8 October 2012

Dear Drafting Group members,

We have carefully reviewed the proposals submitted by the drafting group – the set developed in the Brussels meeting and then the set most recently received. It is evident by reading them and through our face-to-face discussions that considerable work and thought went into these. In particular, the Trademark Claims model has evolved significantly from the time of the Brussels meeting, to the one most recently presented – and we have taken time to study that. The work has been studied in depth at all layers of our organization, and discussed among our technical staff, consultants, executive team (including the CEO) and, informally, with Board members. We offer our comments below.

Implementing the Clearinghouse functionality to meet the intended goals requires ICANN to balance the goals of many stakeholders and to minimize the aggregate cost to the community. A number of concerns have been raised by the drafting group with the draft implementation model published previously by ICANN on 13 April 2012. We have reviewed the list of concerns and made revisions (revised draft implementation model published on 28 June 2012) to mitigate some of these issues. We understand that issues remain for registry operators and we want to work through those issues.

We see merit in all aspects of the drafting group work and we are ready to discuss how to address the concerns raised. Based on reviews performed so far, we believe that the recommendation to use a Signed Mark Data implementation in the sunrise period is feasible pending review by intellectual property stakeholders. We will continue to consider and adopt drafting group recommendations; however, we wish to identify a key concern with one aspect of the alternative Trademark Claims proposal.

As expressed previously, a significant difficulty with the proposed Trademark Claims implementation is the inclusion of a dependency on a live query system. It is ICANN’s recommendation to not adopt a model that features a live query system. Although we understand that this is feasible technically, it is our view that the Claims process should be designed such that the Clearinghouse does not sit in the critical path of domain name registration in real time.

The reasons for this recommendation include:

- A live query system creates a single point of failure in real time, presenting a new type of risk to the DNS, which provides robustness through its distributed architecture. The approach in the alternative proposal creates a new real-time
point of failure that could simultaneously disrupt the operation of registries operating in the Claims period, should there be an operational issue with the lookup system.\footnote{The introduction of the Trademark Clearinghouse can be characterized as the introduction of a single point of failure: the domain industry will be dependent on data from the Clearinghouse to implement the mandatory rights protection mechanisms. However, the way failures can occur and what impact those failures would have on the community are significantly different between the Draft Implementation Model and the Alternative Proposal. An outage of the Clearinghouse distribution does not necessarily have immediate impact to any registry activity in the Draft Implementation Model.} This can immediately stop domain name registrations; a failure of this data source disrupts the rights protection mechanism and stops some percentage of domain name registrations.

- Though requirements for resiliency to guard against such failures will be in place, the risk and impact of a failure incident in a centralized live query system are significant and have an impact on the reputation and, therefore, the effectiveness of the rights protection mechanisms supported by the Trademark Clearinghouse. Such an event could have reputational implications for the Clearinghouse and the New gTLD Program.

- Additional uses of the Clearinghouse are contemplated (for example, watch services and extended Claims periods). It is foreseeable that the live query system might remain on the critical path to domain name registration for the life of a registry. Once in that position, it will be difficult or impossible to extricate the Clearinghouse from that. Alternatively, the Clearinghouse should not be in the position of impeding the evolution of services or the DNS growth due to its position in registering domain names.

- If we can separate the live-query system from the discussion, we think we can make rapid headway on remaining issues. Each of the other issues seems to depend on resolution of whether or how the live-query system would operate. (See the discussion at the end of the paper.)

The following considerations were secondary to the above, but were also factors weighed in the analysis of this issue:

- **Adaptability.** The goal is to provide a system that can be flexible to accommodate various registry business models, systems, and practices. The introduction of a live query system would reduce the control and accountability that a registry has over its own operations. A model that allows and encourages registries to optimize the performance of the databases and functions of the claims service to best suit their specific business needs is most desirable. Any
TLD should be able to implement according to its needs and be independently responsible for its specific performance requirements.

- **Cost.** ICANN’s objective is to provide the Clearinghouse services cost-effectively to the community. We understand the drafting group goal of minimizing the total cost of the system to all participants and support that goal. Because of the engineering requirements of a centralized query system that is a critical part of the domain name registration process, the overall cost of such a system is projected to be high due to the high availability service-level requirements and the need to provide a fast response time globally. In any case, the central issues for us are described above; we just want to point out that it isn’t assured that there are significant cost savings in the live-query model.

- **Schedule impact.** Developing an infrastructure capable of delivering complex, high volume real-time performance on a scale capable of supporting simultaneous claims periods in a limited time frame is another significant risk.

- **Synchronization issues.** A composite data model consisting of both distributed cache and live query data sources could introduce new failure modes caused by synchronization issues. Note that 100% live query and 100% cache solutions are not subject to that issue because the data available in either is always the best available to the answering entity and will be internally consistent. In a composite approach, the local cache will always be some seconds behind the live data source being queried: this will result in possible desynchronization errors with a widespread impact when spread through the registration process.

As stated above, eliminating the element of live query systems from the implementation discussion will serve to clarify the remaining discussions, and this is the intention of this letter. We believe additional improvements can be made to the model, and collaboration with the drafting group and others will be helpful around topics such as:

- The use of encryption, and an appropriate framework to address data access and misuse concerns.

- Capabilities to address registry-specific sunrise requirements.

- Implementation of the Claims process for various types of startup mechanisms (e.g., auctions, first come-first served).

- Uses of the Clearinghouse database for a registry provider across multiple TLDs.

With the discussion re-focused around a system that does not include a live query element, we are prepared to move forward with this collaboration and propose the following next steps:
The working session scheduled during the Toronto meeting in relation to the Sunrise and Trademark Claims implementation can be targeted toward a broad stakeholder audience, and the agenda designed to focus on these or other topics proposed by the group in light of a requirement to avoid putting the Clearinghouse in the path of domain name registration.

Depending on the outcomes of this session, one or two additional working sessions could be scheduled following the meeting, with the goal to conclude these discussions by mid-November to support an adopted set of requirements enabling implementation work by all parties to move forward.

Given the importance of the Clearinghouse functionality and the fact that it is a prerequisite to the launch of any new gTLD registries, ICANN believes that architectural questions related to the Clearinghouse must be resolved as soon as possible. ICANN will continue to support additional discussions on these topics going forward.

Sincerely,

ICANN