

New gTLD Program: Benchmarking of Registry Operations

February 2010

Executive Summary

An exercise to gather industry data on registry operations was undertaken as part of the ongoing implementation of the evaluation criteria and procedures for the New gTLD Program. This took the form of a study including analysis of public industry information and data collected through a survey of existing registry operators. The study was performed by KPMG on ICANN's behalf from June through September 2009, with the objective of identifying benchmarks based on registry financial and operational data, as a reference point for the review of new gTLD applications.

The survey was comprised of 7 gTLD and 6 ccTLD participants, representing 10 countries. While the survey was not designed to contain a statistically significant sample, it does represent a cross-section of operators in terms of size, outsourcing, business models, and time in operation.

Some of the findings include:

- Respondents overwhelmingly tended to favor open source database and server operating systems.
- The survey highlighted that the technical footprint is generally less difficult to correctly plan and project than estimating the size of the registry, which historically has proven to be more difficult for operators. This supports the current emphasis on continuity planning and registrant protection in the evaluation criteria.
- For the new gTLDs for which data was publicly available through the ICANN website, actual level of registrations has been significantly lower than original expectations. This indicates that the evaluation process should take into account the degree of thought and preparation evidenced in an application, and the flexibility of the applicant to increase or decrease deployment of resources to manage differences from projected targets, more so than the likelihood of achieving a planned size.
- The growth curve for all TLDs introduced since 2001 has varied significantly across both pace of growth and absolute growth. While recognizing that there is no typical growth pattern, there seems to be a strong correlation between their relative first month registration volumes and the ultimate peak volume for the most recently observed peak. This could indicate that the evaluation process should take into account the applicant's mitigation of up-front risk and the flexibility to meet cash needs in the start-up phases of operation.
- The majority of respondents indicated that they had greater levels of reserve funds today than upon commencement of operations, when 90% responded they had less than one year of capital expenses and operating costs held in reserve.
- Although there are a variety of viable operating models, large registries were able to convert their larger scale into a significant cost advantage over smaller registries. This was evident across multiple cost dimensions. As a result of the sharp contrast in cost effectiveness, survey

respondents appeared to cluster around two distinct operating models: large registries that tended to run their operations in-house, and small registries that outsourced significant portions of their operations. Many of the benchmarked data points collected showed significant contrast along these two operating models.

This study will be provided as a reference for the independent technical and financial evaluators as part of the onboarding process. The benchmark data is to be used as a common reference point rather than a scoring metric. For example, an application that deviated widely from the industry norm could indicate the need for additional inquiry to determine the soundness of the applicant's proposed approach; it would not necessarily result in failure of the application.

As an additional benefit, the information contained in this study is likely to be helpful to potential applicants in noting common trends and issues.

Background and Objectives

A key goal for the evaluation process is to establish criteria that are as objective and measurable as possible, in line with the GNSO's policy advice ("There must be a clear and pre-published application process using objective and measurable criteria."). In developing a robust evaluation process, ICANN continues to work through the challenge of creating criteria that are measurable, meaningful (i.e., indicative of the applicant's capabilities and not easily manipulated), and also flexible enough to facilitate a diverse applicant pool.

Particularly in the financial area, the criteria have required heavy reliance on the judgment of a "person with registry experience," tending to create a more subjective evaluation process offering less predictability for applicants and for the community in general.

This study was undertaken to contribute to the ongoing development of criteria and procedures for the evaluation process. The primary objective of the exercise was to identify benchmarks based on registry financial and operational data, as a common reference point relevant to the review of new gTLD applications.

Methodology

The study took place from June to September of 2009 and consisted of the following activities:

- Review of the existing Evaluation Criteria as included in the draft Applicant Guidebook, and identification of financial and operational metrics to be benchmarked through the survey. This included demographic, financial, technical, and operational data.
- Design of a questionnaire to address the metrics identified.
- Contact with a sample of existing gTLD and ccTLD operators to seek their input to development of the questionnaire and incorporation of this feedback.

- Execution of the survey among the existing gTLD and ccTLD registries willing to participate, and following up as appropriate.
- Analysis of previous gTLD applications and other publicly available data on registry operations.
- Summary and presentation of the findings. Areas covered in the report are:
 - Survey demographics
 - Registry growth
 - Staffing models and costs
 - Outsourcing models and operating costs
 - Technical and network architecture
 - Reserves
 - Capital expenditures
 - Continuity planning

Participation in the study was voluntary. All gTLD registry operators were approached regarding participation in the study, of which 7 participated. A random sample of 20 ccTLD registry operators was also approached regarding participation, of which 6 participated. A total of 13 registry operators provided data for the study.

The study was conducted entirely by KPMG as a third party on behalf of ICANN. KPMG presented data only on an aggregated basis, and individual registry data was not accessible by other participants, ICANN staff, or ICANN Board directors.

Demographics and sample size

It should be noted that the group of participants in this study represents a very small sample size (38% of all gTLDs, 3% of all ccTLDs, and approximately 5% of all TLDs). The gTLD space is unique in that the total population of 16 gTLDs is quite small overall. ccTLD registry data was incorporated to round out the sample and create a broader context for registry operations. The sample represents a cross-section of operators in terms of size, outsourcing, business models, and time in operation.

However, the study was not designed as a formal exercise founded on statistical reliability tests, and caution is due when extrapolating or drawing conclusions based on the data reported here.

Applicability

This study will be provided as a reference for the independent technical and financial evaluators as part of the onboarding process. The benchmark data is to be used as a common reference point rather than a scoring metric. There are no adjustments to scoring being made on the basis of this data.

One of the goals of the New gTLD Program is to encourage innovation and diversity in the gTLD space. Thus, there is no presumption that an application that does not conform to the “typical” model in a particular area would be rejected on that basis. Rather, this divergence would highlight a need for deeper inquiry into the rationale and circumstances specific to that application. The key task for ICANN is to ensure the approach proposed in the application does not harm the security or stability of the DNS,

and that the applicant demonstrates technical, operational, and financial capacity to operate the TLD. See ICANN's discussion of principles for evaluation criteria at <http://icann.org/en/topics/new-gtlds/draft-evaluation-criteria-clean-04oct09-en.pdf>.

As an additional benefit, the information contained in this study is likely to be helpful to potential applicants in noting common trends and issues.

Participants

Participants were offered the option of maintaining their confidentiality or including their name and company description in the report. The following participants have chosen to disclose their involvement:

- **Canadian Internet Registration Authority (CIRA) / Autorité canadienne pour les enregistrements Internet (ACEI)**
- **CZ.NIC, z.s.p.o**



CZ.NIC, interest association of legal entities, was founded by leading providers of Internet services in 1998. The association currently has 66 members. The key activities of the association include operation of the domain name registry for the .CZ domain and the 0.2.4.e164.arpa (ENUM) domain, operation of the CZ top-level domain and public education in the area of domain names. The association is now intensively working on development of the ENUM system, extension and improvements of the domain administration system and support of new technologies and projects beneficial to the Internet infrastructure in the Czech Republic. CZ.NIC is a member of the EURid association, managing the European domain – EU, and other similarly oriented organizations (CENTR, ccNSO etc.).

- **Fundació puntCAT**

Fundació puntCAT is a non for profit that has as foundational aim the development and promotion of information society in Catalan. It is the entity that promoted the bid for a top level domain for Catalan language and culture, and manages the Registry for that domain. .cat is the first and only domain for a language, and currently there are over 40.000 .cat domain names.

- **Internet NZ**
- **Internet Users Society – Niue**
- **Neustar**



Neustar, Inc. (NYSE: NSR) provides market-leading and innovative services that enable trusted communication across networks, applications, and enterprises around the world. Neustar Domain Name Registry Services operates the global registry for .BIZ and .US; in addition, it provides back-end registry services for .CO, .TEL and .TRAVEL,

gateway services to country code top level domains, internationalized domain names (IDNs), and full registry services to new top level domains. Neustar's registry is connected to more than 250 domain name registrars worldwide. For more information, visit www.neustar.biz and www.neustarregistry.biz.

- **Public Interest Registry**

As one of the original domains, .ORG has been shaped by the global community as the place to express ideas, knowledge, and cause on the Internet. Whether individual with an idea to share, a small club organizing and motivating your members, or a large company conducting educational and marketing campaigns - the .ORG domain name communicates trust, credibility, and community interest.

Since January of 2003, the Public Interest Registry assumed responsibility for operating .ORG and maintaining the authoritative database of all .ORG domain names.

- **SIDN**



SIDN. More than the company behind .nl

As the registry for .nl, the Netherlands' top level domain, SIDN is responsible for the registration and performance of more than 3.7 million .nl domain names and thus for the traceability of millions of websites and mailboxes. With a highly trained team of more than fifty people and global cutting-edge technology, we play a vital role in the Netherlands' e-business community. We are also closely involved in the development of influential new technologies, such as ENUM, which brings together the worlds of telephony and the internet.

ICANN gratefully acknowledges all study participants for their contributions to this report.

Benchmarking of Registry Operations



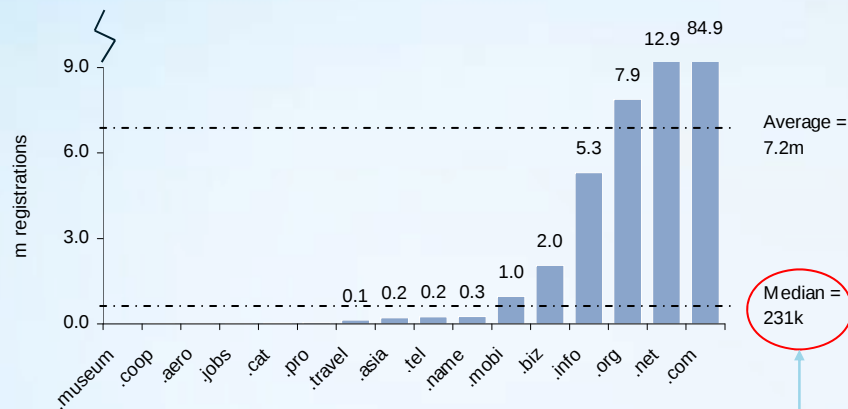
February 2010

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
- Other

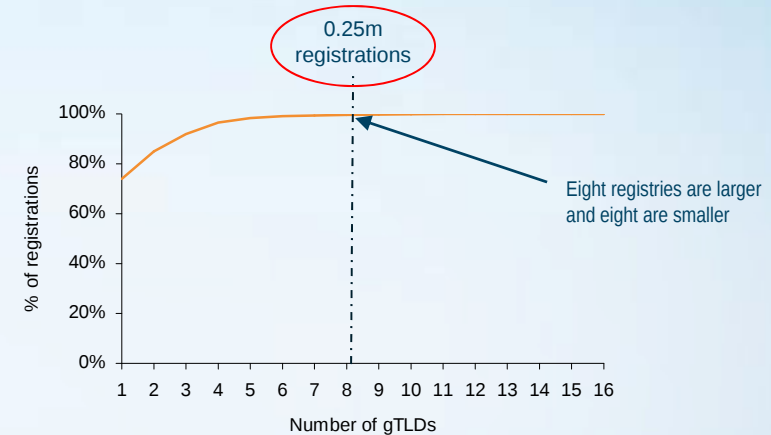
gTLD registry size and population

Median and average size of gTLDs in the market, in number of registrations



Note: .net and .com's number of registrations are off scale for illustration purposes
Source: ICANN website

% of total registrations covered by gTLD registries in order of size ranking



Source: ICANN website

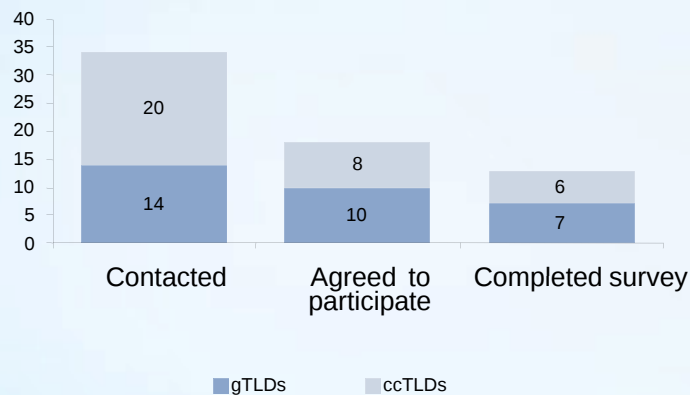
For purposes of the survey, "large" registries are defined as those that fall above the median, and "small" registries as those that fall below the median.

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
- Other

Survey Demographics

Recruitment of Survey Respondents



Source: Survey respondents

DATA COLLECTION PROCESS

June 2009

- 14 gTLD and 20 randomly selected ccTLD operators were contacted with respect to their willingness to participate

July 2009

- Initial draft of surveys were designed
- Surveys distributed to participants for them to comment on the questionnaire

August 2009

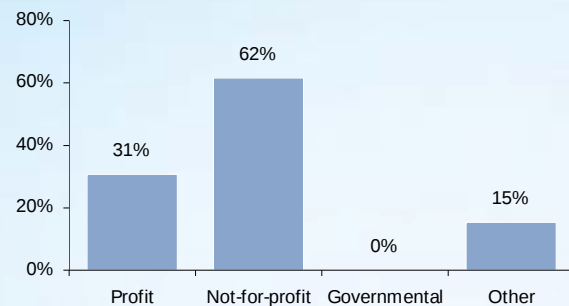
- Feedback on survey design was collected from participants and incorporated
- Surveys sent out for completion

September 2009

- Survey responses collected from participants
- Data analyzed, interpreted and followed-up where necessary

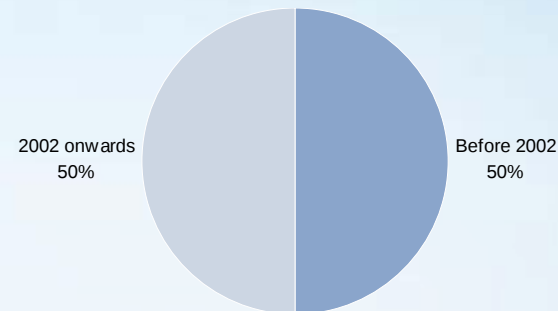
Survey Demographics (2)

Organizational type which best describes the entity, as percentage of respondents



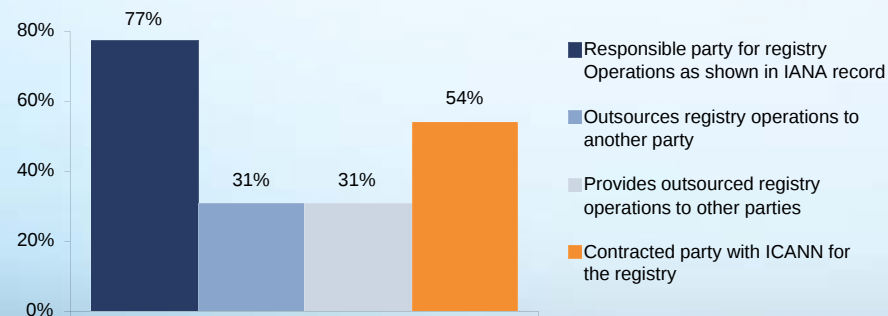
Note: More than one answer was possible.
Source: Survey respondents

First year of registry operations, as percentage of respondents



Source: Survey respondents

Type of entity in terms of registry operations, as percentage of respondents



Note: More than one answer was possible.
Source: Survey respondents

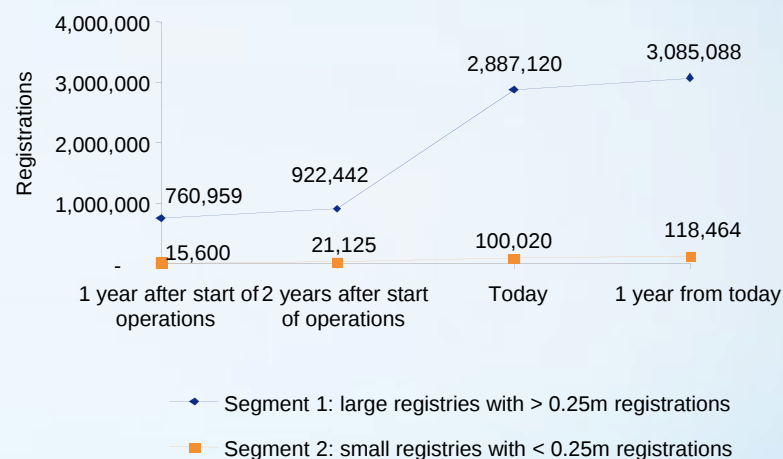
Survey Demographics (3)

Average size of registry, in number of registrations



Source: Survey respondents

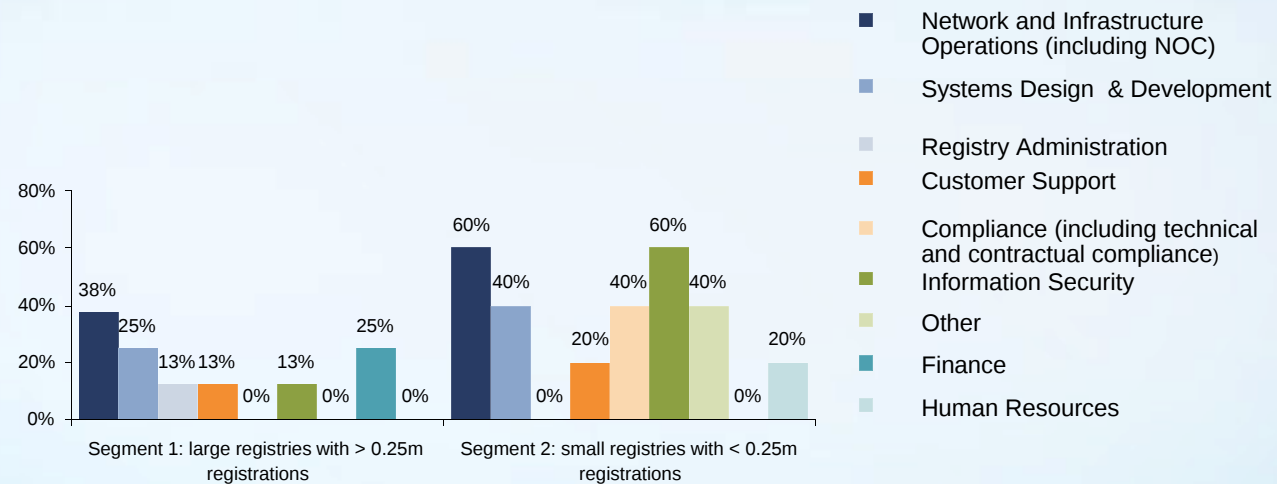
Average size of registry, segmented by size of registry



Source: Survey respondents

Survey Demographics (4)

Percentage of respondents that outsourced the following activities, segmented by size of registry

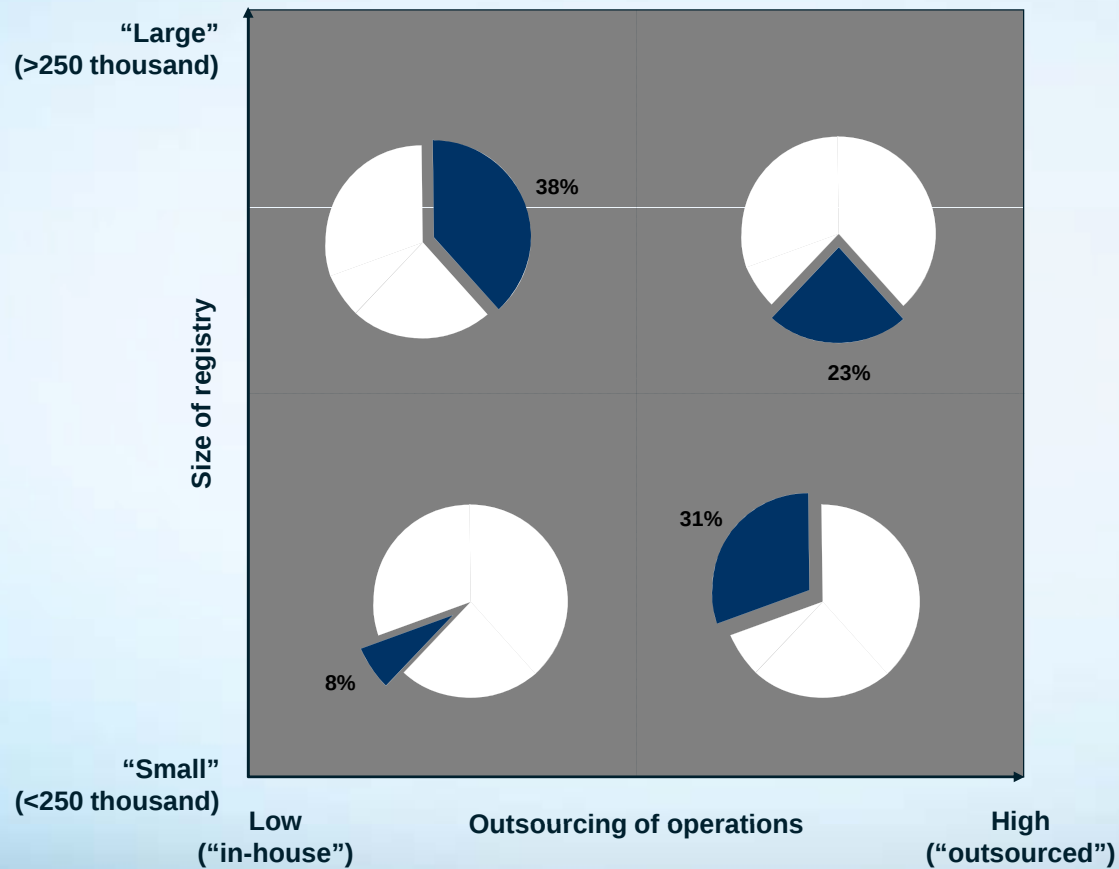


Note: More than one answer was possible.

Source: Survey respondents

Survey Demographics (5)

Respondent population by size and level of outsourcing



Note: Respondents were categorized as "outsourced" if they indicated that they outsourced one or more of network and infrastructure, systems design and development, and/or registry administration.

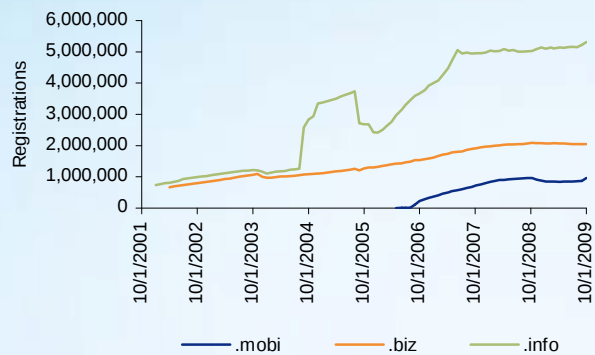
Source: Survey respondents

Contents

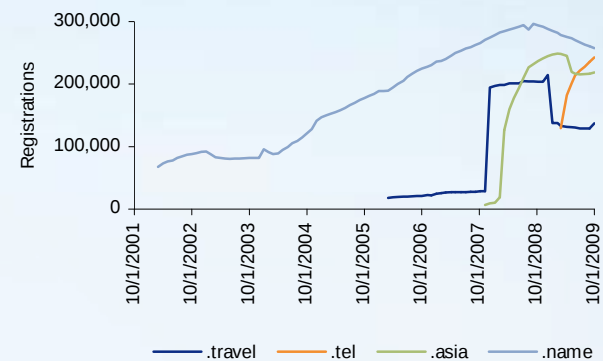
- Registry Population
- Survey Demographics
- Registry Growth
 - Examining the historical growth profiles of newly introduced gTLDs
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
- Other

New gTLD Registry Growth

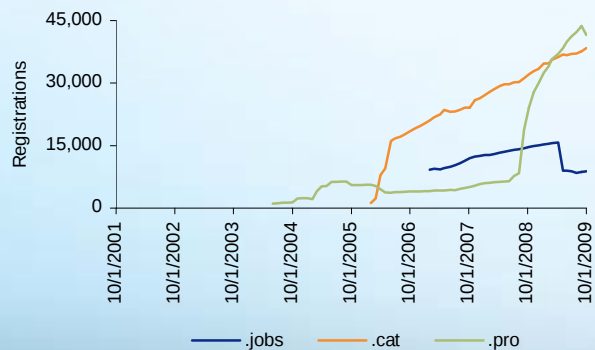
Volume of registrations: .mobi, .biz, .info



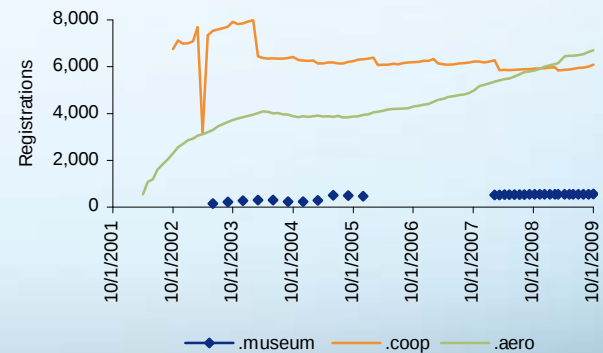
Volume of registrations: .travel, .tel, .asia, .name



Volume of registrations: .jobs, .cat, .pro



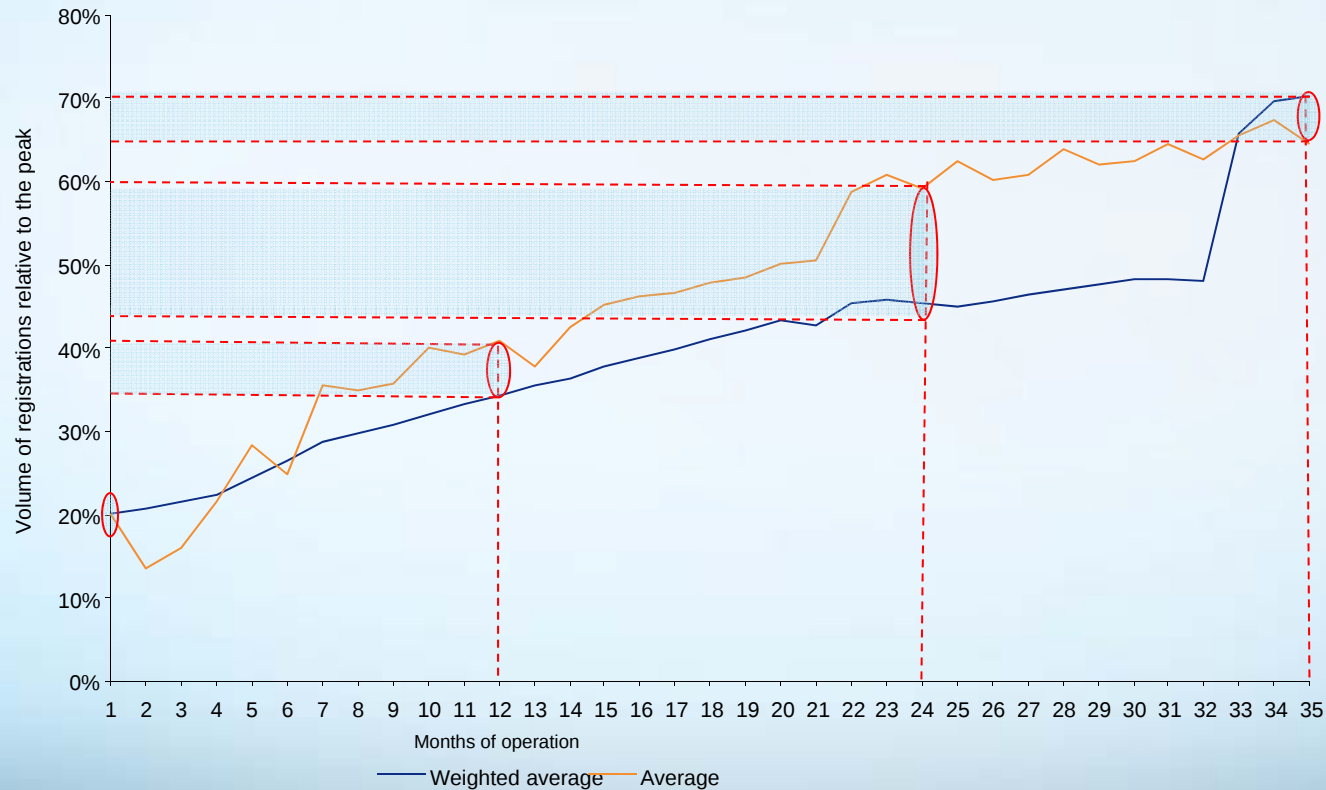
Volume of registrations: .museum, .coop, .aero



Note: Only includes gTLDs that commenced operations from 2001.
Source: ICANN website

Registry Growth (2)

Average volume of registrations for new gTLDs (introduced since 2001, over the first 36 months) relative to their most recently observed peak registration level



Note: Includes only new gTLDs introduced since 2001 that have been operational for longer than 36 months.
Source: ICANN website

Registry Growth (3)

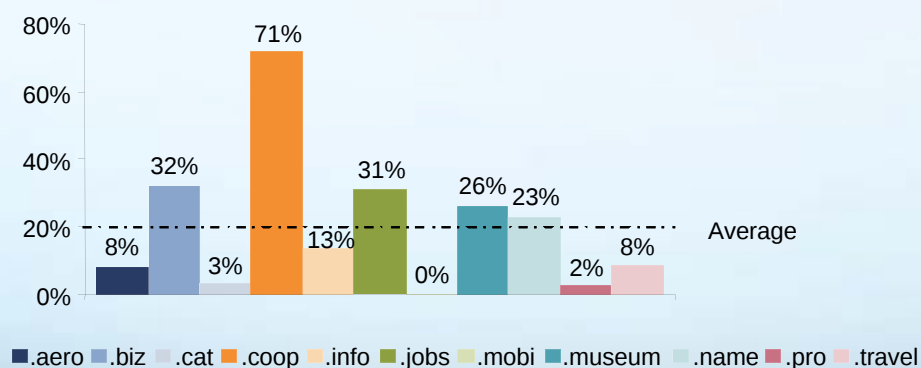
Correlation between first month and most recently observed peak registrations for gTLDs operating for more than 36 months that commenced operation after May 2001

	.aero	.biz	.cat	.coop	.info	.jobs	.mobi	museum	.name	.pro	.travel
Month 1	545	669,905	1,220	5,712	736,863	4,883	1,585	145	67,609	1,072	17,932
Most recently observed peak	6,707	2,086,460	38,410	7,992	5,311,015	15,741	964,115	554	296,428	43,719	214,719

$R^2 = 0.8$

Source: Registry data via ICANN website

Volume of month 1 registrations relative to most recently observed peak

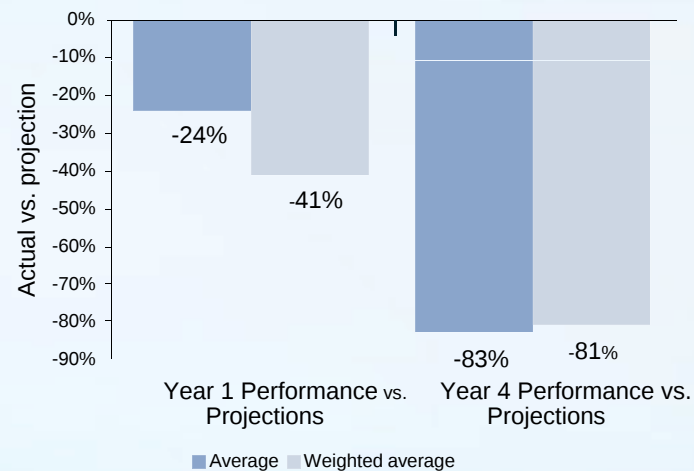


Source: ICANN website

Registry Growth (4)

Actual volumes vs. projected volumes – per publicly available data

Registration volumes of new gTLDs introduced since 2001 relative to their projections (as stated in their applications, where publicly available)



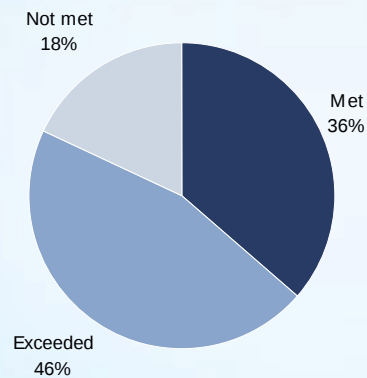
Note: As per source below, only includes 7 gTLDs where the projected volume of registrations was publicly available

Source: ICANN website, publicly available original gTLD applications, evaluator reports, Q&A notes.

Registry Growth (5)

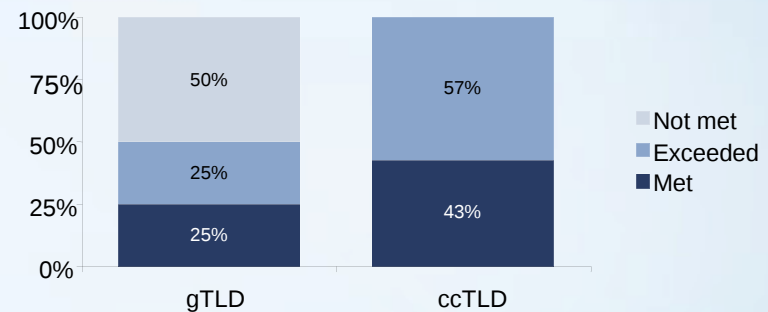
Actual volumes vs. projected volumes – per survey respondents

Performance against initial registry size and growth assumptions, as percentage of respondents



Source: Survey respondents

Performance against initial registry size and growth assumptions, segmented by type of TLD



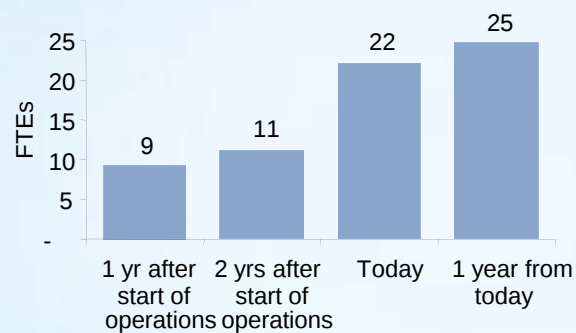
Source: Survey respondents

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
 - An examination of typical headcount and staffing arrangements across survey participants
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
- Other

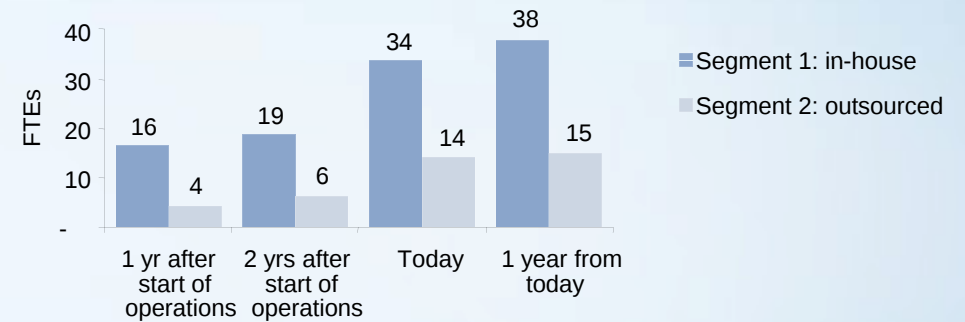
Staffing models

Average total headcount of registry, on a Full-Time Equivalent or “FTE” basis



Source: Survey respondents

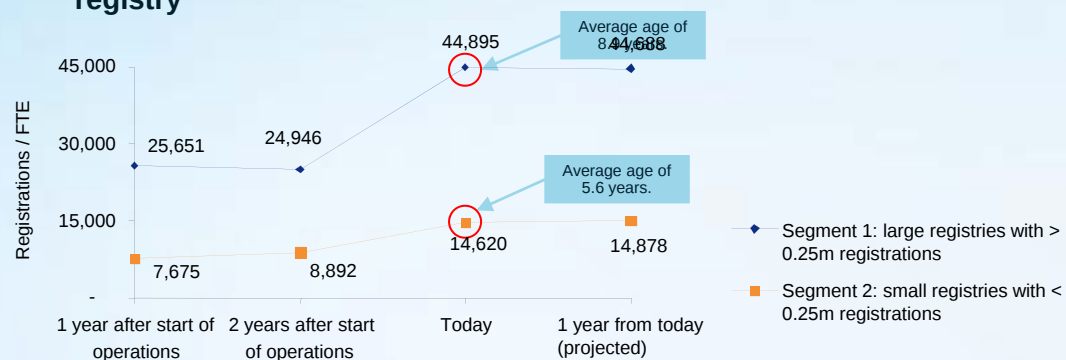
Average total headcount of registry, segmented by level of outsourcing, on an “FTE” basis



Source: Survey respondents

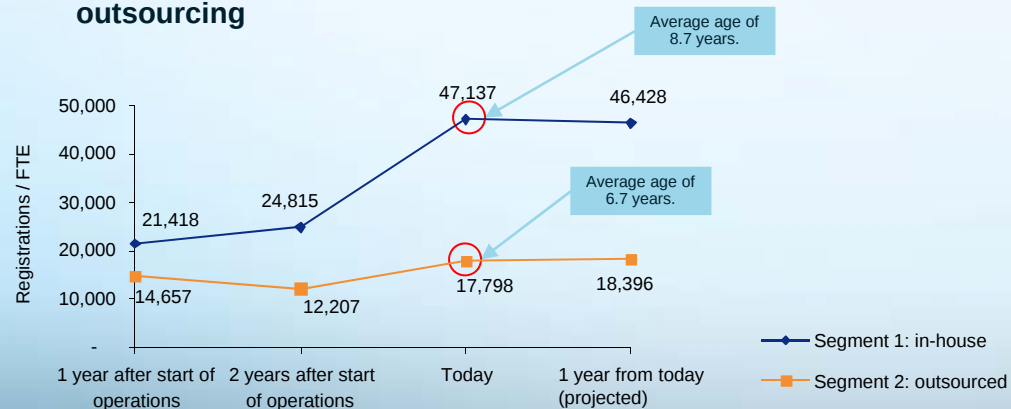
Staffing models (2)

Average number of registrations per FTE, segmented by size of registry



Source: Survey respondents

Average number of registrations per FTE, segmented by level of outsourcing



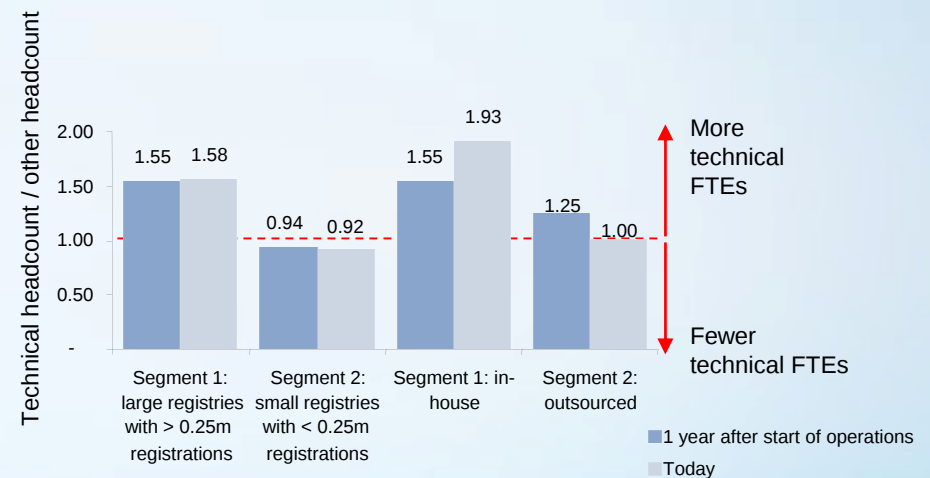
Source: Survey respondents

Staffing Models (3)

Average ratio of technical headcount relative to all other headcount



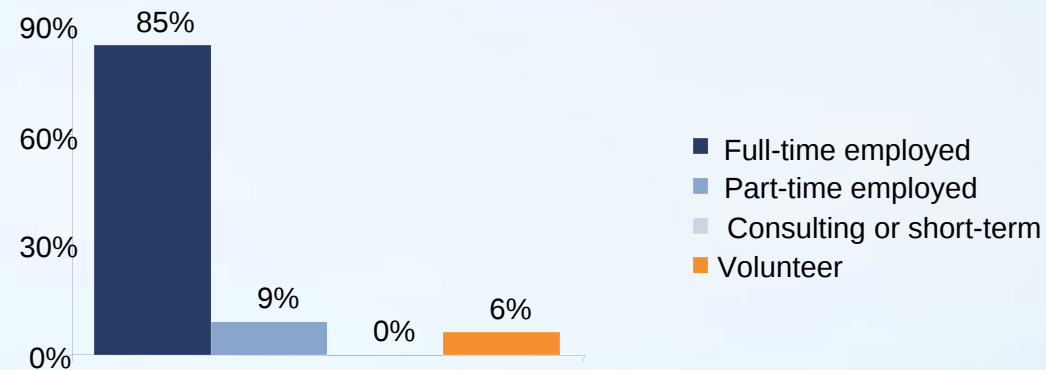
Average ratio of technical headcount relative to all other headcount, segmented by size of registry and by level of outsourcing



Source: Survey respondents

Staffing Models (4)

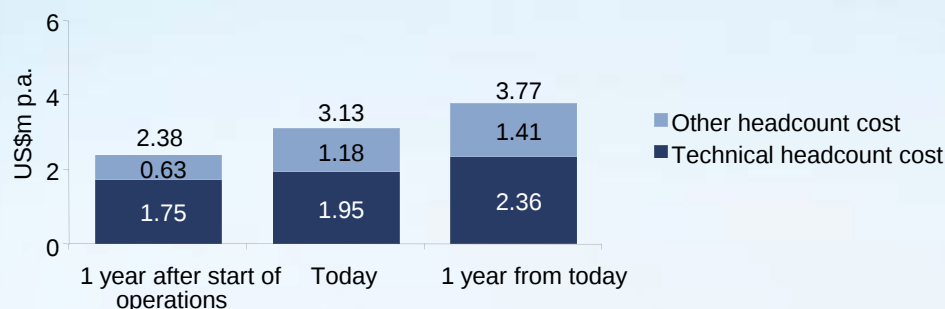
Type of staffing arrangement as of today, as average percentage of total FTEs



Source: Survey respondents

Staffing Models (5) – FTE costs

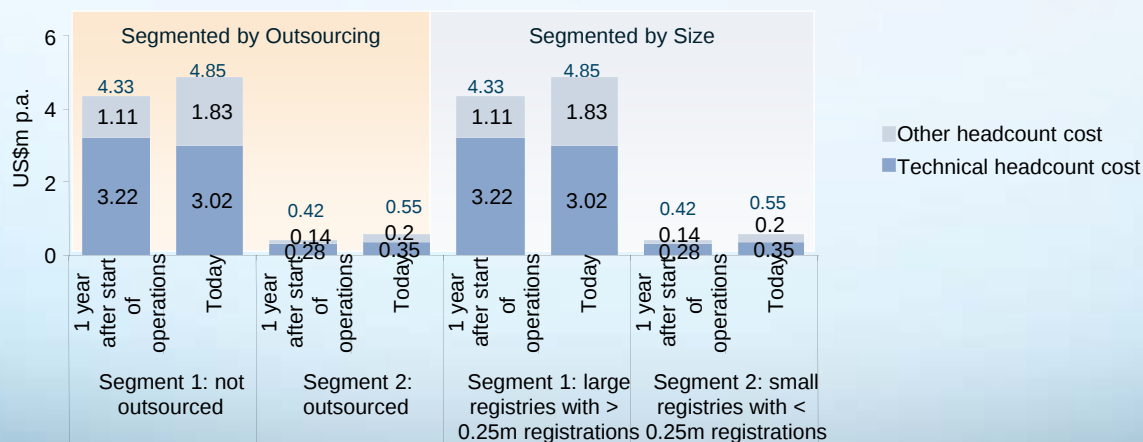
Estimated average annual cost of functions directly related to headcount



Note: Figures reported as local currency

Source: Survey respondents; OANDA for exchange rates, where applicable.

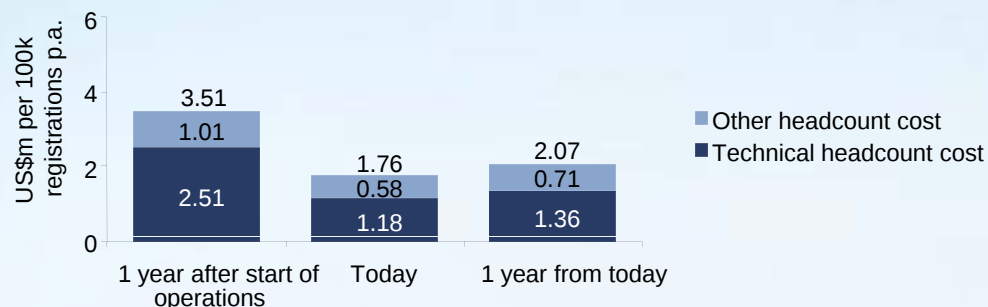
Estimated average annual cost of functions directly related to headcount, segmented by level of outsourcing and size of registry



Source: Survey respondents; OANDA for exchange rates, where applicable.

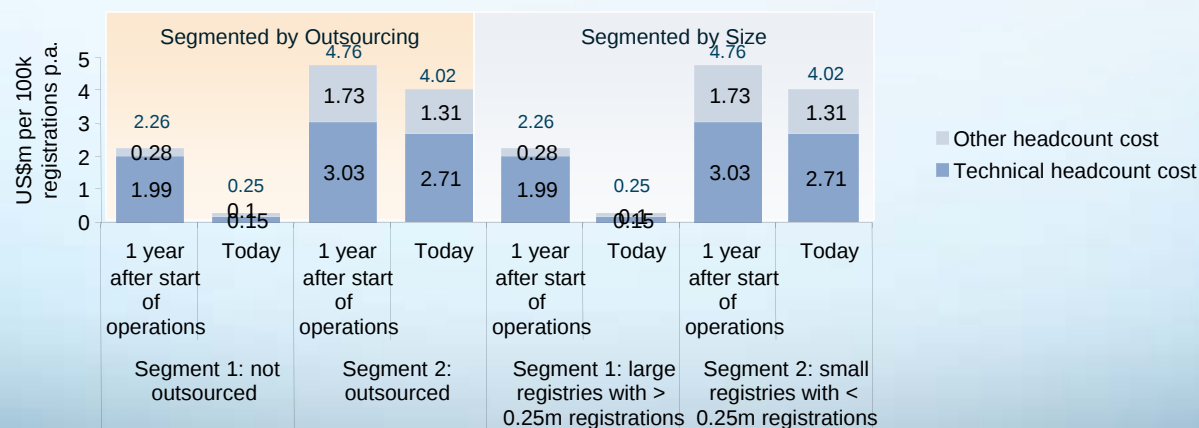
Staffing Models (6) – FTE costs

Estimated average annual cost per 100k registrations of functions directly related to headcount



Source: Survey respondents; OANDA for exchange rates, where applicable.

Estimated average annual cost per 100k registrations of functions directly related to headcount, segmented by level of outsourcing and size of registry



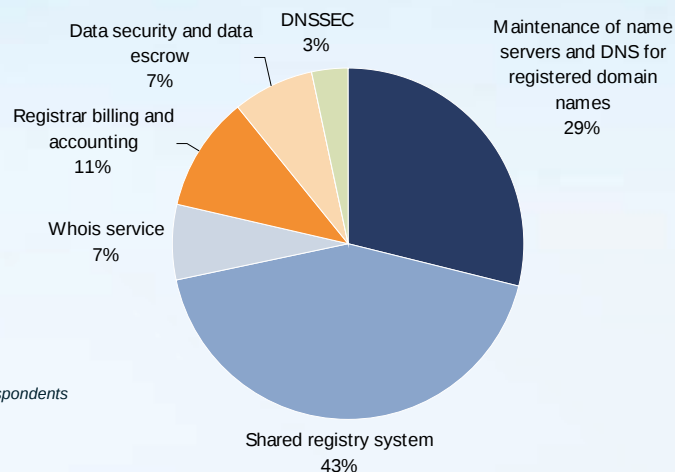
Source: Survey respondents; OANDA for exchange rates, where applicable.

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
 - An examination of key operating costs (e.g., Name Servers, SRS, Whois, etc) across survey participants
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
- Other

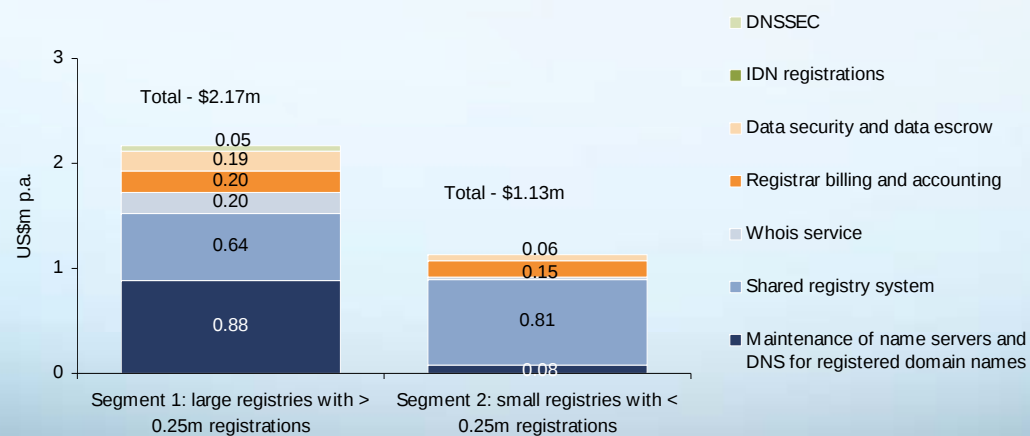
Operating Costs

Estimated average annual cost of operating activities as of today



Source: Survey respondents

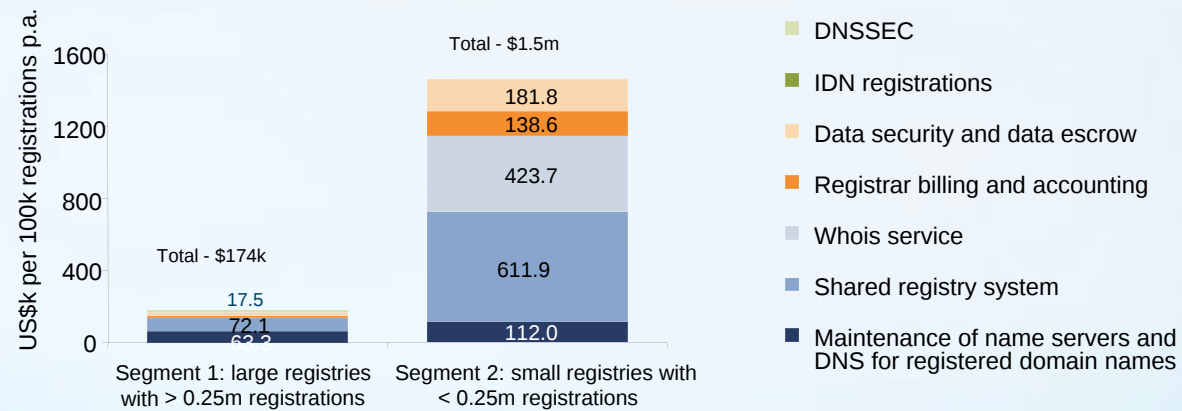
Estimated average annual cost of operating activities as of today, segmented by size of registry



Source: Survey respondents

Operating Costs (2)

Estimated average annual cost per 100k registrations of operating activities as of today, segmented by size of registry

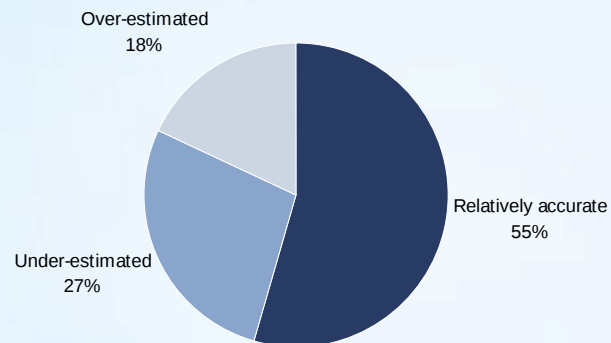


Note: Other Segment 1 categories are each less than \$10k per 100k registrations.
Source: Survey respondents

Operating Costs (3)

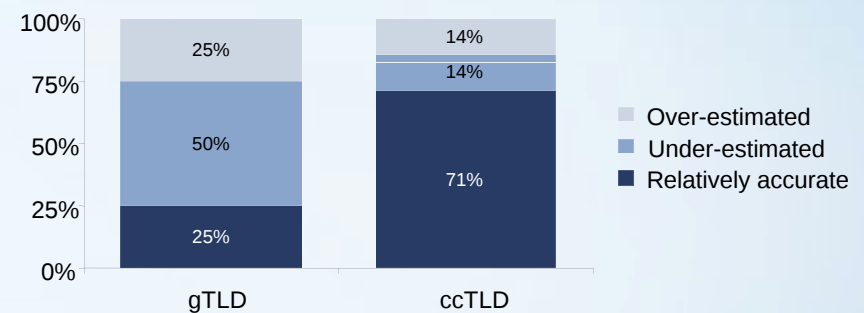
Actual costs vs. projected costs

Performance against initial cost projections for running the registry, as percentage of respondents



Source: Survey respondents

Performance against initial cost projections for running the registry, segmented by type of TLD



Source: Survey respondents

Contents

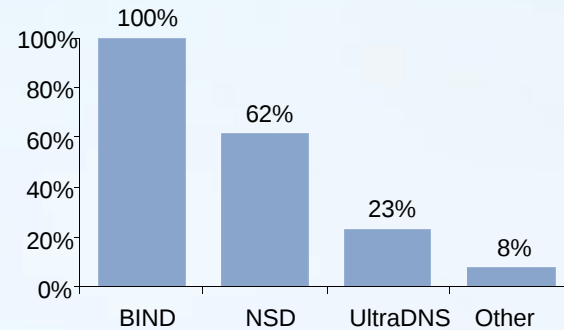
- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
 - An examination of survey participants' network footprint (e.g., databases, servers, IPv6)
- Reserves
- Capital Expenditure
- Continuity Planning
- Other

Technical and Network Architecture

DNS Server Software



DNS server software used, as percentage of respondents

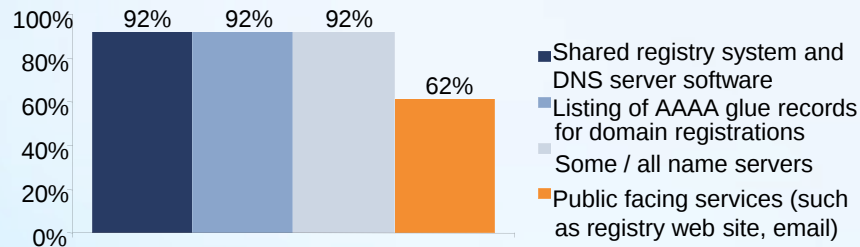


Note: More than one answer was possible.
Source: Survey respondents

Technical and Network Architecture (2)

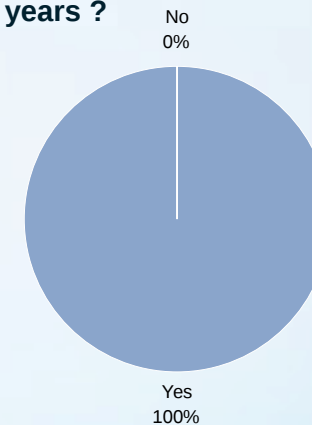
IPv6 support within key DNS infrastructure

Elements of DNS infrastructure that support IPv6, as percentage of respondents



Note: More than one answer was possible.
Source: Survey respondents

If the DNS infrastructure (including server software and O/S) does not support IPv6, does the registry intend to support it within the next two years ?



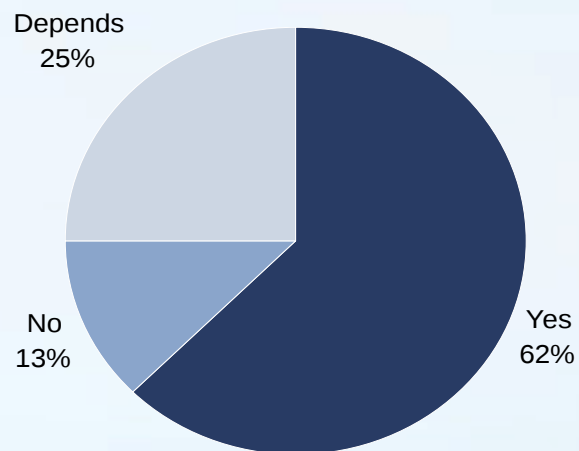
Note: Applicable to one respondent only.
Source: Survey respondents

Technical and Network Architecture (3)

DNSSEC



If the registry does not support DNSSEC, does it intend to support it within the next two years?

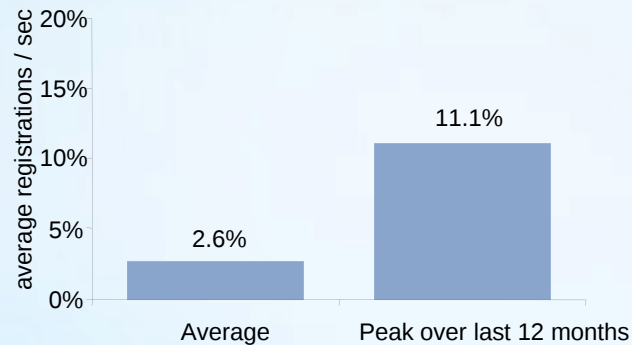


Note: Applicable to majority of respondents.
Source: Survey respondents

Technical and Network Architecture (4)

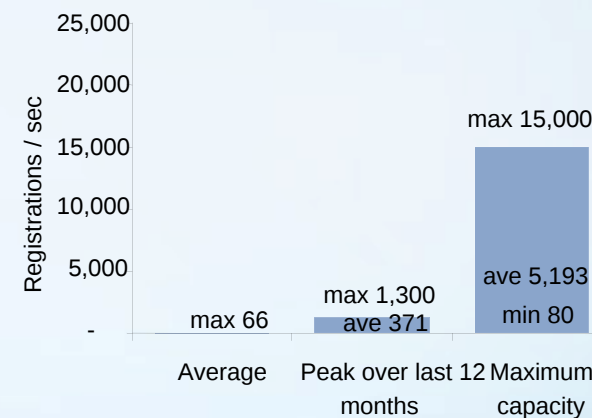
EPP server throughput

EPP server throughput, averaged over respondent group relative to peak capacity



Source: Survey respondents

Range in EPP server throughput, as provided by respondent group

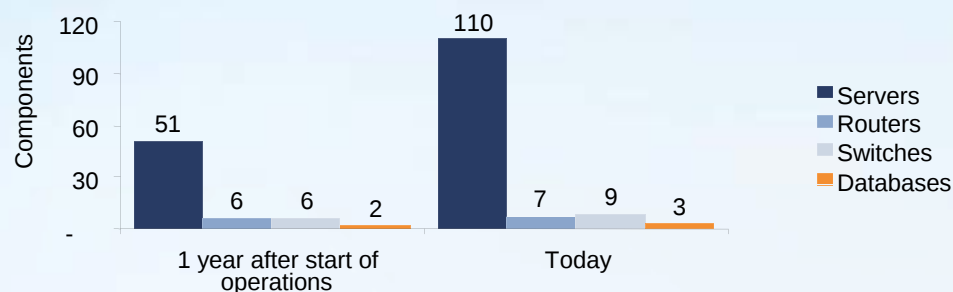


Source: Survey respondents

Technical and Network Architecture (5)

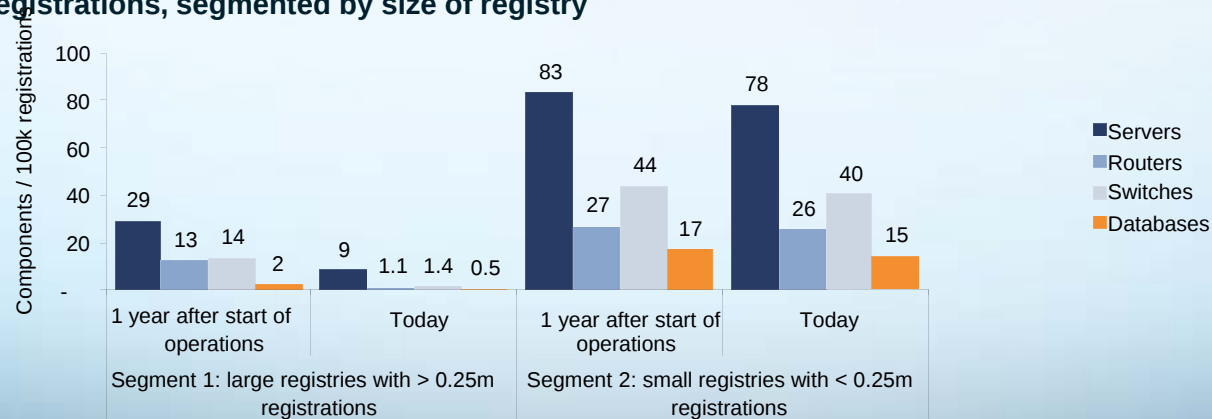
System Components

Average number of system components in use



Source: Survey respondents

Average number of system components in use per 100k registrations, segmented by size of registry



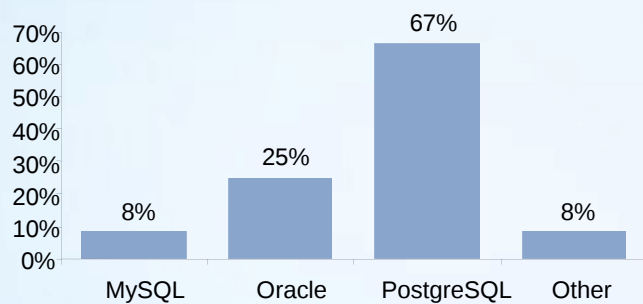
Source: Survey respondents

Technical and Network Architecture (6)

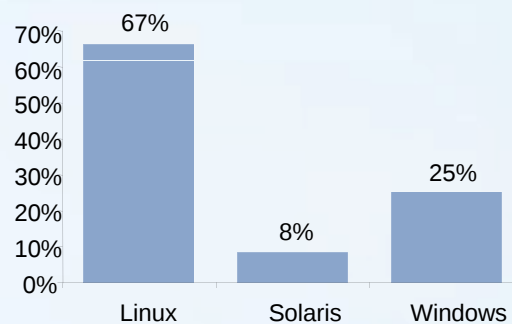


Database and Server Operating Systems

Database used, as percentage of respondents



Server operating system used, as a percentage of respondents



Note: More than one answer was possible; "Other" category is comprised of Sybase, and Red Hat.
Source: Survey respondents

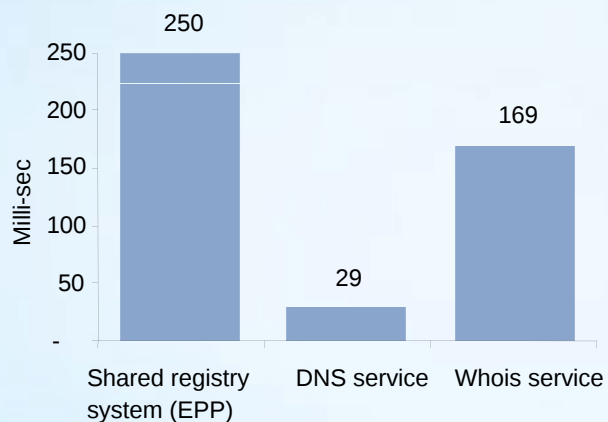
Source: Survey respondents

Technical and Network Architecture (7)



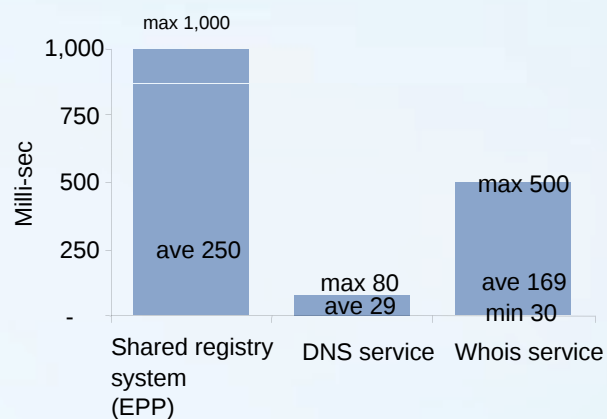
Response times

Average response time for the following registry services



Source: Survey respondents

Range in response time for the following registry services, as provided by respondent group



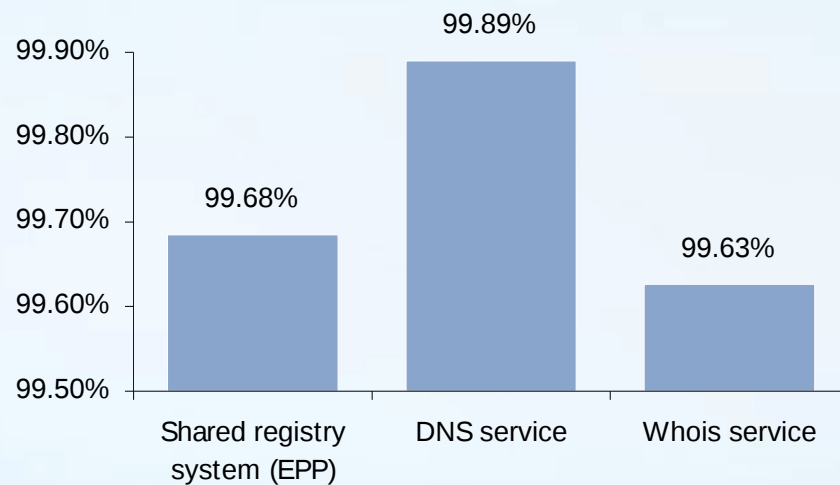
Source: Survey respondents

Technical and Network Architecture (8)



Uptime

Average percentage uptime for the past three months for the following registry services



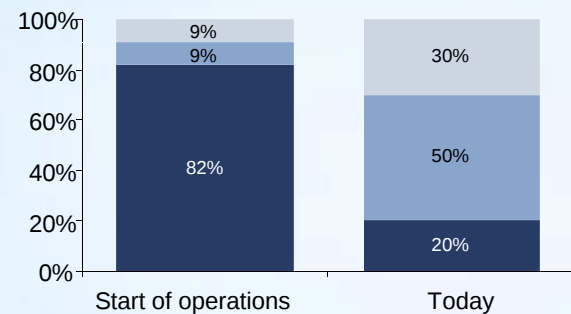
Source: Survey respondents

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
 - Survey participants' financial reserve positions
- Capital Expenditure
- Continuity Planning
- Other

Reserves

Level of cash reserve in place, relative to total annual capital expenditure and operating costs, as percentage of respondents



Percentage of survey respondents with:

- Greater than 3 years reserve
- Between 1 and 3 years reserve
- Less than 1 year reserve

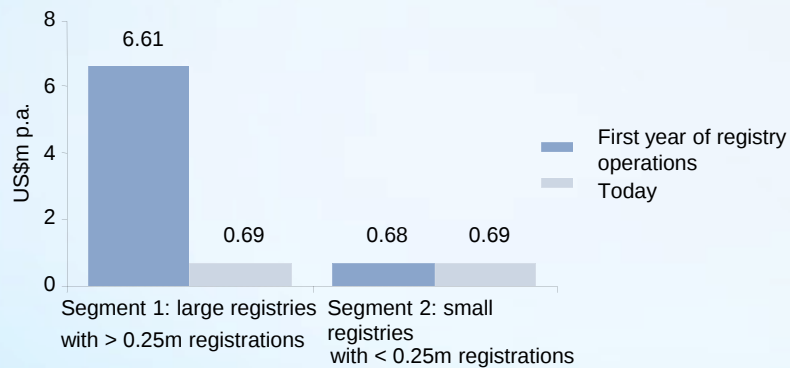
Source: Survey respondents

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
 - Survey participants' start-up and ongoing capital expenditure
- Continuity Planning
- Other

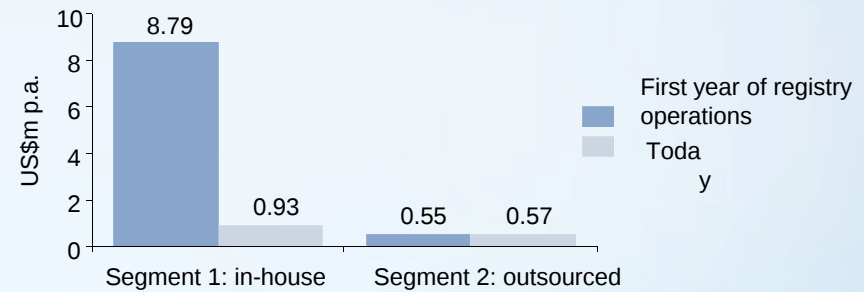
Capital Expenditure

Average annual level of capital expenditure, segmented by size of registry



Source: Survey respondents

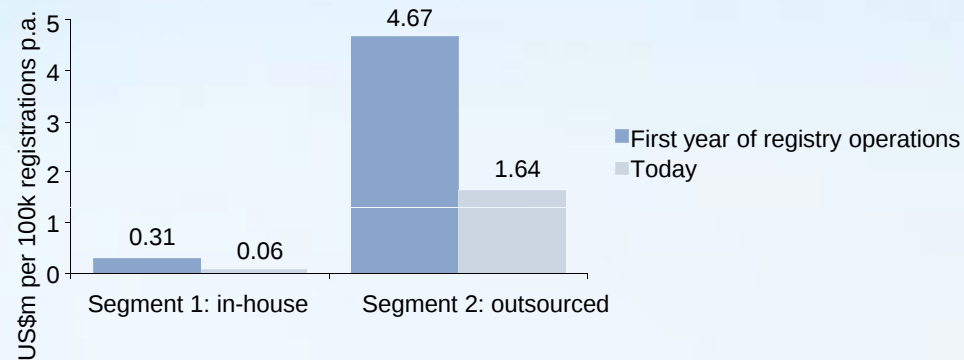
Average annual level of capital expenditure, segmented by level of outsourcing



Source: Survey respondents

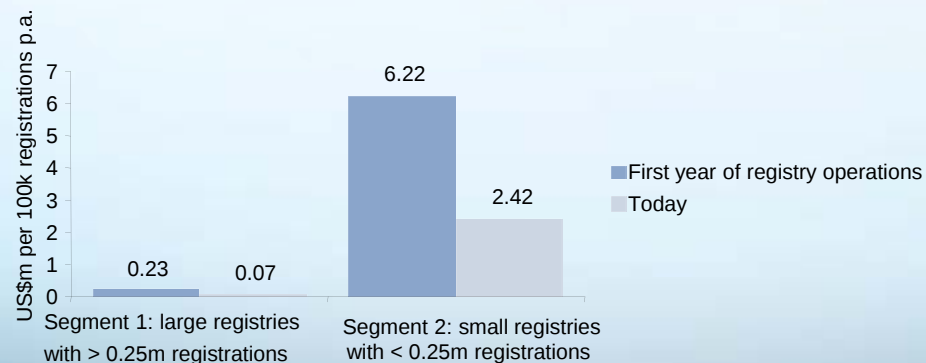
Capital Expenditure (2)

Average annual level of capital expenditure per 100k registrations, segmented by level of outsourcing



Source: Survey respondents

Average annual level of capital expenditure per 100k registrations, segmented by size of registry



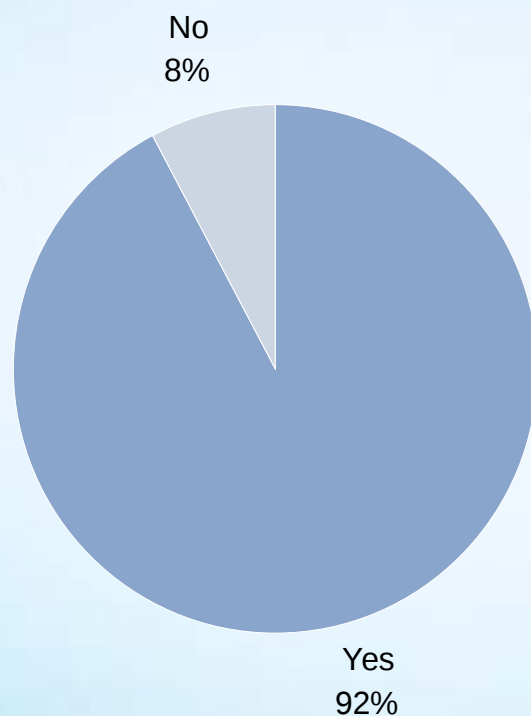
Source: Survey respondents

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
 - An examination of survey participants' continuity planning and failover practices
- Other

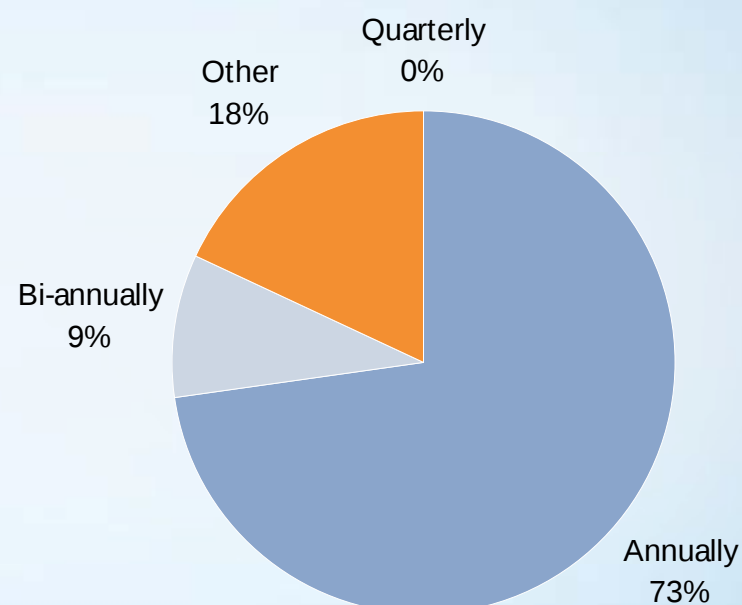
Continuity Planning and Failover Testing

Is a detailed registry continuity plan in place ?



Source: Survey respondents

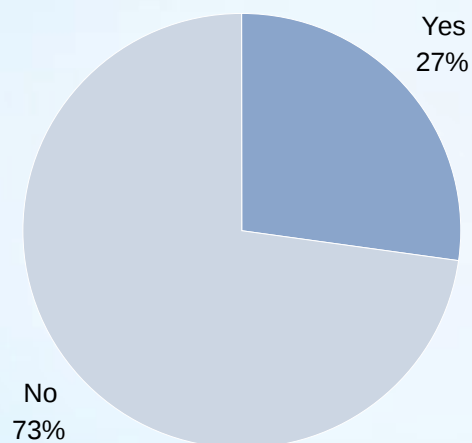
Frequency with which the registry continuity plan is reviewed or refreshed



Source: Survey respondents

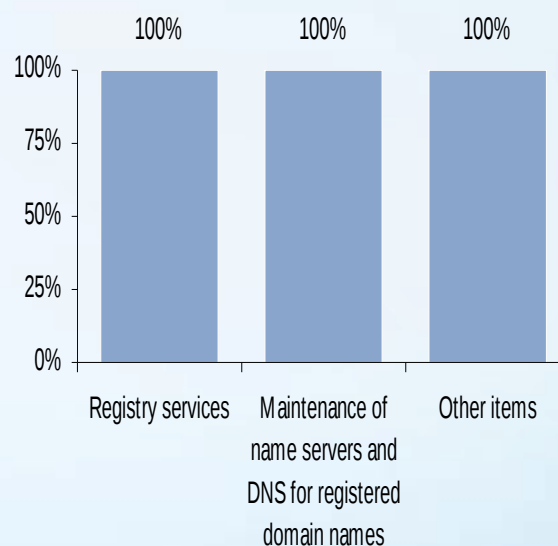
Continuity Planning and Failover Testing (2)

Has a transition services provider been identified and contractually engaged ?



Source: Survey respondents

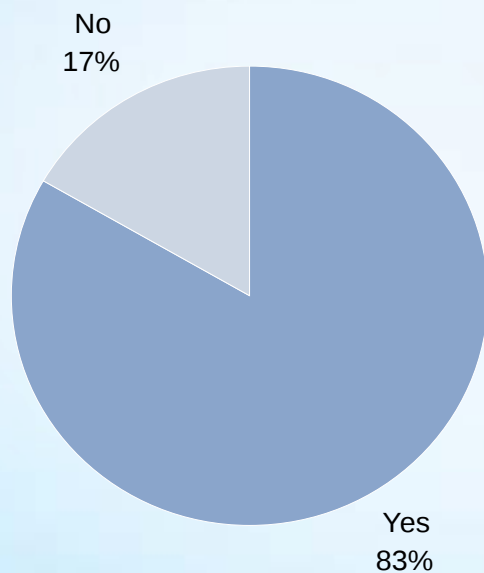
Elements that are part of the arrangement with transition service providers, where they have been contracted, as percentage of respondents



Note: Applicable to three respondents.
Source: Survey respondents

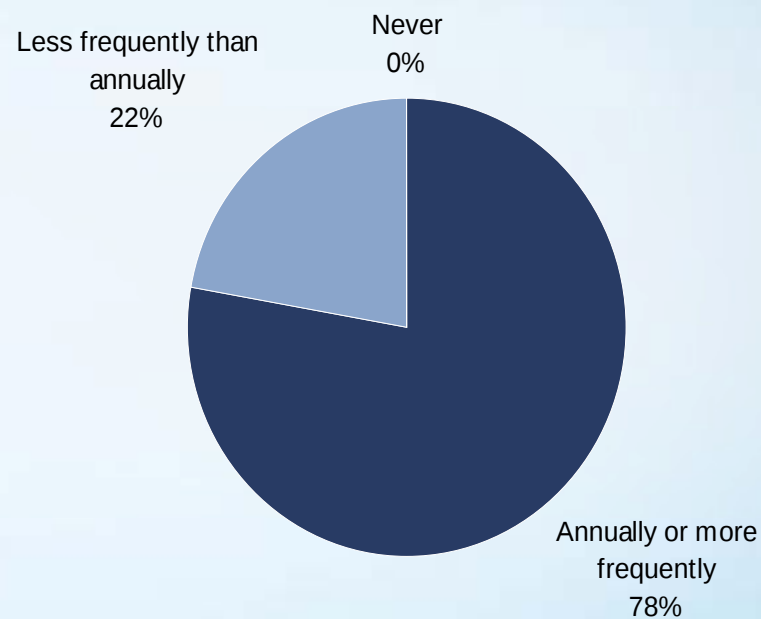
Continuity Planning and Failover Testing (3)

Is a failover testing plan in place?



Source: Survey respondents

Frequency with which the failover testing plan is regularly tested



Source: Survey respondents

Contents

- Registry Population
- Survey Demographics
- Registry Growth
- Staffing Models and Costs
- Operating Costs
- Technical and Network Architecture
- Reserves
- Capital Expenditure
- Continuity Planning
- Other
 - Other miscellaneous survey data collected from respondents

Renewals

Average daily number of renewals received



Source: Survey respondents

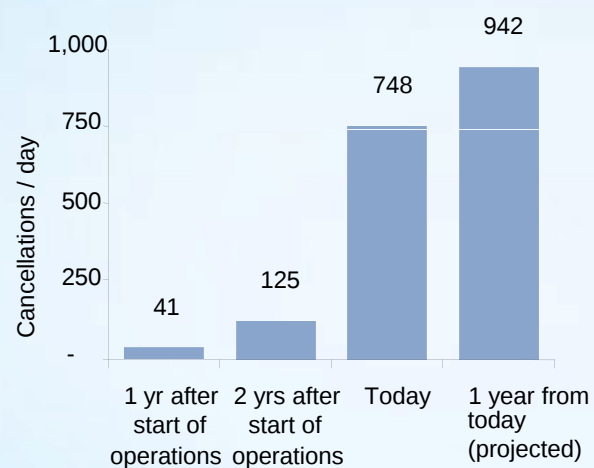
Average daily number of renewals received per 100k registrations



Source: Survey respondents

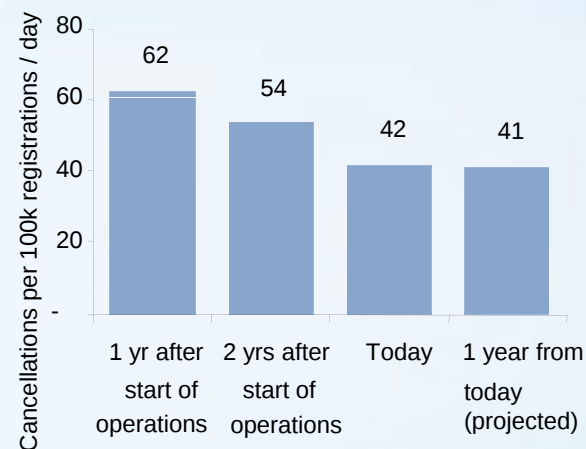
Deletions

Average daily number of cancellations / deletions received



Source: Survey respondents

Average daily number of cancellations / deletions received per 100k registrations



Source: Survey respondents

Whois queries

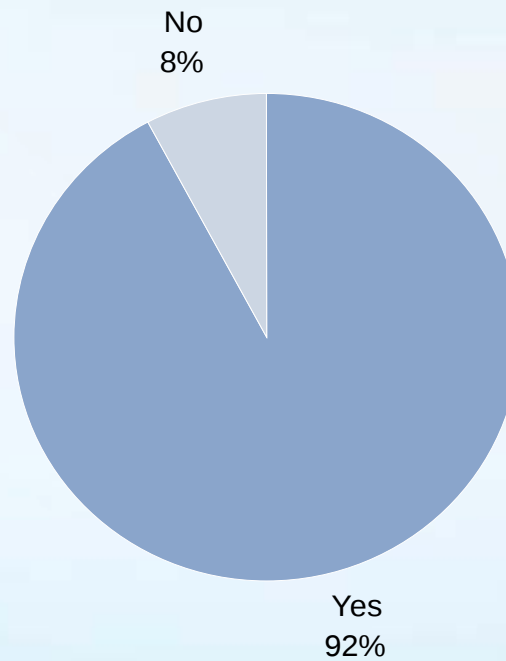
Average daily number of Whois queries received



Source: Survey respondents

Financial statements

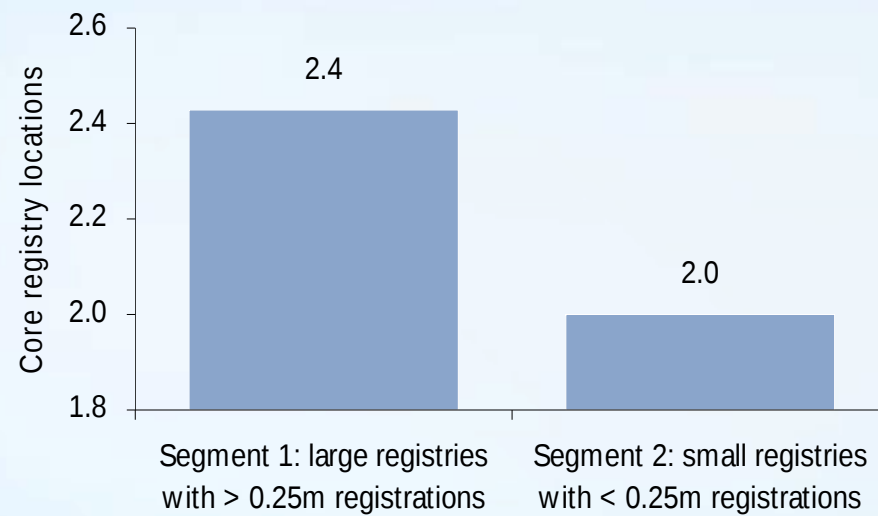
Are the registry's financial statements currently audited?



Source: Survey respondents

Core registry locations

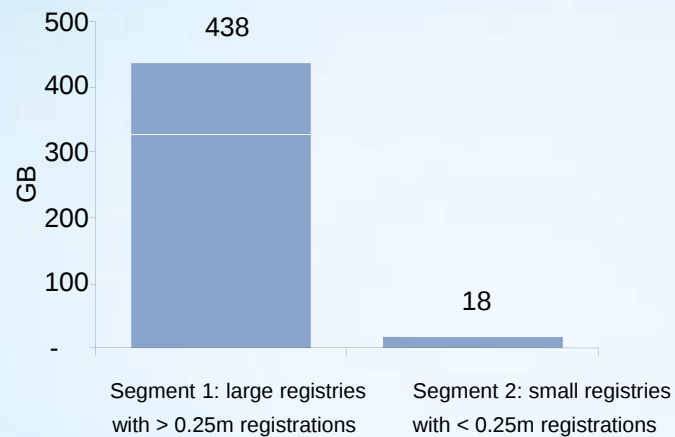
Average number of core registry locations, segmented by size of registry
(includes primary and secondary sites, excludes name servers)



Source: Survey respondents

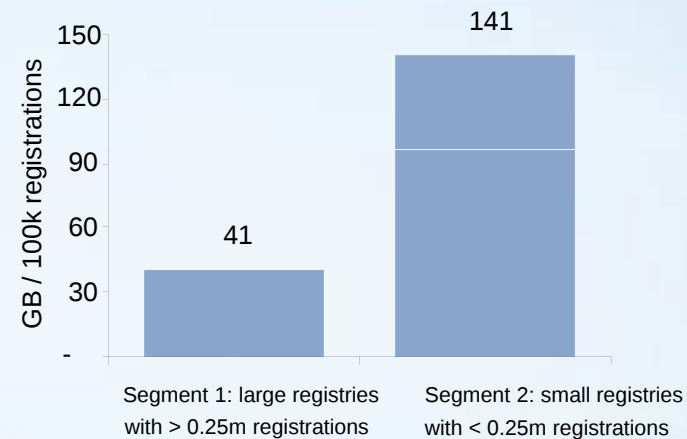
Size of core registry database

Average size of core registry databases, segmented by size of registry



Source: Survey respondents

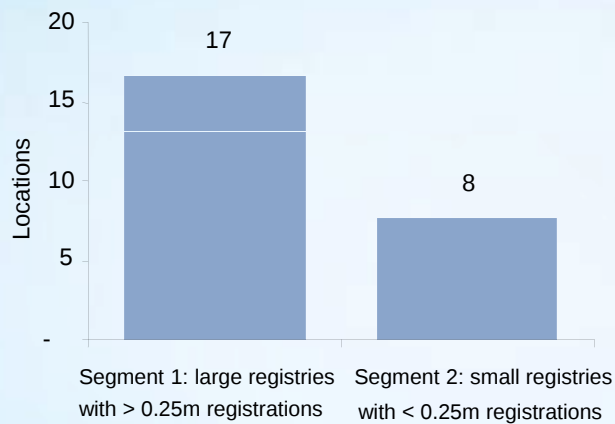
Average size of core registry databases per 100k registrations, segmented by size of registry



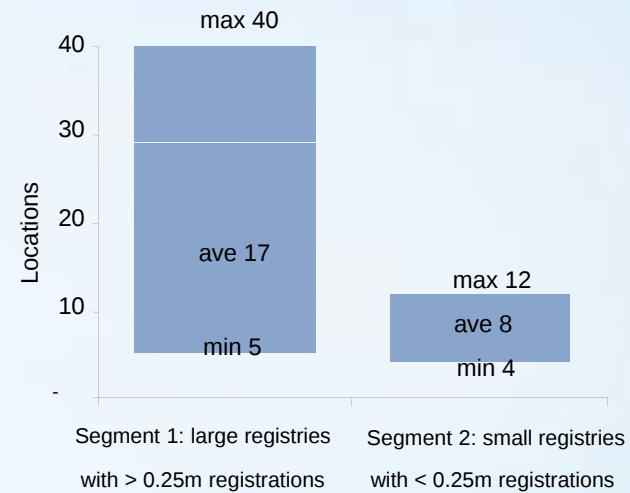
Source: Survey respondents

DNS server locations

Average number of separate locations for DNS servers, segmented by size of registry



Range in number of separate locations for DNS servers, segmented by size of registry



Source: Survey respondents

Source: Survey respondents

REGISTRY OPERATIONS - PEER GROUP SURVEY

Instructions:

Please complete the survey below, in excel, by SEPTEMBER 4, 2009, save it, and email the completed form back to Alexander Nouel at anouel@kpmg.com

ICANN has asked KPMG not to share individual responses with ICANN staff or other survey participants. Results, on an anonymized and aggregated basis will be published. Please indicate below whether you would like to be acknowledged as a participant, and if you do whether you would like to include your corporate logo and a brief paragraph describing your services.

When opening the excel file please choose "Enable Macros" when prompted, in order to use the check boxes.

If you have any questions please do not hesitate to contact Barak Ravid (tel: +1 415 963 5548, barakravid@kpmg.com) or Alexander Nouel (tel: +1 213 955 8309, anouel@kpmg.com).

Many thanks

Organization Name	
Primary Contact Name	
Primary Contact Title	
Primary Contact Phone Number	
Primary Contact Email Address	

Would you like to be acknowledged as a survey participant? (yes/no)

If yes, would you like to have your corporate logo incorporated into the published report? (yes/no)

If yes, will you be separately sending a brief paragraph to include as a description of your services? (yes/no)

A. Introduction / Background

1.A. What is the name of your entity ?

1.B. Which TLD's do you operate ?

2.A. Please check the organizational type which best describes your entity :

☐ Profit

☐ Not-for-Profit ☐ Other (please provide detail) :

☐ Governmental

2.B. Please provide any additional narrative you feel is appropriate to clarify your legal and organizational structure :

3. Please check the responses that match your activity (check as many as apply) :

☐ I am the responsible party for registry operations as shown in the IANA record for the TLD

☐ I outsource my registry operations to another party

☐ I provide outsourced registry operations to other parties - If yes, to how many?

☐ I am the contracted party with ICANN for the registry

4. In which year did you, as an entity, commence operation of the registry ? (where more than one registry is operated, please provide for each registry)

	Registry 1	Registry 2*	Registry 3*	Registry 4*
Name :				
Year :				

* = if relevant

5. How big is your TLD (in number of registrations) ? (where more than one registry is operated, please provide for each registry)

	Registry 1	Registry 2*	Registry 3*	Registry 4*
Name :				
Today :				
As of 1 year after commencement of operations :				
As of 2 years after commencement of operations :				
Best-estimate as to 1 year from today :				

* = if relevant

applicant guidebook
questions ?
(May 30 update)

n/a

n/a

n/a

n/a

n/a

n/a

Multiple

6.A. What is your total headcount number (on Full Time Equivalent "FTE" basis) ?

n/a

Today : FTE's

As of 1 year after commencement of operations : FTE's

As of 2 years after commencement of operations : FTE's

Best-estimate as to 1 year from today : FTE's

6.B. Please provide any narrative you feel appropriate to clarify / explain any parts of your organization, which you either specifically included or excluded in the above headcount number :

n/a

7. Please provide headcount number (on Full Time Equivalent "FTE" basis) for the following activities as of today :
Note: Please consider that the total broken down in this question should ideally match the response to Question 6.A. above.

29

Technical Headcount

Network and Infrastructure Operations (including NOC) :		FTE's
Systems Design and Development		FTE's
Registry Administration		FTE's
Customer Support		FTE's
Compliance (including technical, and contract compliance) :		FTE's
Information Security :		FTE's
Other :		FTE's
SUB-TOTAL TECHNICAL	0	FTE's

Other Headcount

Marketing (including PR & Communication)		FTE's
Finance :		FTE's
Administrative :		FTE's
HR :		FTE's
General :		FTE's
Sales (if applicable)		FTE's
Other :		FTE's
SUB-TOTAL OTHER	0	FTE's
TOTAL	0	FTE's

8. Please provide headcount number (on FTE basis) for the following activities as of 1 year after commencement of operations :
Note: Please consider that the total broken down in this question should ideally match the response to Question 6.A. above.

29

Technical Headcount

Network and Infrastructure Operations (including NOC) :		FTE's
Systems Design and Development		FTE's
Registry Administration		FTE's
Customer Support		FTE's
Compliance (including technical, and contract compliance)		FTE's
Information Security :		FTE's
Other :		FTE's
SUB-TOTAL TECHNICAL	0	FTE's

Other Headcount

Marketing (including PR & Communication)		FTE's
Finance :		FTE's
Administrative :		FTE's
HR :		FTE's
General :		FTE's
Sales (if applicable) :		FTE's
Other :		FTE's
SUB-TOTAL OTHER	0	FTE's
TOTAL	0	FTE's

9. Please check the areas, if any, which are outsourced :

29

Technical :	Other :
☐ Network and Infrastructure Operations (including NOC) ☐ Compliance (including technical, and contract compliance)	☐ Marketing (including PR & Communication) ☐ General
☐ Systems Design and Development ☐ Information Security	☐ Finance ☐ Sales (if applicable)
☐ Registry Administration ☐ Other	☐ Administrative ☐ Other
☐ Customer Support	☐ HR

10. For the total headcount number listed in Question 6.A. above (as of today), please provide an estimate as to % of FTE's who are 1) Full-time Employed, 2) Part-time employed, 3) Consultants/Other Short-term roles, 4) Volunteer, and 5) Otherwise :

29

% that are full-time employed :	0%
% that are part-time employed :	0%
% that are consulting/short-term :	0%
% that are volunteer :	0%
% other :	0%
Total* :	0%

* Total should add to 100%

29

12. For each of the functions listed in Question 7, please provide your best current estimate as to whether you expect FTE's to increase, stay the same, or decrease over the next 12 months :

B. Technical	
--------------	--

29

29

- | |
|--|
| |
|--|

C. Reserves			
15.A. Please provide a brief narrative to describe your policy objectives for maintaining adequate financial reserves (i.e., which measures do you consider) and whether you typically meet those objectives :			52, 54
15.B. When expressed relative to your total annual capital expenditure and operating costs, do you <u>currently</u> have cash reserve / funding in place equivalent to :			52, 54
☐ Less than 1 years of capital expenditure and operating costs ☐ Between 1-3 years of capital expenditure and operating costs ☐ Greater than 3 years of capital expenditure and operating costs			
16. What cash reserve/funding did you have in place upon commencement of registry operations ?			52, 54
☐ Less than 1 years of capital expenditure and operating costs ☐ Between 1-3 years of capital expenditure and operating costs ☐ Greater than 3 years of capital expenditure and operating costs			
17. Please provide an estimate of the annual costs to operate the following as of today (please state which currency you are using) :			54
Currency Used			
Maintenance of Name Servers and DNS for registered domain names :			
Shared Registry system :			
Whois Service :			
Registrar billing and accounting :			
Data security and data escrow :			
IDN Registrations (if applicable) :			
DNSSEC (if applicable) :			
D. Network Architecture			
18. Please check whether the following elements of your DNS Infrastructure support IPv6 and provide a brief narrative, if appropriate, to clarify :			30,37
	Supports IPv6 ?	Narrative :	
Shared Registry system and DNS Server Software (Bind Version 9.x etc) support publication of IPv6 address records (AAAA) :	☐		
Listing of AAAA glue records for domain registrations supported :	☐		
Some/ All name servers are accessible over IPv6 :	☐		
Public facing services (such as registry web site, email) are accessible over IPv6 :	☐		
19. If your DNS infrastructure (including server software and O/S) does not support IPv6, do you intend to support it within the next 2 years ? Please provide a brief narrative, if appropriate, to clarify :			30,37
☐ Yes ☐ No			

20. If you do not support DNSSEC, do you intend to support it within the next 2 years ? Please provide a brief narrative, if appropriate, to clarify : ☐ Yes ☐ No																	
21. Please describe the number of core registry locations including primary and secondary sites : (this question refers to the core registry locations only. Name Servers are covered in Question 26)		30															
22. What is your EPP server throughput in terms of maximum domain name registrations/second ? Average : Peak over the last 12 months : Maximum capacity :		30															
23. Please provide the number of the following system components in use, both as of today, and 1 year after the date of commencement of operations : <table border="1"> <thead> <tr> <th></th> <th>Today</th> <th>1 year after commencement of operations</th> </tr> </thead> <tbody> <tr> <td>Servers :</td> <td> </td> <td> </td> </tr> <tr> <td>Routers :</td> <td> </td> <td> </td> </tr> <tr> <td>Switches :</td> <td> </td> <td> </td> </tr> <tr> <td>Databases :</td> <td> </td> <td> </td> </tr> </tbody> </table>			Today	1 year after commencement of operations	Servers :			Routers :			Switches :			Databases :			30
	Today	1 year after commencement of operations															
Servers :																	
Routers :																	
Switches :																	
Databases :																	
E. Database Capabilities																	
24. Which database and Server OS do you use ? ☐ Oracle/Solaris ☐ MySQL/Linux ☐ Other (please provide detail) :		31															
25. Please provide the size of your core registry databases (in GB) :		31															
F. Geographic Diversity																	
26. How many separate locations do you have for your DNS servers ?		32															
G. Continuity																	
27.A. Do you have a detailed registry continuity plan in place ? ☐ Yes ☐ No		42,43,44, 45															
27.B. If you responded "Yes" to Question 27.A, has a transition services provider been identified and contractually engaged ? ☐ Yes : ☐ No		42,43,44, 45															
28. How often do you review / refresh the plan ? ☐ Quarterly ☐ Never ☐ Annually ☐ Other (please provide detail) : ☐ Bi-annually		42,43,44, 45															

29. If you responded "Yes" to Question 27.B, please check whether the following elements are part of your arrangement with your transition services provider :		42,43,44, 45																														
- Registry Services : ☐ - Maintenance of name servers and DNS for registered domain names : ☐ - Other items : ☐																																
30.A. Do you have a failover testing plan in place ?		42,43,44, 45																														
☐ Yes ☐ No																																
30.B. If you responded "Yes" to Question 30.A., how regularly do you test it ?		42,43,44, 45																														
☐ Annually or more frequently ☐ Less frequently than annually ☐ Never																																
H. Monitoring and Fault Escalation																																
31. Please describe the tools currently used for monitoring critical registry operations and systems :		46																														
32. Please provide the current (past 3 months) % uptime for the following registry services :		46																														
Shared Registry System (EPP) :	%																															
DNS Service :	%																															
Whois Service :	%																															
I. Registry Size and Operations																																
Questions 33-37 need only be completed if you have not already previously made this information available to ICANN through regular reporting																																
33. On average, what volume of renewals (in actual number of renewals) do you receive on a daily basis ? (for this and remaining questions under this section, where more than one registry is operated, please provide for each registry)		Multiple																														
<table border="1"> <thead> <tr> <th></th> <th>Registry 1</th> <th>Registry 2*</th> <th>Registry 3*</th> <th>Registry 4*</th> </tr> </thead> <tbody> <tr> <td>Name :</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Today :</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>As of 1 year after commencement of operations :</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>As of 2 years after commencement of operations :</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Best-estimate as to 1 year from today :</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Registry 1	Registry 2*	Registry 3*	Registry 4*	Name :					Today :					As of 1 year after commencement of operations :					As of 2 years after commencement of operations :					Best-estimate as to 1 year from today :					* = if relevant	
	Registry 1	Registry 2*	Registry 3*	Registry 4*																												
Name :																																
Today :																																
As of 1 year after commencement of operations :																																
As of 2 years after commencement of operations :																																
Best-estimate as to 1 year from today :																																

34. On average, what volume of cancellations / deletions do you receive on a daily basis ?					Multiple
	Registry 1	Registry 2*	Registry 3*	Registry 4*	
Name :					
Today :					
As of 1 year after commencement of operations :					
As of 2 years after commencement of operations :					
Best-estimate as to 1 year from today :					
					* = if relevant
35. On average, what volume of Whois queries do you receive on a daily basis ?					Multiple
	Registry 1	Registry 2*	Registry 3*	Registry 4*	
Name :					
Today :					
As of 1 year after commencement of operations :					
As of 2 years after commencement of operations :					
Best-estimate as to 1 year from today :					
					* = if relevant
36. What is the average response time for the following registry services ?					Multiple
Shared Registry System (EPP) :					
DNS Service :					
Whois Service :					
37. Please describe your pricing model (with respect to prices from new registrations, renewals, cancellations, and any volume discounts and promotions) :					Multiple
Today :					
As of 1 year after commencement of operations :					
As of 2 years after commencement of operations :					
Best-estimate as to 1 year from today :					
J. Forecasting Performance					
38. Looking back at your initial registry size and growth assumptions (prior to actually commencing registry operations), were the					50, 53
☐ Met ?					
☐ Exceeded ?					
☐ Not met ?					
39. Please describe the key factors (or challenges), that you did not anticipate, or that proved erroneous when thinking about actual registry growth versus your planned growth :					50, 53
40. Looking back at your initial cost projections for running the registry (prior to establishing the registry), were they					50, 53
☐ Relatively accurate (in comparison to the actual size of registry) ?					
☐ Under-estimated ?					
☐ Over-estimated ?					

41. If costs were initially either under- or over-estimated, what were the main drivers of the incorrect forecast (e.g., not enough labor, over-estimated costs involved, did not anticipate marketing requirements, etc) ?	50, 53
K. Financial Metrics	
42.A. Are your financial statements currently audited ? ☐ Yes ☐ No	49, 51, 52
42.B. If you responded "No" to Question 42.A., please describe what form of financials you produce, the frequency with which you produce them (e.g., monthly, annually etc), and the level of detail involved : Frequency : ☐ Monthly ☐ Quarterly ☐ Annually	49, 51, 52
43. What is your <u>current</u> annual level of capital expenditure ? (please state which currency you are using) Currency Used Current Level of Capital Expenditures 	51, 52
44. What was your level of capital expenditure during the <u>first year</u> of registry operations ? (please state which currency you are using) Currency Used Current Level of Capital Expenditures 	51, 52