ICANN org Submission on the Proposal for a Regulation of the European Parliament and of the Council on a Single Market for Digital Services (Digital Services Act) and Amending Directive 2000/31/EC (COM/2020/825 final; 2020/0361 (COD)) Issued by the EU Commission.

Executive Summary

The Internet Corporation for Assigned Names and Numbers ("ICANN") is a not-for-profit public-benefit corporation that, on behalf of the Internet community, among other functions, oversees the technical coordination of the top-most level of the Internet's Domain Name System ("DNS"), and especially its security, stability, and resiliency.

ICANN, through its multistakeholder governance model, brings together governments, non-commercial and commercial stakeholder groups, civil society, and individuals. Each group represents a different interest on the Internet. Collectively, they make up the ICANN community, which develops policies for the DNS through a consensus-driven bottom-up process.

The ICANN organization (ICANN org) submits this comment on the "Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC" (COM/2020/825 final; 2020/0361 (COD)) ("DSA"), with the aim to highlight the actual roles of DNS services and the need to match the obligations of DNS service providers to these roles, taking into account the technical conditions and the impact on the DNS ecosystem. Providers of DNS services in their capacity as providers of underlying Internet infrastructure should be enabled to provide these services without suffering from chilling effects caused by uncertain and possibly excessive liability regimes.

The proposed DSA, in its current form, is not sufficiently specific with regard to the scope of applicability to "DNS services." It is also potentially over-broad, taking into account the actual role that these services play as online intermediary services.

1. <u>Need for Clarification of DSA's General Scope of Application for Providers of DNS Services</u>

ICANN org welcomes the publication of the DSA in a regulatory challenging environment of rapidly and widely developing digital services, to tackle associated problems and adverse consequences for society and economy and the protection of citizens' fundamental rights.

However, in ICANN org's view, the DSA is not clear regarding its scope of application to providers of DNS services. In contrast to the current NIS Directive as well as to the proposed

NIS2 Directive,[1] no clear definition of "DNS services" or "DNS service providers" is given in the proposed DSA. This raises a number of questions as to its general scope of application and its rationale. It is possible that the DSA could potentially apply to ICANN's operations, all DNS registries and registrars (regardless of impact on the DNS infrastructure), and other actors in the domain name ecosystem. These entities could constitute an extremely broad spectrum of actors. The DSA is not clear regarding how far it is intended to reach across this spectrum. In many cases, these entities may have little or no practical control over the content that flows through their services and, as such, would seem to fall outside the intended scope of this proposed regulation.

ICANN org observes that DNS services are only mentioned exemplarily in recital 27 to the DSA. The recital states that DNS services as "intermediary services" should in principle be included in the scope of application, but only "to the extent" that they qualify as one of the three "intermediary services" set out in Article 2(f) of the DSA. No further clarification that could help classify DNS services within the categories of "intermediary services" is given at the current draft stage.

Although recital 27 may therefore indicate that DNS services are subject to the DSA, covered by the umbrella term of "intermediary services," ICANN org is concerned that an in-depth assessment of applicability might be necessary for each individual DNS service. This would lead to a certain degree of legal uncertainty, which is precisely what this clarification was originally intended to prevent. Such interpretation would need to take the structural and technical peculiarities into account, as each individual DNS service would still need to qualify as one of the three online "intermediary services." This classification is, however, not a matter of course, especially in technical terms.

In this context, ICANN org also notes that recital 27 to the DSA is drafted in such a way that DNS services are only covered "to the extent that" they provide mere conduit, caching, or hosting services, while associated services would possibly not benefit from the DSA's liability exemptions. This legislative approach is further watered down because, according to recital 27, DNS services are only included "as the case may be." For example, as currently drafted, it is uncertain whether the DSA would exempt a registry or registrar from liability for the contents of a website or an email transmitted by a third party.

Thus, it is unclear not only which DNS services are targeted but also whether they would indeed fall under the general scope of application of the DSA. For the sake of providing certainty for entities in the DNS ecosystem, ICANN org urges clarifications that make clear which DNS services, specifically, are intended to be covered by the DSA's general scope of application.

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[1] *See*, recital 15 and Article 4(13) and (14) of the proposed NIS2 Directive on measures for a high common level of cybersecurity across the Union, repealing Directive (EU) 2016/1148 COM/2020/823 final, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020PC0823.

From a technical perspective the term "DNS services" is ambiguous. By way of background, the DNS can be seen as being composed of a unique set of names (the "namespace"), a protocol specification by which software uses the Internet connectivity to look up (i.e. to resolve) names, and an infrastructure that is used to publish and resolve the names.

The namespace is implemented in a distributed database across hundreds of thousands of independently owned and operated machines all over the Internet. The creation, modification, and deletion of names in the namespace is performed by entities known as registries on behalf of individuals or legal persons who obtain the exclusive right to use a domain name, known as registrants. In many cases, entities known as registrars act as an agent on behalf of the registrant and interact with the registry. In these situations, the registry can be seen as the wholesaler, with the registrar acting as a retailer acting as the agent for the registrant.

The registry is responsible for the maintenance of its subset of the namespace. For example, the top-level domain ".ORG" is maintained by a US non-profit organization, "Public Internet Registry" (PIR). All second-level domains of .ORG (e.g., ICANN.ORG) are listed in a database for which PIR is responsible. PIR has authorized a number of registrars (e.g., GoDaddy, NameCheap, etc.) to sell those second-level domains. It is the responsibility of the registrar to make modifications to the registry's database entries on the registrant's behalf. Some registrars also offer separate hosting services, and these services are akin to that provided by other traditional service provider hosts.

The namespace databases are implemented in software on machines called "authoritative name servers." The authoritative name server software is non-specialized; it can be run on essentially any computer. In order to improve resilience and performance, multiple authoritative name servers publish the same namespace. Typically, one authoritative name server is designated as "primary" (where the database is modified) and the others are designated "secondaries." The secondary authoritative name servers copy the subset of the namespace they publish and make it available with no modification.

Finally, there is software known as "recursive resolvers" that act as an agent on behalf of end users to look up names published in the namespace. Recursive resolvers come pre-configured with a set of 26 IP addresses (13 IPv4 and 13 IPv6 addresses) that identify the Internet's root name servers. Root name servers are authoritative name servers that publish the list of all top-level domains. When an end user attempts a connection, such as by typing "www.icann.org" into their web browser, the application they are using will send a lookup request to a pre-configured recursive resolver (the selection of the recursive resolver is typically done when the end user starts up their machine). The recursive resolver will then query the various authoritative servers, starting at the root name servers, then the top-level domain name servers, then the second-level domain name servers, etc., until the authoritative name server for the full domain name being looked up is queried and returns the information originally requested by the end user. The recursive resolver then returns the answer (i.e. the

full IP address) back to the end user's application, which can then initiate the communication with the website (or email server or other Internet service as appropriate).

With this understanding, the criticality of the question of what the DSA is intended to cover becomes clear. In the case of registries, they provide the service of modifying DNS data at the request of registrants intermediated (in many cases) by registrars. Nonetheless, the current simplistic approach of the DSA raises a number of concerns. It is unclear whether registries are in scope of the DSA. Similarly, doubts remain whether registrars are "mere conduits," since they pass DNS requests from registrants to the registries, but no content-related data requested by the user. Furthermore, the question as to whether authoritative name server operators offer "hosting" services persists, as well as whether authoritative name server operators, if they are secondaries, would still be covered by the DSA. The proposal also does not provide any guidance for network issues or similar scenarios, leading to the promotion of a secondary authoritative name server operator to primary, and the resulting legal consequences for the operator of the secondary. Finally, the fact that some authoritative name server operators (e.g., the root name server operators) do not accept remuneration needs to be duly reflected in the proposed DSA.

In addition to the fact that the DSA does not specify which DNS services are under scope, the aforementioned services do not clearly fall in one of the three intermediary services categories of the DSA (i.e., "mere conduit", "caching" and "hosting").

2. <u>Need to Establish Legal Certainty for Application of the DSA Liability Exemptions</u>

From ICANN org's point of view, the question arises as explained above as to which one, if any, of the three "intermediary services" categories could correspond to the activities of different DNS services operators with regard to "DNS services" referred to in recital 27 to the DSA. ICANN org believes that a reliable assignment to one of the three "intermediary services" is particularly important to determine the applicability of the liability exemptions set out in Articles 3-5 DSA.

ICANN org is concerned that the rather broad concept of "DNS services" could pose the risk of encountering different interpretations by courts and authorities and might result in legal fragmentation. In such a situation, it would be even more difficult to achieve a coherent general technical and operational understanding. This is, however, key to the unhindered operation in the Internet's backbone area, which does not include the provision of, or contribution to, online content.

Furthermore, ICANN org is concerned about a possible discrepancy between the DSA's general scope of application and its liability exemptions. Irrespective of the DSA's scope of application set out in Article 1(3) DSA, which is linked solely to "intermediary services," the additional requirement of an "information society service" pursuant to Article 2(a) DSA in

conjunction with other EU legal acts[2] must be met.[3] Put another way, the liability exemptions under Articles 3 to 5 of the DSA seem to require that the relevant service not only qualify as one of the "intermediary services," but also simultaneously as an "information society service."

Such service is also defined in recital 5 to the proposed DSA as "any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services." Although DNS queries are usually free of charge, this condition could presumably be satisfied even if the service recipient is not at the same time paying for it, as derived from case law of the Court of Justice of the European Union, and may include services providing access to the Internet or to a communication network and hosting services.[4] Nonetheless, ICANN org is concerned that DNS service providers could potentially be classified solely as "intermediary services" within the general scope of application of the DSA, while not benefitting from liability exemptions, since they may not always clearly fulfill all aspects of the definition of "information society services."

In this context, ICANN org also observed that recital 5 (and also recital 1) could indicate that all intermediary services shall constitute "information society services" as a narrower term. Nevertheless, this understanding is not backed by the current wording of Article 1(1) and (3) of the DSA, which includes only intermediary services into the DSA's scope of application, while repeatedly referring to the different concept of "information society services" later in the context of liability exemptions. Based on the rather broad and general definition of the term "information society service," which is linked, inter alia, to the "remuneration" criterion, one may conclude that every such service could constitute an "intermediary service" as a matter of principle, whereas not every "intermediary service" would necessarily qualify as an "information society service" (insofar as it may not always fulfill said criterion). Moreover, even recital 5 itself imposes the restriction to only "certain information society services" without providing any further detail in that regard.

ICANN org believes that further legal qualification beyond a non-binding recital would help to ensure that DNS services that fall into the general application of the DSA will also clearly benefit from liability exemptions for such providers set out in the DSA and to ensure reliable connectivity on the Internet for end users.

While the DSA steps up to the technological reality in recital 27, it does not alter the legacy classification of providers of "intermediary services" and requires, from ICANN org's

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[2] *See*, by way of example, Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on "Information Society Services." This term was introduced first by Directive 98/48/EC of the European Parliament and of the Council of 20 July 1998 amending Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations.

[3] Article 2 (a) DSA reads: "*'Information society service' refers to services within the meaning of Article 1(1) lit. b of Directive (EU) 2015/1535.*"

[4] *See*, ¶ 41 of Judgment dated September 15, 2016, C-484/14 (*McFadden*); ¶ 30 of Judgment dated September 11, 2014, C-291/13 (*Papasavvas*); ¶ 198 of Judgment dated October 6, 2020, C-511/18, C-512/18 and C-520/18 (*La Quadrature du Net et al.*).

point of view, much-needed supplementation in this regard. Existing uncertainty, which follows from the reference back to EU legal acts already in force, is in particular relevant for the question of whether DNS services can be regarded as "information society services," and is not convincingly addressed by the proposed DSA. Nonetheless, it is key for assessing the scope of liability exemptions for DNS service providers to prevent chilling effects to the freedom of information and expression and other fundamental rights. As a consequence, ICANN org believes that at the current stage, merely mentioning DNS services in recital 27 to the DSA does not provide adequate legal certainty.

For the reasons stated above, ICANN org suggests that the liability exemptions be amended or at least clarified. Article 3 to 5 of the DSA should thus be rephrased more comprehensively to ensure that the intention of recital 27 will in fact be achieved, (i.e., exempt DNS service providers from liability for information over which they have the least control in the overall flow of information).

3. Closing Remarks

The concerns raised in this comment are fundamental to effectively maintain and provide backbone DNS services with sufficient legal certainty, while further strengthening the freedom of information and expression as well as a number of other fundamental rights. We would therefore appreciate if the above considerations were taken into account.

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