

National Database System Replacement Project

Greg McCormick
VP Communications & Marketing

Joint BOD/MC Meeting Hockley Valley Resort September 20, 2019

Overview

January & February 2018

> Discussions started











Survey to ZPs and DPs

June 2018

Needs assessment interviews at AGM 2018

May 2019

First quote received from prospective vendor



June 2018 to May 2019

Assessment of options based on needs

June 2019

Review with ZPs, DPs, NMC and Board at Altitude 2019

August 2019

1st Draft of **Business Case** reviewed by Board

Board agrees in principle to continue next stage of review and receive formal estimate



September 2019

2nd Draft of **Business Case** with formal estimate reviewed by Board



Project Leads

Greg McCormick

- CSP member since 1995
- Information Technology Diploma (End-User Support) (Holland College)
- Master of Science (Risk, Crisis and Disaster Management (Univ. of Leicester)
- Civilian Member Royal Canadian Mounted Police (24 years)
 - Three years as a Project Manager for funding grants under Public Safety Canada's New Search and Rescue Initiatives Fund
 - Intelligence Analyst with Criminal Intelligence Service PEI

Diane Lemay

- CSP member since 2010
- Diploma in Computer Science (Algonquin College)
- ISTQB Certified / SAFe for Practitioners Certified
- Currently QA Tester (oil and banking sectors) with CGI
 - Tier Two support analyst
- Previously a Business Analyst with Manulife (Treasury Division)



National Database System Current Situation

The NDS is all encompassing & has five individual modules

1. Member:

 manages personal information, membership directory, shared files, FAQ and trouble ticketing system.

2. Operations

• Patroller and zone data, financial reports, registrations information, awards, and non-skiing event approvals.

3. Education

Course information, certifications, instructor certification program, exam information

4. Administration

• email software, ID card information, conference information, life member information.

5. Programmer

error logs, member transfer requests and database tool.



Current NDS Risk Assessment

- Reliant 100% on volunteers
- Platform is completely proprietary
 - 1000x of hours spent creating, many more needed to maintain.
- May have security vulnerabilities
 - impossible to tell without a full security audit.
- Not compliant with accessibility practices
 - could lead to frustration by those members with disabilities.



Opportunities

- By re-imaging the NDS and taking a deep look at what we use the most, we can <u>re-shape the experience</u>.
- Specific opportunities include:
 - Removing the long-term risk of relying COMPLETELY on in-house skill sets to manage and grow the system.
 - Revamp the user interface / Revamp the user experience.
 - Mobile-device complainant.
 - Allows for a review of how much CSP data should reside on a single platform.
 - Modern security standards / updating to meet new threat vectors.
 - Consolidating systems within the CSP's information technology sphere.



Priorities

Must Have

- Member records
- Registration / payment
- Reporting
- SSSO Portal (CiviCRM > WordPress < Moodle) – This is presumed to be custom
- Event registration (Internal conferences (National, Regional)
- Donation management

Nice to Have

- Awards system similar to current NDS
- Non-skiing event registration similar to current NDS
- Inventory management (jackets, equipment, etc.)



Selection Criteria

Level 1 Considerations

- Platforms must meet these criteria
 - 1. Server must be physically located in Canada
 - 2. Platform must integrate with WordPress (<u>www.skipatrol.ca</u> is operated on the WordPress platform)
 - a) Note: If the system doesn't integrate with WordPress, the CSP website needs to be redesigned.
 - 3. Open source, hosted platform
 - a) Not to rely on proprietary software with costs that caps growth
 - 4. Have a variety of vendors available to provide technical assistance
 - a) Not rely on customized software that requires a single person to provide technical assistance
 - 5. On-going operational costs must be low
 - a) Focus on security and technical maintenance; volunteers to manage content only

Level 2 Considerations

- Platforms will be assessed how they meet the following needs:
 - Portability
 - Extensibility (allows for future growth)
 - Security (modern encryption)
 - Bilingual content (multilingual nice-to-have)
 - Sustainability
 - Established business rules
 - High degree of confidence in data accuracy
 - Single-Session Security Sign-On (SSSO)

- Role-based access control
- Modern UI (device responsive)
- Scalable hosting
- Accessibility
- Data sharing with external systems (Moodle (e-learning))
- Reporting system with dynamic field selection

Options Considered

Nation Builder*

Neon CRM*

BaseCamp*

SUMAC*

Unit4*

CiviCRM

CSP NDS

ZIMS (Central Zone)

WordPress



^{*} Platforms to consider suggested by zones and divisions

Level 1 Analysis

Nation Builder*

Neon CRM*

BaseCamp*

SUMAC*

Unit4*

CiviCRM

CSP NDS

ZIMS (Central Zone)

WordPress

* Platforms to consider suggested by zones and divisions



Level 1 Analysis Systems not selected

System	Rationale
Nation Builder	Does not integrate with WordPress; would require an entirely new website or an external plugin to bridge both. Pricing model is linked to users and emails – could limit growth
NeonCRM	Uses internal consultants to migrate data (high cost). Pricing model is linked to users and emails, could limit growth. Integration with WordPress limited to a plugin.
BaseCamp	Project management and team communication software. No database functions apparent. Not applicable.
SUMAC	Used by the national office for donor management, could be tailored to the needs of the database however there is a cost to this above and beyond the initial setup.
Unit4	Project management and business management (enterprise resource planning) suite. No integration with Wordpress.



Level 2 Analysis Systems selected

Status Quo

NDS upgrade

ZIMS

Upgrade to national Scope

PROPOSED

SOLUTIONS

WordPress with Plugins

CiviCRM



Summary – Platform Analysis

Priority	CiviCRM	WordPress with Plugins	ZIMS	NDS Upgrade			
Portability	Medium	Medium	Medium	Low			
Extensibility (allows for future growth)	High	High	Medium	Medium			
Security (modern encryption)	High	Low	Medium	Low			
Bilingual content (multilingual nice-to- have)	High	High	Low	High			
Sustainability	High	High Medium Low					
Established business rules	N/A - unknown	Low	Medium	High			
High degree of confidence in data accuracy	Medium	Medium	Medium	Medium			
Single-Session Security Sign-On (SSSO)	High	High	Medium	Low			
Role-based access control	High	Medium	High	Medium			
Modern UI (device responsive)	Medium	High	Low	Low			
Scalable hosting	N/A – does not apply	High	N/A – does not apply	N/A – does not apply			
Accessibility	Medium	Medium	Low	Low			
Data sharing with external systems (Moodle)	High	High	Medium	High			
Reporting system with dynamic field selection	High	Medium	Medium	Medium			





Implementation Plan

Phase	Oct'19	Nov'19	Dec'19	Jan'20	Feb'20	Mar'20	Apr'20	May'20	Jun'20	Jul'20	Aug'20	Sep'20	Oct'20	Nov'20	Dec'20	Jan'21	Feb'21	Mar'21	Apr'21
Discovery & Planning																			
Membership form development																			
Self-serve portal set-up																			
Access control lists																			
Data migration																			
Donation form & tax receipt																			
Training for zones and divisions																			
Release																			
Deployment to zones and divisions																			
Operational Year																			
NDS decommissioning																			

- 12-month project, intentions to go live for FY-2020/2021.
- User acceptance testing at each phase of completion.
- After one-full year of operational use, the old NDS would be archived (code) and decommissioned.



Project Budget

Item	Description	Amount (CAD)
Contractor	3^{rd} -party vendor is contracted to perform the technical tasks and manage project. 370 hours of work at \$95 per hour = \$35,150 + GST and QST (no rebates included)	\$40,500
Training	Training 15 people for 2 days in Montreal, QC	\$20,000
Contingency	105 hours of contract work (rounded)	\$10,000
Total Project Cash Needs		<u>\$70,500</u>
	Additional Considerations	
ZIMS Integration	Ensure the requirements for Central Zone's Zone Information Management System (ZIMS) are integrated	\$15,000
GST and QST	50% of GST (\$1,757) and QST (\$3,506)	\$(2,631)



Operating Cost

Item	Description	Amount (CAD)
Hosting Costs	Host the database and website (\$100 / month)	\$1,200
Annual Maintenance	Annual updates as required (30 hours at \$100 per hour)	\$3,000
Annual Operating Costs		<u>\$4,200</u>

