the allocation of name spaces that promote sustainable cities;

- commit to the use of graphic design practices that facilitate cross cultural understanding;

- commit to support their city's branding and external promotion activities;

- commit to engage all segments of the population and the technical operators of the TLD in a collaborative governance structure.

End.