



Government of  
The Republic  
of Vanuatu



Telecommunication &  
Radiocommunication  
Regulator

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A Consultation Paper on  
**VANUATU DOMAIN NAME MANAGEMENT  
AND ADMINISTRATION REGULATION**

Inviting public comment and input  
9/12/2015

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## Consultation feedback Information

- TRR welcomes and invites comments and feedback to this consultation document from all interested parties;
- We would appreciate your responses to be clear by quoting the corresponding main sections and sub sections when providing your comments;
- More general comments on this consultation document should be indicated accordingly;
- In the interests of transparency, TRR will make public all or parts of any submissions made in response to this Consultation Document unless there is a specific request to treat all or part of a response in confidence. If no such request is made, TRR will assume that the response is not intended to be confidential. TRR will evaluate requests for confidentiality according to relevant legal principles;
- Respondents are required to clearly mark any information included in their submission that they consider confidential. They shall provide reasons why that information should be treated as such. Where information claimed to be confidential is included in a submission, respondents are required to provide both a confidential and a non-confidential version of their submission. TRR will determine, whether the information claimed to be confidential is to be treated as such, and, if so, will not publish that information. In respect of the information that is determined to be non-confidential, TRR may publish or refrain from publishing such information at its sole discretion.
- If you have specific questions, please use Section 5 (Your Specific Questions) to provide us with your queries;
- TRR will accept comments in English, French or Bislama;
- If comments are submitted in printed format, they must be submitted on A4 paper accompanied, wherever possible, by a disk or flash drive containing the comments, in electronic format;
- Comments on this consultation document should be provided to TRR via the following means:
  - Email address [consultation@trr.vu](mailto:consultation@trr.vu)
  - Faxed to (678) 24470
  - Posted or hand delivered to:  
**Public Input – VANUATU DOMAIN NAME MANAGEMENT AND ADMINISTRATION  
REGULATION**  
Telecommunications and Radiocommunications Regulator  
P O Box 3547, Port Vila, Vanuatu
- The deadline for public Comments is **4pm, 29 January 2016**;
- For any phone enquiries regarding this Consultation document, please call the following numbers:
  - (678) 27621 or (678) 27487

- For more information about TRR's Consultation Guidelines, please visit the following website [www.trr.vu](http://www.trr.vu) or contact TRR office to obtain a copy.
- You are welcome to visit our website <http://www.trr.vu> for more details on the latest developments in the telecommunication services industry and other regulatory related matters.

## 1 INTRODUCTION

This consultation paper has been prepared for TRR stakeholders to discuss and consider the intended future arrangement and management of .vu country code Top Level Domain (ccTLD).

It provides background information on some .vu domain name issues, areas of concern identified and actions taken by Telecommunications and Radiocommunications Regulator (TRR) to date, and TVL's current administration issues and views. Additionally, it includes discussions on the significance of, and need for, establishing an appropriate ccTLD management and administration model and its rules or regulatory framework for managing and administering “.vu” Internet domain names and the associated domain name system's technical infrastructure. The TRR proposed model is provided in Annex A and recommendations are based on this structure for TVL's and other Licensee's consideration. Annex B provides description of the model.

## 2 BACKGROUND

TRR has the authority to make arrangements for the proper and appropriate management and administration of the country code Top Level Domain (ccTLD) name for Vanuatu – that is for .vu ccTLD. Pursuant to its powers under the Telecommunications and Radiocommunications Regulation Act 2009 (“the Act”), Section 7(4) (e), TRR may make regulations for the management and administration of country code top level domain names and domain name registration for Vanuatu. Until TRR makes suitable arrangements, the management of the country code is with Telecom Vanuatu Limited (TVL) in continuation of the role it had as the single operator within Vanuatu, pursuant with its arrangement with International Corporation of Assigned Names and Numbers (ICANN). TRR acknowledges the good work that TVL has done as manager, but in a liberalized and competitive market it is now time for the management function to be fully undertaken by the independent regulator, TRR. Under guidelines developed by ICANN, a country's ccTLD and its Internet domains names are treated as public resources which must be managed to best serve the internet community. Organizations and individuals applying for the use of a domain for a period of time (generally one year), are subject to certain technical, legal and policy or regulatory requirements, as are the organizations providing domain registration services to the public.

## 3 FUTURE MANAGEMENT OF .VU CCTLD

TRR has already consulted on the matter of .vu ccTLD management in October 2012. Very limited feedback was received at that time, and TRR adjudged that the submissions were insufficient to support the implementation of any major ccTLD management changes. However, since then, TRR has conducted its own investigations and been made aware of various views and concerns about expansion of the .vu domain market. TRR has also had the benefit of a number of discussions with TVL, as the current Registry operator, about how management of the ccTLD might develop in future. TRR has therefore developed a comprehensive draft regulation setting out the roles and responsibilities of the

Various participants in the domain management process in the future, and of the procedures that shall generally apply. The draft regulation is attached for public consultation at Annex D. A graphic summary of the proposed new .vu ccTLD management structure appears at Annex B, but this is subject to the detail in the draft regulation.

#### **4 BACKGROUND INFORMATION ON DOMAIN NAMES AND SERVICES**

Outlined at Annex A is a background brief on domain names, the domain names system (DNS) and structure, and services that are provided by functionaries performing various roles in the management of the system. It is not intended that Annex A be directly subject to consultation, but it may help intending respondents to organize and provide to TRR their views and thoughts.

#### **5 REGULATORY IMPACT ASSESSMENT**

TRR considers that the draft Regulation at Annex D provides appropriate arrangements for the management and administration of .vu ccTLD because:

- There are no Vanuatu specific arrangements in place at present;
- The proposed separation of Registry and Registrar roles is necessary for overall good administration and is clearly provided for;
- The arrangements will facilitate achieving the following benefits and goals:
  - Equitable management and operation of .vu domain names;
  - Promoting .vu domain market growth and optimum utilization of the .vu Internet name space;
  - Promoting growth and development of ICTs in Vanuatu and addressing “digital divide” problems;
  - Nurturing and extending indigenous Internet expertise and promoting Internet usage and computer literacy;
  - Improved interaction with the wider Internet community through participation in technical and policy fora such as ICANN, WSIS activities, IGF, IETF, Regional Internet Registries (RIRs) e.g. Asia Pacific Network Information Centre (APNIC) and regional top level domain associations e.g. Asia Pacific Top Level Domain;
  - Improved quality, diversity and safety of Vanuatu’s Internet infrastructure.

TRR has set out at Annex C a series of consultation questions that may assist respondents to structure their submissions. It would be appreciated if the submissions that are responding to these questions could refer to the relevant questions being addressed at various stages in their submissions.

Submissions may be structured in any form that is convenient, but TRR requests that specific comments be cross referenced to the relevant part of the draft regulation to assist in the full appreciation of the comments being made. More general comments on the consultation document should be indicated accordingly.

In the interests of transparency, TRR will make public all or parts of any submissions made in response to this Consultation Document unless there is a specific request to treat all or part of a response as confidential. If no such request is made, TRR will assume that confidentiality is not being claimed for the submission.

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TRR will accept comments in English, French or Bislama.

If comments are submitted in printed format, they must be submitted on A4 paper accompanied, wherever possible, by a disk/flash drive or alternative storage device containing the comments in electronic format.

Comments on this consultation document should be provided to TRR via the following means:

Email address: [enquiries@trr.vu](mailto:enquiries@trr.vu)

Faxed to (678) 24470 Posted or hand delivered to:

**Input – Vanuatu Domain Name Management and Administration Regulation**

Telecommunications and Radiocommunications Regulator

P O Box 3547, Port Vila, Vanuatu

The deadline for public Comments is 4pm, Friday 29th January 2016. For any phone enquiries regarding this Consultation document, please call the following numbers: (678) 27621 or (678) 27487

## 6 ANNEX A – OVERVIEW OF THE DOMAIN NAMES, DOMAIN NAME SYSTEM AND SERVICES

### A.1 Domain Names

A domain name is the address of a person or an organization on the Internet. Businesses typically register domain names with their company name or sometimes their product names. Individuals often register family names or other names that have personal meaning. For instance the Internet address of TRR is “trr.vu”.

Domain names are an important part of the Internet, and as a result so is ccTLD management.

Every device connected to the public Internet has a unique numeric address - similar to the uniqueness of a telephone number - which is a string of numbers that is difficult for most people to remember. This string is called the “IP address.” IP stands for “Internet Protocol.” For example 180.222.210.79 is the IP address of MyCompany’s website.

### A.2 Domain Name System (DNS) and Services

Lengthy IP numeric addresses are not easily remembered and so Internet web sites use easy-to-remember domain names linked to the IP addresses. The Domain Name System (DNS) was invented to make it easier to find a given location on the Internet. The DNS translates IP addresses into unique alphanumeric addresses called domain names that are easier for people to remember. A DNS enables you to type www.trr.vu (user understood name) without having to enter a lengthy IP address (numbers), and get to the right website – i.e. MyCompany website. Without this uniqueness, the DNS would be less predictable and reliable. By associating a familiar string of letters which is the domain name, with an IP address, the DNS makes it much easier for Internet users to remember websites and email addresses.

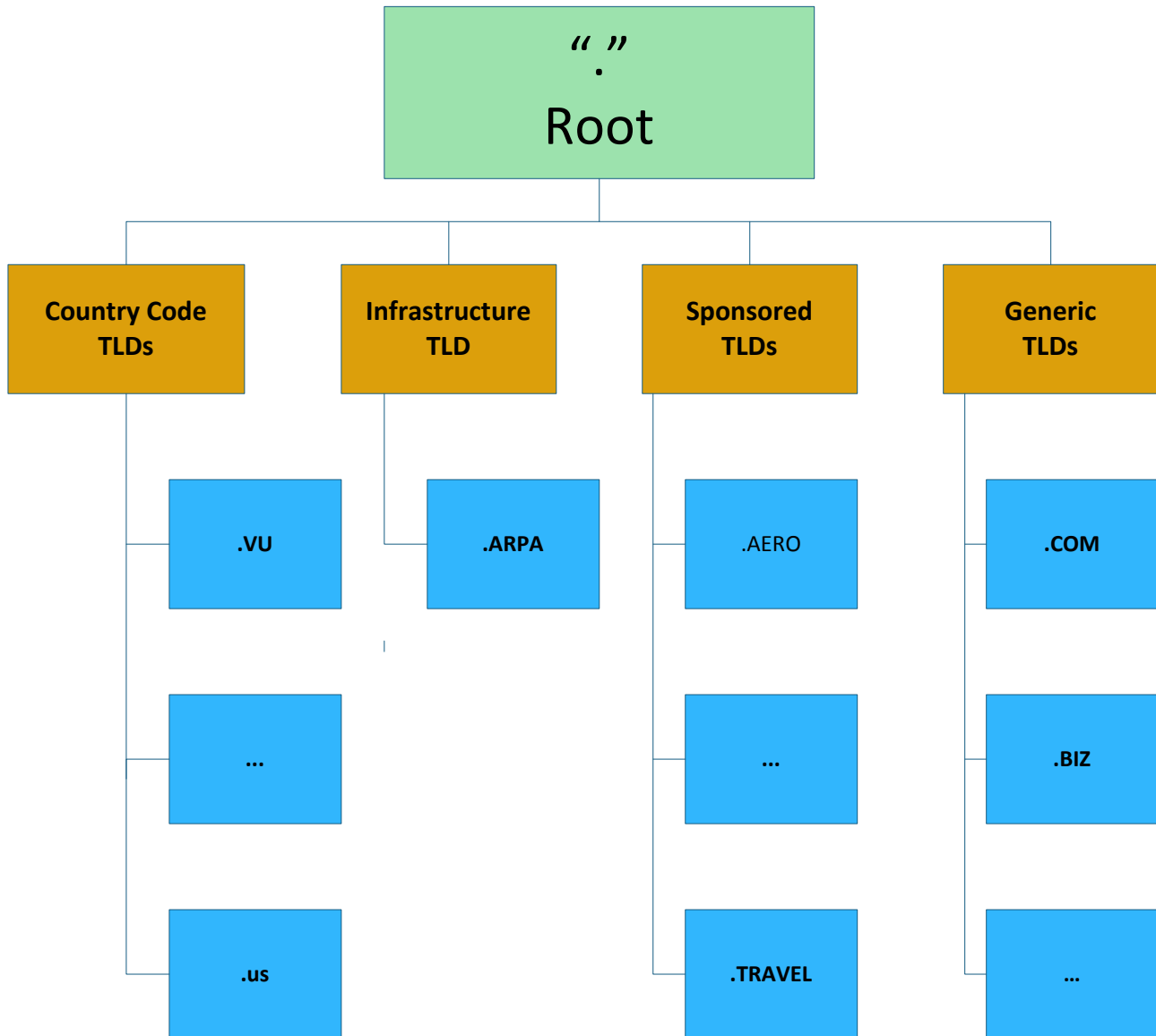
Domain names can also be used to send email. Whether sending business or personal communications, the sender will want to be certain that your message is directed to the intended addressee. Both the domain name and the IP address behind it are unique. The DNS enables email to reach the intended recipient, for example, enquiries@trr.vu and not someone else with a similar domain name.

A domain name can remain unchanged even if a website is moved to a different host computer or server because the DNS can be told to point an existing domain name to a new IP address.

### A.3 DNS Structure

In a DNS hierarchy, all Internet domain names can be broadly categorized under the generic Top Level Domain (gTLD), country code Top Level Domain (ccTLD), infrastructure Top Level Domain and Sponsored Top Level Domain (see below structure that will guide your understanding).





**Figure 1 – DNS Structure**

Examples of generic top level domains (gTLDs) include .com for commercial entities, .org for nonprofit making organizations, .edu for academic institutions, .net for network providers, and .int for international organizations established under accords. An example of an infrastructure TLD is .arpa while .aero or .travel are examples of sponsored TLDs. Only companies accredited by the ICANN may act as registrars and provide registration services for these TLDs.

According to the two-letter codes in the ISO 3166-1 standard "Codes for the Representation of Names of Countries and Their Subdivisions", ccTLDs are assigned to local Internet communities. A ccTLD is a Top Level Domain (TLD) used to uniquely identify a country or territory, for example ".vu" for Vanuatu or ".pg" for Papua New Guinea. The ISO 3166 standard currently lists more than 200 ccTLDs. For each ccTLD, there is a designated registry operator. The ccTLD is also the top umbrella of second-level

domains by generic descriptions. In the case of Vanuatu five second-level domains exist, under the .vu namespace and they are .com.vu, .org.vu, .net.vu, .edu.vu and .gov.vu. At present, TVL is the sole

Company providing domain registration services under these second-level domains. Generally speaking, ccTLD registry operators or simply known as Registry throughout this document, are entities that are legally and often operationally resident in the concerned country or territory.

#### A.4 Registry and WHOIS Services

A Registry (see Figure 2) maintains and publishes a list of domain names that have been registered in the DNS. For resilience and robustness, each zone or logical administrative unit in the DNS, is served by more than one name server that are normally distributed in different locations to avoid single points of failure. Updates to the zone are performed on exactly one server known as the master name server (or primary server) and propagated from there to the other servers which are known as slaves (secondary servers). The DNS protocol automatically takes care of synchronization and replication of data between the master name server and the slave name servers for each zone.

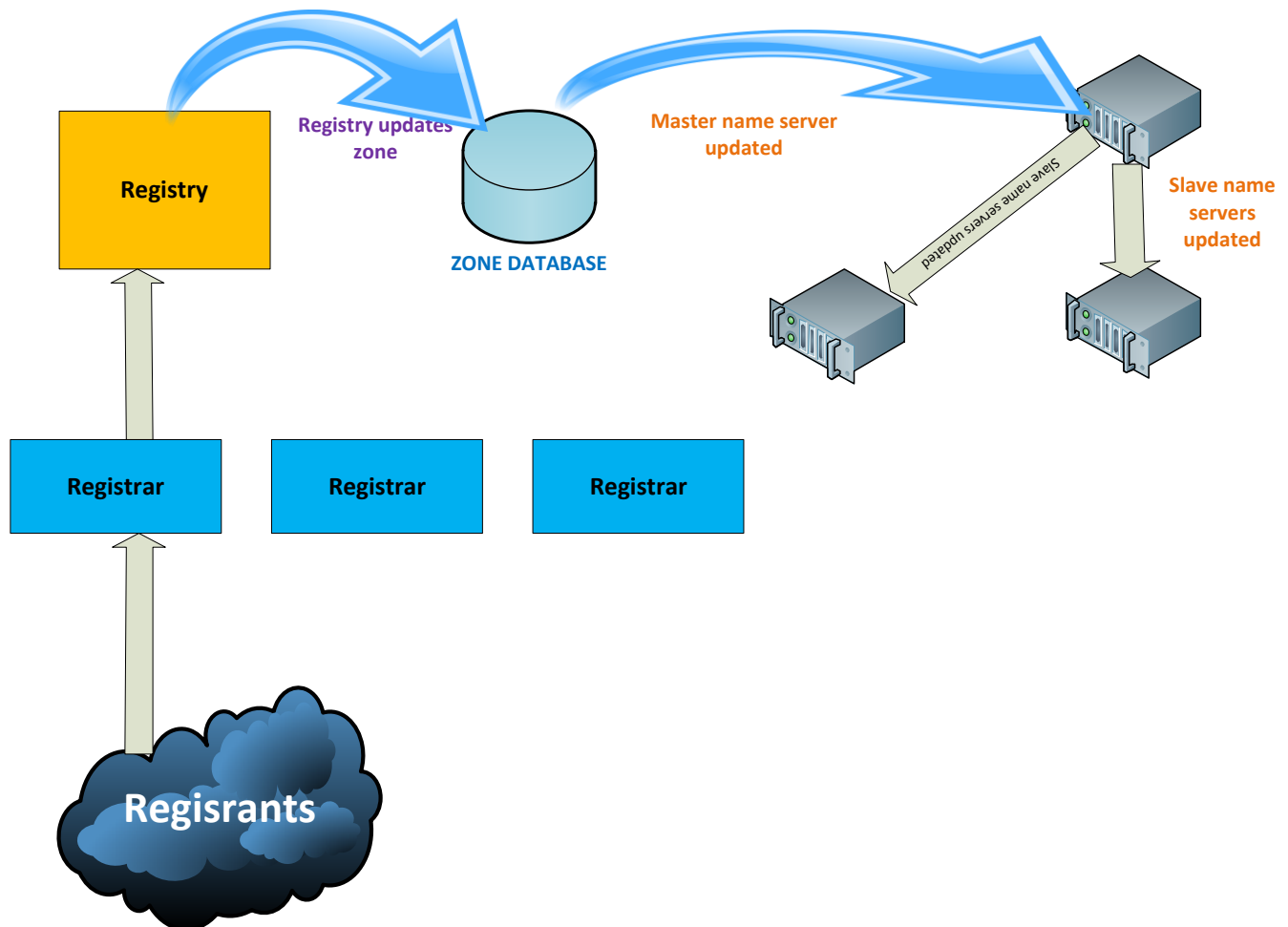


Figure 2 – Data flow in a standard ccTLD

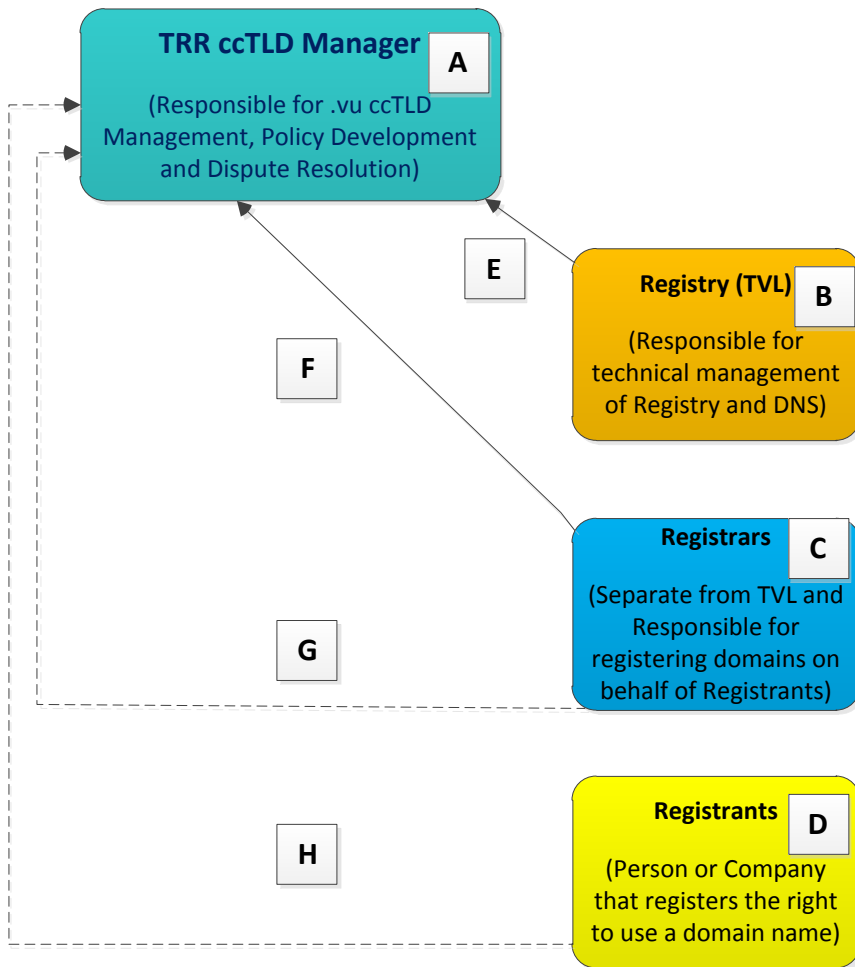
The **'whois'** service is also a critical internet service independent of the DNS. It provides information on:

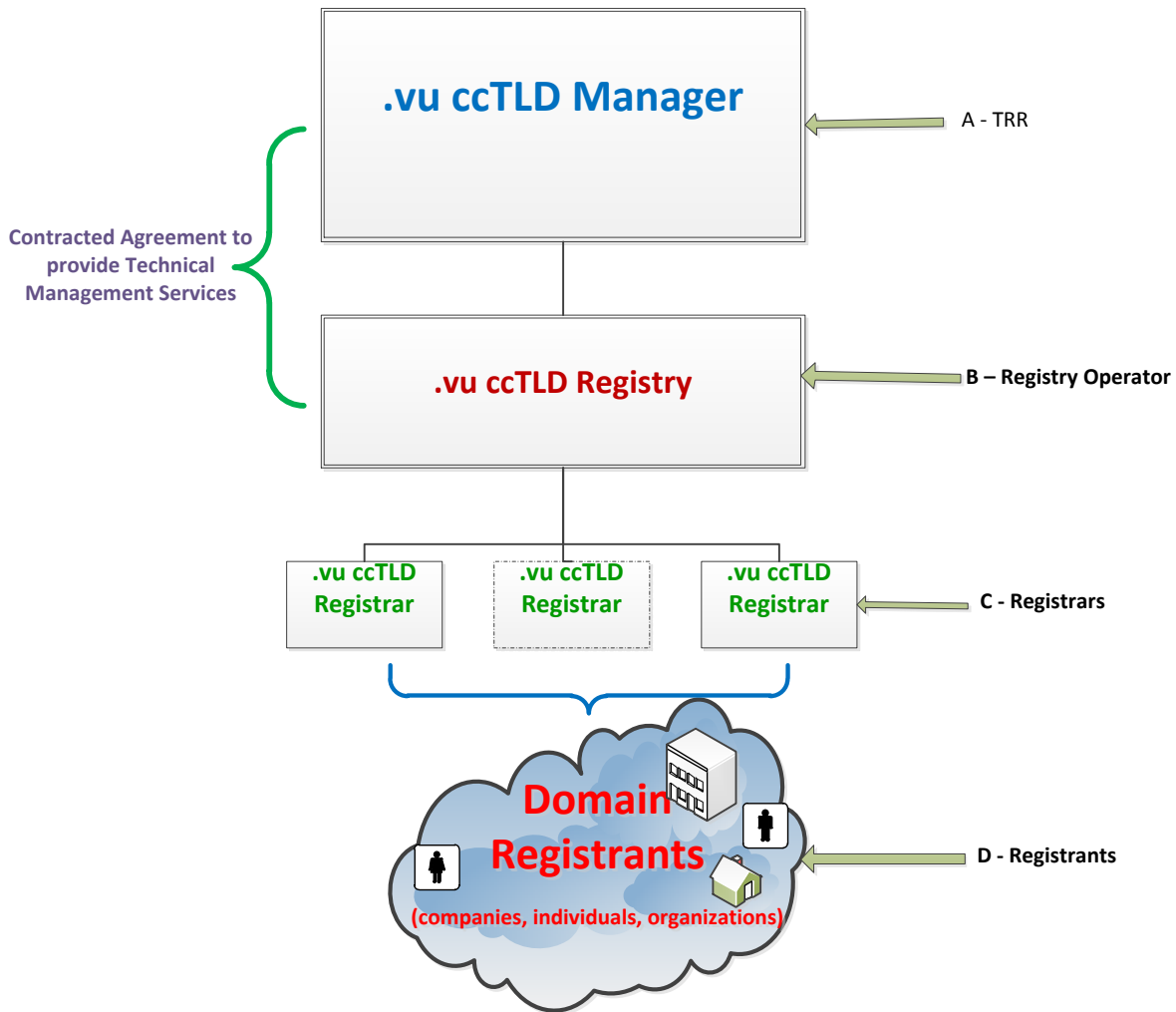
- the status of domain names such as that pertaining to technical, administrative and billing contact details about the domain name holder;
- which registrar was used;
- when the domain name was registered;
- when it was last updated; and
- the domain's expiry date.

The information displayed by each registry's whois server varies, and depends on factors such as the prevailing national laws for data protection and privacy, contractual obligations and registrant or registrar preferences. TVL provides whois service as part of its registry service through Vanuatu Network Information Center (VUNIC) - <http://www.vunic.vu/>

Domain name services (DNS) play a critical role and are a significant part of the Internet's basic infrastructure. They provide users with useful, meaningful addresses that make navigating the Internet's vast wealth of information resources possible. Users depend on the data returned from the DNS in order to effectively visit web sites, send email and use other forms of Internet-based communication to contact those who have registered domain names. Without Internet domain services, the Internet would be effectively useless for the majority of its users.

## 7 ANNEX B - PROPOSED NEW .VU CCTLD





Reference	Description
A	<p>TRR is the Vanuatu Domain Administrator and is responsible for oversight of all .vu ccTLD policy or regulation development and administration in order to ensure the structure and regulatory governance framework works best to suit Vanuatu’s needs. TRR will work closely with Office of the Government Chief Information Officer on policy aspects.</p> <p>TRR, in consultation with internet communities through representations, will select the ccTLD registry, normally via a competitive tender process.</p>
B	<p>The Registry (referred to in the diagrams as Registry or Domain Technical Administrator) is the entity that will provide the underlying infrastructure of systems and procedures</p>

	<p>for registering domain names.</p> <p>The Registry will operate on the basis of a TRR appointment, and in line with relevant regulations.</p> <p>The Registry will be responsible for operating the register database and the supporting infrastructure of DNS servers, whois system and other DNS services. It will implement the policies and processes in line with the Domain Name Management and Administration Regulation. This will be defined by a formal agreement with TRR. The authoritative record of .vu domains will also be managed and operated by the Registry.</p> <p>TRR would have the authority to introduce changes to registry policy or regulation and have them implemented by the registry operator. Ideally this would be done by a process of consensus and agreement.</p>
C	<p>Registrars are the entities that register domains on behalf of the registrants.</p> <p>Registrars are independent parties who have TRR's approval via an application to perform registrar roles. They will have access to the register database provided by the Registry, and will be subjected to agreement to comply by Registrar and Registry service obligations</p> <p>Registrars are typically Internet Service Providers (ISPs) or companies that offer other services such as web and mail hosting. Registrars interact with the registry which maintains a database of registered domain names. This database is used to populate the registry's Domain Name System (DNS) and whois servers.</p>
D	<p>Registrants (also known as end users or domain users) are the individuals or organizations/companies who hold the right to use a domain name.</p> <p>A registrant will generally have a business relationship with a registrar to register domain names on their behalf.</p> <p>No direct communication will occur between Registrants and the Registry in the first instance. The Registrar contacts the Registry on behalf of the Registrant.</p>
E	<p>This represents communication and reporting line of the Registry to TRR. TRR must approve of the Registry operator and sign an Agreement with the Registry operator, before it is able to provide Registry and technical administration services.</p>
F	<p>This represents communication and reporting line of the Registrar to TRR. TRR must approve of the Registrar operator and sign an Agreement with the Registrar operator, before it is able to provide Registrar services.</p>
G & H	<p>These represent communication and reporting lines during a dispute and resolution situation. If a party believes its concerns had not been addressed satisfactorily by the party it has a direct relationship to, the case may be escalated to TRR.</p> <p>No direct dispute communication will occur between TRR and the Registrars, or the Registrants in the first instance. Communication line in 'F' as explained above for</p>

	Registrar approvals must be followed before an escalation occurs
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## 8 ANNEX C – CONSULTATION QUESTIONS ON .VU CCTLD MANAGEMENT AND ADMINISTRATION

1. Do you agree with the proposed new ccTLD Structure and regulatory framework, and why/why not?
2. If not, what kind of .vu ccTLD Structure and regulatory framework would you like to see implemented instead?
3. What are the risks, if any, of TRR's preferred Structure and approach?
4. Do you agree that the .vu resource be managed as a public good resource? State your reasons for agreeing or disagreeing.
5. Do you agree that the 'Registrar' service be opened to competition which means there will be more than one Registrar in Vanuatu? State your reasons for agreeing or disagreeing.
6. Do you agree that Registrar services should also be run by international Registrars outside of Vanuatu? State your reasons for agreeing or disagreeing.
7. Should the Registry and Registrar roles be separated? State your reasons for agreeing or disagreeing.
8. Do you have any comments on specific provisions in the draft Regulations at Annex D? Please cite the number of the section concerned when making comments.
9. Has TRR covered all relevant aspects in the draft Regulation? If not, please outline additional provisions that should be included.
10. Any other appropriate Management and Administration models that you think TRR should also consider?



## **9 ANNEX D – CONSULTATION QUESTIONS ON RULE NO. 1**

1. Do you agree with the proposed rules, and why/why not?
2. If not, what kind of .vu ccTLD Structure and regulatory framework would you like to see implemented instead?
3. Do you have any other comments on Rule No.1?
4. What other rule do you think should be included?
5. What are your own expectations concerning Rule No 1 for Vanuatu Domain name and what would you suggest?

## **10 ANNEX E DOMAIN NAME REGULATION**

## **11 ANNEX F RULE NO. 1 OPERATIONAL PROCEDURES**