



# NZRS Technical and Business Systems Review Project

## Draft -Terms of Reference for consultation with InternetNZ and .NZOC

### **1 Introduction**

.nz Registry Services (NZRS) has been operating and managing the Shared Registry System (SRS) application and the Domain Name System (DNS) for the .nz space since October 2002. As part of NZRS's Business Plan the SRS and DNS are scheduled for a full review in the 4th year of operation (2006). This document defines the Terms of Reference of the review project which seeks to ensure that NZRS's technical and business systems continue to effectively meet its business needs until 2011.

### **2 Background**

The Internet Society of New Zealand (InternetNZ) is responsible for the management of the New Zealand (.nz) domain name space. In line with this responsibility, InternetNZ established New Zealand Domain Name Registry Ltd (trading as .nz Registry Services - NZRS) to operate as the registry for .nz domain name registrations. The SRS was specified by InternetNZ and developed by Catalyst IT in 2002 and is the application that has allowed for a competitive marketplace for .nz registrations. NZRS operates the SRS in line with documented policies and a Service Level Agreement with InternetNZ (represented by the Domain Name Commissioner - DNC). The DNC also has an oversight role in relation to the operation of the .nz market.

The SRS and DNS are deemed to be part of the critical infrastructure of New Zealand and as such are required to be managed and operated in the most professional, stable and secure manner possible. The SRS is well regarded internationally and has been promoted and operated from a position of quality and accuracy. It is important to the ongoing success of the SRS, NZRS and the .nz market that this continues. During the life of the SRS the number of domain names in the .nz register has increased from 116,000 to over 207,000 names. Over the period from October 2002 NZRS has operated a Continuous Improvement Programme.

### **3 Purpose**

The purpose of the Technical and Business Systems Review (TABSR) project is to review and document current systems, current and future business needs, then deliver an architecture and technical strategy that will effectively meet these needs until 2011.

### **4 Scope**

#### **4.1 In Scope**

The following are included within the scope of the project.

1. Define NZRS's high-level business system requirements through to 2011, including any emerging new business opportunities identified by the review committee or the company and those which are documented in the company's strategic and business plans.
2. Define the most suitable and effective technical architecture to support NZRS's systems and business requirements through to 2011.
3. Define the most suitable and effective technical standards and protocols, internal, external and international, to underpin the technical architecture - with special emphasis on interfaces to other systems.
4. Review the SRS and DNS applications and architecture against best practice and the proposed architecture.
5. Identify opportunities to enhance the service provided to our customers through continuous improvement and technological innovation.
6. Define a technical strategy and timetable for moving existing NZRS systems from their current state to one which conforms to the proposed architecture.
7. Define the network management and capacity planning requirements to take NZRS through to 2011.
8. Review current hosting arrangements from a technical perspective and recommend any improvements that might be made through to 2011.
9. A high-level cost benefit analysis of the implementation of any proposed systems or architecture
10. A risk analysis of the implementation of any proposed systems or architecture
11. Provide comment on .nz policy as it affects, or is potentially affected by, the outcome of the review.

## 4.2 Out of Scope

The following are excluded from the scope of the project.

1. Review of .nz policy.
2. Review of commercial or contractual arrangements relating to existing systems other than where these relate to the cost-benefit or risk analyses outlined above.
3. Development and implementation of any business or technical systems.

## **5 Project Structure**

### 5.1 Project Phases

The project will have three main phases, Project Start-up, Requirements Definition and Technical Architecture.

The Project Start-up will refine the terms of reference and formalise the Project Charter.

The Requirements Definition phase must be completed before substantive work on technical architecture can begin. The key deliverable of this phase will be an approved requirements document. The final deliverable of the phase will be a full definition and scope of the technical architecture phase, including a Terms of Reference document, a budget, and detailed work estimates.

The Technical Architecture phase will be largely carried out by a Technical Architecture Panel. This approach will ensure NZRS has access to a wide range of expertise and at the same time mitigate the political risk of an architecture that does not meet stakeholder expectations. Nevertheless, it will be made clear from the outset that NZRS 'owns' the architecture and has full and final say over all matters related to it. The panel must be, and must appear to be, truly representative of NZRS customers and stakeholders. Depending on commercial sensitivity, the scope of the panel might be restricted to specific systems, such as the DNS and SRS.

### 5.2 Project Resources

The key resources required for the review project team are a Project Manager, a Technical Architecture Panel, and a Networking and Capacity Consultant. Experts on international trends and standards are also required and are assumed to be members of the Technical Architecture Panel, although from time to time they may be consulted on non-technical matters. Other expertise might be brought to the project as required.

### 5.3 Business Owner

An NZRS Committee will be established for the review to act as the Business Owner (or Sponsor) of the project and will be the key recipient of project deliverables. Its members will represent the NZRS Board in all matters relating to the project, including financial approval within the limits of the budget agreed with the Board, and will be responsible for reporting project progress to the Board.

#### 5.4 Business Manager

The NZRS General Manager is the Business Manager of the project and will oversee it on a day to day basis on behalf of the Business Owner. The Business Manager will be solely responsible for decision making on the project and will refer matters to the Business Owner when appropriate in accordance with defined delegations.

#### 5.5 Project Manager

The Project Manager will be appointed by, and report to, the Business Manager. As well as standard project management and planning duties, the Project Manager will be responsible for facilitating the Technical Architecture Panel and compiling and presenting project documents.

## 6 **Project Schedule**

Following are the Requirements Definition phase of the project and indicative timelines for the Technical Architecture phase.

<b>Phase</b>	<b>Start</b>	<b>Finish</b>
Project Start-up	February 2006	February 2006
Requirements Definition	March 2006	May 2006
Technical Architecture	May 2006	August 2006
	<b>February 2006</b>	<b>August 2006</b>

## 7 **Stakeholders**

The following are identified as key stakeholders in the project and will be consulted as appropriate.

- InternetNZ Council (shareholder)
- InternetNZ Technical Committee
- .nz Oversight Committee
- .nz Domain Name Commissioner
- .nz Registrars

The following are also identified as stakeholders, although in a minor capacity.

- New Zealand-based ISPs
- Commerce Commission
- Ministry of Economic Development (MED)
- Government Communication and Security Bureau (GCSB)
- IANA

- APTLD

The following are considered stakeholders due to their current association with NZRS systems.

- Catalyst IT (SRS and DNS support, SRS hosting)
- UltraDNS (DNS hosting)
- Open Systems Specialists (OSS) (business continuance)
- Registrants are also considered to be stakeholders and they are represented by many of the stakeholders on the list above in particular the .nz Domain Name Commissioner.

## 8 Deliverables

Following is a list of project deliverables. The exact nature of the deliverables may change after the project has started and more information is known, particularly for the Technical Architecture phase.

<b>Phase</b>	<b>Deliverable</b>	<b>Due</b>
Project Start-up	Discussion Paper	February 2006
	Project Committee TOR	February 2006
	Project Charter and TOR	March 2006
Requirements Definition	Terms of Reference	February 2006
	Project Plan	March 2006
	Project Budget	March 2006
	Briefing Paper(s)	March 2006
	Requirements Document	April 2006
Technical Architecture	Terms of Reference	May 2006
	Revised Project Plan	May 2006
	Revised Project Budget	May 2006
	Briefing Paper(s)	May 2006
	Panel Terms of Reference	May 2006
	Network/Capacity Plan	August 2006
	Cost Benefit Analysis	August 2006
	Risk Analysis	August 2006
	Technical Architecture	August 2006
	Technical Strategy	August 2006
	Final report to NZRS Board with options and recommendations	September 2006

**10 Sign-off**

Signature

Date

For NZRS Board

For NZRS  
(Nick Griffin)

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