

# STRENGTH IN NUMBERS SYSTEM REQUIREMENTS

## 1. INTRODUCTION

The System Requirements Document captures the complete set of core system-level requirements identified for the Strength in Numbers Information Management System, and serves as the reference documentation throughout the project lifecycle. The System Requirements Document outlines the functionalities necessary to support viaSport's operational requirements for end-to-end data collection, storage, analysis, reporting, and governance.

## 2. SYSTEM REQUIREMENTS

### 2.1 DATA MANAGEMENT

Req. ID	Title	Description	Acceptance Criteria
DM-AGG-001	Data Collection & Submission	The system shall enable customizable form building, support flexible data entry through variable formats (forms, file uploads), with capabilities for real-time submission tracking, editing, and historical data migration.	Users and System Admin can successfully submit, track, and edit data
DM-AGG-002	Data Processing & Integration	The system shall enable standardization of data formatting, logging of transformation processes, and integration with external platforms through API (optional), and data import/export mechanisms.	Incoming data is processed uniformly, logged for traceability, and exchanged with external platforms.

DM-AGG-003	Data Governance & Access Control	The system shall enforce role-based access to data and provide administrators with secure database access, along with data cataloging and indexing capabilities for discoverability.	Users can only access data based on permission
DM-AGG-004	Data Quality & Integrity	The system shall ensure relational integrity and continuously monitor data quality using validation rules and automated checks.	Submitted data meets validation rules
DM-AGG-005	Data Storage & Retention	The system shall support regular backups, disaster recovery mechanisms, data archiving, and secure cloud hosting aligned with retention policies.	Data is backed up, archived as scheduled, and securely hosted in the cloud.
DM-AGG-006	Legacy Data Migration & Bulk Import	The system shall provide tooling and configurable mapping templates to import historical data from CSV/Excel, legacy databases, or APIs, including validation, error-handling, and rollback.	Administrators can map legacy fields to system fields, preview results, and execute import; import logs stored for audit.

## 2.2 REPORTING

Req. ID	Title	Description	Acceptance Criteria
RP-AGG-001	Data Validation & Submission Rules	The system shall validate submissions to ensure they are complete, clean, use the correct file types, and contain valid data fields such as dates and contact information.	Submissions that fail validation are rejected with appropriate error messages.
RP-AGG-002	Reporting Information Management	The system shall manage metadata related to reporting including but not limited to contribution agreements, NCCP, contact details, fiscal periods, organization profiles, and delegated access rights.	Users can update relevant metadata and access reporting features accordingly.

RP-AGG-003	Reporting Flow & Support	The system shall support automated reporting reminders, allow users to track data re-submissions, and visualize submitted data through dashboards.	Users are reminded, track changes, and view data in a dashboard format.
RP-AGG-004	Reporting Configuration & Collection	The system shall allow system administrators to configure customizable reporting forms, define required fields, display files for users to read, edit, delete, and download,	System admin can configure reporting information and forms
RP-AGG-005	Self-Service Analytics & Data Export	Enable authorized users to build ad-hoc charts, pivot tables, and export raw or aggregated datasets in CSV, Excel, or JSON (optional) without developer intervention.	User builds a custom chart and exports underlying dataset to CSVs; export respects field-level access rules.

## 2.3 SECURITY

Req. ID	Title	Description	Acceptance Criteria
SEC-AGG-001	Authentication & Access Control	The system shall enforce multi-factor authentication, support secure password recovery, restrict access based on user roles and affiliations, and allow organizational leaders to manage user admission.	Users log in securely; only authorized individuals gain access based on role and affiliation.
SEC-AGG-002	Monitoring & Threat Detection	The system shall detect and flag suspicious activities such as unusual login patterns or behavior anomalies and automatically lock accounts where appropriate.	Security anomalies are flagged, logged, and result in appropriate account safeguards.
SEC-AGG-003	Privacy & Regulatory Compliance	The system shall comply with relevant data protection laws (e.g., PIPEDA) to ensure secure handling, storage, and access to personal information.	All sensitive data is encrypted and stored securely.

SEC-AGG-004	Audit Trail & Data Lineage	The system shall maintain an immutable audit log of user actions, data changes, authentication events, and administrative configurations, supporting forensic review and regulatory reporting.	Auditors can filter logs by user or record ID and export results; tamper-evident hashing verifies integrity of log entries.
-------------	----------------------------	--	---

## 2.4 TRAINING & ONBOARDING

Req. ID	Title	Description	Acceptance Criteria
TO-AGG-001	Template Support & Integration	The system shall provide a centralized templates tab and offer contextual template access directly from each data entry item to guide users through required formats.	Users can easily locate and access the correct template when needed.
TO-AGG-002	Guided Learning & Walkthroughs	The system shall offer onboarding and data upload tutorials to help users navigate key processes, especially during their first-time use.	Users can complete tasks independently with support from walkthroughs.
TO-AGG-003	Reference Materials & Support	The system shall provide categorized guides and a frequently asked questions (FAQ) section to help users resolve issues and understand system functionality.	Users can find accurate answers and instructional material without needing direct support.

## 2.5 USER INTERFACE

Req. ID	Title	Description	Acceptance Criteria
UI-AGG-001	User Access & Account Control	The system shall support secure login/logout (MFA), individual and organizational account registration, account recovery, and system administrator account management with role-based access.	Users and system admin can perform account-related tasks securely.

UI-AGG-002	Personalized Dashboard	The system shall provide the capability to create personalized dashboard for each user role, summarizing relevant data, actions, and reporting progress.	Users can view personalized dashboards based on their roles.
UI-AGG-003	Responsive and Inclusive Design	The system shall provide a responsive interface across devices and include accessibility features such as screen reader compatibility, color contrast tools, and etc.	System is functional on all devices and meets accessibility compliance.
UI-AGG-004	Communication: Task & Notification Management	The system shall enable automated and customizable notification messages and task reminders that alert users of pending actions and updates, both on the platform and via email.	Users receive timely and relevant notifications and reminders.
UI-AGG-005	Content Navigation & Interaction	The system shall allow users to efficiently locate and interact with information using robust categorization, search and filtering capabilities.	Users can retrieve accurate results through search and filter functions.
UI-AGG-006	User Support & Feedback Mechanism	The system shall enable users to submit support inquiries and feedback and allow administrators to respond through a managed interface.	Users can submit and receive responses to inquiries within the system.
UI-AGG-007	Consistent Visual Language & Branding	The system shall maintain a consistent design style, color scheme, and branding across all modules.	All UI components follow a standardized visual style.