# IMRS Singapore Cluster Connectivity RFP

Request for Proposal

23 December 2019

## 1 Introduction

#### 1.1 About this Document

The Internet Corporation for Assigned Names and Numbers ("ICANN") is seeking one or more ISPs to provide connectivity in Singapore for our global network infrastructure.

The services are intended to augment the services provided by the ICANN DNS Engineering Department for the ICANN Manage Root Server (IMRS) in the Asia region. For more information on the IMRS project, please visit: <a href="http://www.dns.icann.org/imrs/">http://www.dns.icann.org/imrs/</a>

Indications of interest are to be received by emailing <a href="MRSCluster.Sing.NWConnectivity-RFP@icann.org">MRSCluster.Sing.NWConnectivity-RFP@icann.org</a>. Proposals should be electronically submitted by 23:59 UTC on 31 January 2020 using ICANN's sourcing tool, access to which may be requested via the same email address as above.

## 1.2 Overview of the Internet Corporation for Assigned Names and Numbers (ICANN)

The Internet Corporation for Assigned Names and Numbers' (ICANN) mission is to ensure the stable and secure operation of the Internet's unique identifier systems. To reach another person on the Internet, you have to type an address into your computer a name or a number. That address has to be unique, so computers know where to find each other. ICANN helps coordinate and support these unique identifiers across the world.

ICANN promotes competition and develops policy on the Internet's unique identifiers. ICANN has introduced over 1200 new generic top-level domains (gTLDs), each of which is operated by a Registry. In addition, as a function of ICANN's responsibility, it accredits domain name Registrars, who facilitate the registration of Internet domain names for individuals and organizations (i.e. Registrants). Currently, there are approximately 3,000 ICANN-accredited Registrars.

See www.icann.org for more information.

## 2 Scope

## 2.1 Project Objective

ICANN is seeking a qualified Internet service providers (ISPs) to bid on the delivery of Internet transit to a new IMRS Cluster to be located in Singapore.

## 2.2 Background

As part of the service provided to the internet community, ICANN operates one of the 13 root servers of the Internet, the ICANN Manage Root server (IMRS) or also known as "L.ROOT-SERVERS.NET".

The ICANN Managed Root Server (IMRS) DNS system operates at

- IPv4 address 199.7.83.42 from the ranges 199.7.83.0/24 and 199.7.82.0/23
- IPv6 address 2001:500:9f::42 from the ranges 2001:500:9f::/48 and 2001:500:9e::/47
- All these prefix ranges are announced from AS20144.

The ICANN organization has established the need to continue to expand the ICANN Managed Root Server (IMRS) by installing a cluster in Singapore, resulting in increased root server capacity for the Asian region and resulting in increased resiliency of not just the IMRS, but the entire Root Server System.

## 2.3 Scope of Work

#### Service summary:

- The ISP will provide a 100Gb (100 Gigabit Ethernet) full duplex, fiber connection, utilizing standard 100G-LR4 optics.
- The service provided be of burstable nature, with a commit of 10% of the port speed, burstable to full port speed.
- The ISP will provide native IPv4 and IPv6 connectivity, unfiltered.
- The ISP will allow the IMRS BGP announcements
- The ISP will provide full view of the IPv4 and IPv6 Routing Table
- The ISP will provide an English speaking 24x7x365 NOC contact details with information for problem resolution and escalation.
- The ISP will maintain a web portal to submit trouble tickets, change requests, review billing information, and related requests.
- Provider must maintain a portal with BGP Communities it supports for client use for routing engineering as per documented RFC standards.
- Agree to all the assumptions listed on the pricing workbook file

#### Connection Requirements:

- The ISP will provide one 100Gbps ethernet port and LOA. ICANN will be responsible for the cross connect fees to connect to the ISP.
- ICANN has yet to determine the co-location to be utilize, as such we request a list of all the full POPs the ISP has available in Singapore at carrier neutral locations, including the addresses, where they are able to provide the service.

#### ISP Point of Presence requirement:

 The ISP must run a fully redundant PoP; redundant uplink fibers and equipment on-site. For this the ISP will need to provide supporting documentation of the sites, including network diagrams, if requested.

#### Bandwidth Requirements:

• The ISP must be able to provide bursting capacity to the full 100Gbps speed. For this the ISP will need to provide supporting documentation of the sites.

#### Service Availability:

 The ISP will guarantee network availability of 99.999% for a given month, excluding scheduled maintenance. Scheduled maintenance is downtime for which the ISP will provide ICANN seven (7) business days advance written notice. In the event of any unscheduled downtime, ICANN and the ISP will jointly determine the cause of the downtime. If such downtime is in excess of 00.01% for a given month, excluding scheduled maintenance, ISP shall make reasonable and appropriate accommodations to ICANN.

#### Notifications Requirements:

 The ISP will promptly notify ICANN as soon as reasonably possible of all outage events via email to designated ICANN contacts. Such notifications will indicate the nature of the problem, the actions taken to remedy current problems, and measures implemented to avoid similar outages and problems of a similar nature in the future.

#### Contracting Requirements:

- ICANN is looking for a 1or 2 year term contract; that will go into month-to-month thereafter.
- Contracting will be executed with the ISPs paper. Resellers can participate in the process but offers will be presented on official service provider paper.

#### Optional Services:

- Provide a 100Mb (100-megabit Ethernet) full duplex, UTP connection or 1G MMF/SMF (SX or LX)
  - The service provided be of burstable nature, with a commit of 10mbps burstable to 100mbps.
  - The ISP will provide native IPv4, unfiltered.
  - The ISP will provide /26 routable IPv4 address space
- Provide one ethernet port and LOA. ICANN will be responsible for the cross connect fees to connect to the ISP.

## 3 High Level Selection Criteria

The decision to select a provider as an outcome of this RFP will be based on, but not limited to, the following selection criteria:

- 1. Regional (Singapore and nearby countries, and Asia) reach.
- 2. ISP PoP site design redundancy level and capacity.
- 3. Price
- 4. Customer References to be used only as a tiebreaker

## 4 Proposal Components

Proposals should include the following components at a minimum:

- A proposal document outlining the following:
  - Company background
    - If a reseller is presenting the proposal; it most include company background information for the service provider.
  - Documentation of the services included on the proposal
  - Documentation for any other services that might be related or provide a value added.
  - Build out timeline for the services.
  - Applicable SLA documents
  - Examples of conducting similar tasks
- Completed Pricing Workbook
- Customer References (use the template attached in RFP)
- Signed Conflict of Interest Disclosure Form (use the template attached in RFP)
- A draft of an order form or contract that your firm typically uses.
- Additional attachments as necessary.

## **5 Project Timeline**

The following dates have been established as milestones for this RFP. ICANN reserves the right to modify or change this timeline at any time as necessary.

Activity	Dates
RFP published	23 December 2019
Participants to indicate interest in submitting RFP	10 January by 23:59 UTC
Participants submit any questions to ICANN	14 January by 23:59 UTC
ICANN responds to participant questions	17 January
Participant RFP proposals due by	31 January by 23:59 UTC
Evaluation and selection of the vendor	14 February

### 6 Terms and Conditions

#### **General Terms and Conditions**

- 1. Submission of a proposal shall constitute Respondent's acknowledgment and acceptance of all the specifications, requirements and terms and conditions in this RFP.
- 2. All costs of preparing and submitting its proposal, responding to or providing any other assistance to ICANN in connection with this RFP will be borne by the Respondent.
- All submitted proposals including any supporting materials or documentation will become
  the property of ICANN. If Respondent's proposal contains any proprietary information
  that should not be disclosed or used by ICANN other than for the purposes of evaluating
  the proposal, that information should be marked with appropriate confidentiality
  markings.

#### **Discrepancies, Omissions and Additional Information**

- 1. Respondent is responsible for examining this RFP and all addenda. Failure to do so will be at the sole risk of Respondent. Should Respondent find discrepancies, omissions, unclear or ambiguous intent or meaning, or should any question arise concerning this RFP, Respondent must notify ICANN of such findings immediately in writing via e-mail no later than ten (10) days prior to the deadline for bid submissions. Should such matters remain unresolved by ICANN, in writing, prior to Respondent's preparation of its proposal, such matters must be addressed in Respondent's proposal.
- 2. ICANN is not responsible for oral statements made by its employees, agents, or representatives concerning this RFP. If Respondent requires additional information, Respondent must request that the issuer of this RFP furnish such information in writing.
- 3. A Respondent's proposal is presumed to represent its best efforts to respond to the RFP. Any significant inconsistency, if unexplained, raises a fundamental issue of the Respondent's understanding of the nature and scope of the work required and of its ability to perform the contract as proposed and may be cause for rejection of the proposal. The burden of proof as to cost credibility rests with the Respondent.
- 4. If necessary, supplemental information to this RFP will be provided to all prospective Respondents receiving this RFP. All supplemental information issued by ICANN will form part of this RFP. ICANN is not responsible for any failure by prospective Respondents to receive supplemental information.

#### **Assessment and Award**

ICANN reserves the right, without penalty and at its discretion, to accept or reject any
proposal, withdraw this RFP, make no award, to waive or permit the correction of any
informality or irregularity and to disregard any non-conforming or conditional proposal.

- ICANN may request a Respondent to provide further information or documentation to support Respondent's proposal and its ability to provide the products and/or services contemplated by this RFP.
- 3. ICANN is not obliged to accept the lowest priced proposal. Price is only one of the determining factors for the successful award.
- 4. ICANN will assess proposals based on compliant responses to the requirements set out in this RFP, responses to questions related to those requirements, any further issued clarifications (if any) and consideration of any other issues or evidence relevant to the Respondent's ability to successfully provide and implement the products and/or services contemplated by this RFP and in the best interests of ICANN.
- 5. ICANN reserves the right to enter into contractual negotiations and if necessary, modify any terms and conditions of a final contract with the Respondent whose proposal offers the best value to ICANN.