TERMS OF REFERENCE (TOR)

[National Sampling Framework Dashboard in BSDS]

National Statistics Bureau

1. BACKGROUND

A sampling frame is a complete list of all the units (e.g., individuals, households, institutions) in a population from which a sample can be drawn. It serves as the source material or device that ensures survey samples are representative, accurate, and reliable. A well-maintained sampling frame is essential for statistical operations, as it determines the quality of survey results and the credibility of official statistics.

The National Statistics Bureau (NSB) maintains a sampling frame comprising 3,310 Enumeration Areas (EAs), disaggregated into 1,464 urban and 1,846 rural developed from the Population and Housing Census of Bhutan (PHCB) 2017. Each EA has a corresponding digital map and associated metadata.

Currently, the sampling frame and EA maps are maintained in Excel and stored on a single focal person's computer. Updates are done manually during annual household surveys or when EAs are identified as oversized or undersized, and dissemination is done upon request via email.

The existing practices pose some limitations, including:

1. Storage and Maintenance Issues: Excel-based sampling frames and digitized EA maps are stored on personal computers, posing security risks. No real-time accessibility and interactive features for data exploration.
2. Operational Inefficiencies: No real-time updates of selected EAs. The current practice requires submission of the Listing Form and Control Form from the field to the headquarters for updating. Frequent follow-ups are needed for form submissions, and updates rely on manual entry, resulting in delays and a higher risk of errors.
3. Dissemination Problems: No single-point access for users, leading to delays in data sharing. Users and stakeholders have to make separate requests for the sampling frame and EA maps.

To enhance the current statistical operations, NSB proposes the development of a **National Sampling Frame Dashboard (NSFD)** within the Bhutan Statistical Data System (BSDS). The dashboard will provide interactive EA maps, automated updates, real-time data sharing, secure role-based access, and customizable export features to improve statistical operations and support evidence-based decision-making.

2. OBJECTIVE

This initiative is carried to enhance accuracy, timeliness, and efficiency of survey operations through automation and reduced manual processes. The main objective is to develop and implement the NSFD to:

1. Provide interactive, map-based visualization and metadata access of EAs.
2. Integrate real-time updates by linking field data directly to the system.
3. Ensure secure storage, maintenance and controlled dissemination of the sampling frame and EA maps through a single-point access system.
4. Enhance data accessibility with role-based access and customizable downloads.

3. TECHNICAL REQUIREMENTS

3.1 System Requirements

The National Sampling Framework Dashboard is a new dashboard to be incorporated in Bhutan Statistical Database System (BSDS) which will function as the central sampling frame repository and has to be fully dynamic.

3.2 Solution Architecture

1. By design the application should be decomposed into independent microservices where the SRP (Single responsibility principle) should be applied. Also, identify the boundaries of the services and align them with the business capabilities.
2. Make sure that the microservices design ensures the agile/independent development and deployment of services. (Please refer the DevOps section stated below for more details on this)
3. Make use of messaging streams/queues wherever there is a need of communication between the services.
4. The application can adopt any of the microservices design patterns that is globally practiced; for instance, Database as a service or scheme as a service.

3.3 DevOps

1. The entire development lifecycle should be automated using various DevOps tools.
2. All the services should be hosted inside containers which should adhere to the policies and standards set by the GovTech.

3. There should be at least 2 environments configured within the application ecosystem so that there is an uninterrupted transition against each deployment.
4. The production environment should be deployed in the clusters which are configured by the GovTech in the GDC. Since the clusters will be designed and developed using Kubernetes Engine, the application should be built using all necessary DevOps tools that support the cluster's technology.
5. The application should be capable of dynamically scale up and down (horizontally) based on the parameters/metrics set by the GovTech/stakeholders.

3.4 Platform and Technology

1. The proposed NSFD must be a dashboard incorporated in Bhutan Statistical Database System as one of sectors like Gewog profile, Agriculture, Livestock, Economic and Price and SGD. It should have features to work in a LAN environment with appropriate built-in facility to capture and store data in a centralized database at Government Data Center. In absence of LAN connectivity, the system should be also accessible through the Internet.
2. The entire system will be implemented in open-source platform/technology. The preferred font-end language should be Javascript, framework as react js and UI should be Material UI and regarding the back-end framework should be Ruby on Rails, language as Ruby and database should be in PostgreSQL.
3. The system should have a data dissemination platform/dashboard for internal and external use.
4. The reporting will have to be done graphically as well as in text/tabular form. The report generation in the proposed system would have two categories, the standard reports and ad hoc reports. The standard reports will be designed and uploaded during the implementation and for ad hoc reports; the system will have a customized Query Builder feature. In every report there must be a facility to generate the report as MS Excel Sheet, shp files, stata, PDF,or as HTML format.
5. The system should have provision for batch upload where the system should accept data in various formats such as csv, xlsx, sql, stata, shp, KML/KMZ etc.

In case the SDV chooses to propose any third-party tool(s) for the solution for tuning performance, adding security features, or rapid application development, or any specific add-in software package required for analysis and processing data, full justifications and cost must be provided in the proposal.

3.5 Security Features

As the information from the portal will be available for public domain and also used for national planning and development, security and confidentiality is a key concern for the NSB. The SDV must incorporate security features to further enhance the checks and balances to ensure the integrity of data. The SDV should ensure that the portal does not have any flaws or bugs which inadvertently or by design, permit the users to tamper, alter or modify any data without the appropriate permissions.

The system should have some built in features like user authentication mechanism where the authorized users follow proper login procedures. The data input validation in every form of the system should be in place to maintain the integrity of data and have role-based access to the forms and other privileges like edit and delete. As such the role of the user will be allocated by the system administrators through an administration module. The SDV should ensure that the system has audit trails and logs mechanism for any content changes performed by system users in a log file and database for future reference.

The system should provide the highest degree of security in the architecture. The SDV must ensure suitable security components required in the system. The following are some of the security issues, but not limited to, which must be addressed in the proposal.

1. The system would ensure that the users follow login procedures.
2. The access to the system should be based on the user roles of the organization.
3. A fully dynamic Access Control List procedure should be developed.
4. A proper audit trail must be built within the proposed system.
5. Standard password policy

3.6 Audit Trails and Time Series Data

The SDV must enhance audit trail features in the dashboard with all the authorized user activities maintained in the database. The activities include the log in and out information and capture the time series data about who created or modified or deleted the data. This will help in not losing certain information with passage of time and repeated updating.

3.7 Hardware Requirements

Since the system is hosted at GDC, the SDV shall develop NSFD in the BSDS system tested on the SDV test server before pushing to the production server. The dashboard should be High Availability Mode and shall ensure 99.98% downtime.

3.8 Concurrency, Browser Compatibility and Bandwidth Optimization

Since, bandwidth of the network through which the system is going to be used is low; the system developed must run optimally (page load time below 30 seconds) on a PC connected to a network with minimum network bandwidth of 56 kbps. The system including the database must provide at least 100 concurrent accesses. The system developed must be compatible with any kind of web browser. The system must run on any screen size and should be responsive and user friendly. Using modern UI frameworks for responsive design is highly recommended and required.

3.9 Development Methodology

The SDV shall develop using an iterative development method known as Agile Scrum software development methodology.

1. The SDV shall carry out a detailed requirement study including Process Re-engineering wherever possible, which will result in formulation of a Software Requirement Specification (SRS) document (subject to update with the change in requirement), Software Design document and associated AS-IS and TO-BE workflows.
2. The SDV shall develop each process and present it to the NSB and accept several iterations until it satisfies the NSB requirement.
3. The SDV must have its own Software Development Team as mentioned under “Minimum Requirement for Bidders” within its local premises with adequate development infrastructures, tools, etc. which will be inspected and verified for compliance.
4. The NSB will deploy its ICT officials for the project. This is done for better Transfer of Technology. However, their role is to learn the details of the design and modules so that after the system is handed over to the NSB, corrections can be done in-house. The SDV must not bank on their skills for implementing the system. But, it is also necessary for the SDV to involve these developers actively in the project and it will be monitored by the NSB.
5. After the development is over, the developed system will be first tested in the UAT environment and should be tested by the testers from the SDV's side. SDV shall indicate bug fixing matrix and escalation matrix for fixing the bugs as and when reported by the NSB.

6. The bugs are classified into two categories: **Critical and Non-Critical**. The Critical bugs are those which freeze the system and the normal functioning of the NSB or any other Agency is affected by the system's malfunction. Otherwise, it will be Non-Critical. The SDV must give immediate attention to the Critical bugs and attend to them within 24 hours of receiving the complaint from the NSB in any form of media. The critical bugs must be fixed within 5 working days. However, in some exceptional cases, the SDV may negotiate for time extension if acceptable to the NSB. The Non-critical bugs should be fixed within two weeks. The SDV should also fix bugs reported during the warranty period.
7. The final testing of the system with sample test data will be done at the premises of the NSB and if the user acceptance test succeeds, the system will be deployed for live operation at the GDC production environment.
8. The SDV shall submit detailed Methodology and approaches for the development of the dashboard.

3.10 Training

The SDV must provide comprehensive training to the ICT officials and focal persons of NSB (one time) in the operation of the information system for 10 working days (including the system administrators training).

3.11 Warranty, Support, Maintenance & Change Management

1. The SDV must provide free technical support for a period of 1 year from the time of acceptance of the system by NSB (Warranty support).
2. During the above-mentioned warranty period, the SDV will be responsible for making changes (as defined in Annexure I) as well as to fix the bugs, if any.
3. If there is a major change (as defined in IV) in the requirements of the system, the SDV must provide post implementation support under a Change Request Contract (CRC). The specific terms and conditions for CRC are included in Annexure I.
4. The changes will be considered major if the change brings about a major impact on the database or adds more input screens. These changes will be handled under the Change Request Contract (CRC) while the minor modifications of fields within an existing screen or changes having minor or no impact on the database or small impact on the database should be handled within the Warranty support period.

3.12 Backup and Recovery

Since the Bhutan Statistical Database System is hosted on a Government Data Center the NSFD should be incorporated in the BSDS system and tested in SDV system then only after UAT is completed then only pushed to the production server. The SDV should configure a backup server to backup applications and databases and should also backup to a backup device of the NSB.
The SDV should ensure HA, active-active deployment architecture with proper load balancing and the SDV should ensure 99.98% of system uptime.

The problems other than hardware failure will be addressed by the SDV under warranty support period. The system failure due to a hardware/VM failure shall be reported to the NSB and should provide recommendation, way forward, and reconfiguration if needed under the warranty period.

The SDV will also provide adequate training to the Administrator from the NSB so that routine checks and basic recovery can be handled in-house.

The SDV must also ensure that adequate training is provided to the System Administrator so that the NSB can handle the backup and recovery issues in-house after the expiry of the warranty period.

1. The back-up of the database should be taken on a daily incremental basis.
2. Full back-up of relational database and source code files should be taken on a monthly basis whenever changes take place.
3. A full (cold) backup should always be kept in a safe location.

3.13 Confidentiality of Data

Since some of the legacy data handled by the SDVs during the migration of data is classified and restricted in nature, the SDV must sign a Non-Disclosure Agreement (given in Annexure IV) with NSB.

3.14 Conformity with Standards

The to-be developed system should strictly adhere to the following standards:

1. Electronic Government Interoperability Framework (eGIF) standards. (https://egif.moic.gov.bt)

2. Information Management Security Policy of RGoB
3. GDC Standards and Policy.

3.15 Use of Source Code Management Tools

The SDV must manage its source codes through source code management tools like Subversion (SVN) and GIT or any other source code management tools, so that many programmers can work in parallel without duplication of work. It will also be a useful tool to track previous versions of the codes and will be useful for debugging purposes.

3.16 Ownership of Source Code and other Intellectual Property

The NSB will be the rightful owners of the Source Code and all Intellectual Property associated with the system and will have full rights over the ways they can use these resources. The information system so developed will be the sole property of the NSB or any agencies designated by them. The SDV will have no right to commercially use or apply the software elsewhere.

3.17 Re-engineering of the Processes

The SDV must try to re-engineer the processes wherever possible so that the system can be optimally utilized instead of merely automating the manual procedures.

3.18 Obsolescence

The SDV undertakes to continuously and unfailingly advise the NSB of new technologies (hardware & system software) in regard to the Solution during the currency of this Contract. If the NSB decides to introduce any such new technologies in replacement of the Solution or along with the Solution or as the case may be, the work that may arise therefrom shall be considered beyond the purview of this Contract. The NSB shall enter into a change request contract (CRC) for the purpose; provided that such work scope is not being covered under the license agreement.

3.19 Naming Convention /standard

In order to keep source codes organized, SDV must strictly follow standards for forms, reports, database, triggers, views, stored procedures, coding, normalization etc. Also, the

SDV must use the standard code and name listed in Data Interoperability Standards whenever possible.

3.20 Project Development Team

The minimum requirements for the Project Development Team from the SDV's side are as specified under "5. Minimum Requirement for Bidders". The SDV may propose any additional professionals that may be required for the successful implementation of the project with proper justifications.

3.21 Project Governance

The management structure for the project has been proposed in this document based on identification of specific players, their responsibilities and the degree of interaction required between them during execution of this project.

Under the project, the NSB proposes to set up the working groups to aid the implementation of the project. In this regard, the Project Manager, which is to be fielded by the SDV, is fully responsible for conducting a thorough study of the project, and accordingly come up with a comprehensive project governance structure (including the teams from the SDV's side) that is mutually acceptable by the NSB.

4. TENDER EVALUATION CRITERIA

Proposals will be evaluated based on the technical capacity and financial competitiveness of the consulting firm. The relative weight assigned to each component is as follows:

- Technical Capacity: 75%
- Financial Proposal: 25%

Technical Capacity (75%)

Evaluation of technical capacity will consider the firm's organizational experience, proposed methodology, and the qualifications of key professional staff. The breakdown of points is as follows:

1. Consultant's Organization and Experience
    a) General experience – [5]
    b) Specific experience in developing statistical dashboards and in excel. – [15]
    c) Specific experience in GIS-based systems and map integration – [15]

2. Adequacy of the proposed technical approach, methodology and work plan in responding to the Terms of Reference.
    a) Proposed technical solution and methodology [25]
    b) Work plan [5]

iii. Team qualification and relevant expertise
    a) Team leader – [15]
    b) Database designer – [5]
    c) Programmer– [5]
    d) GIS Expert – [10]

The number of points to be assigned to each of the above Key professional staff shall be determined considering the following two sub-criteria and relevant percentage weights:

1. *Qualifications [25%]; and*
2. *Experience [75%]*

Financial Proposal (25%)

The financial proposal will be evaluated based on price competitiveness. The following formula will be applied to derive the Financial Score (Fs):

Where:

Fm = Lowest evaluated financial proposal

F = Financial proposal under consideration

5. TERMS AND CONDITION- GENERAL

5.1 SDV Information

The SDV should submit a brief description of the firm's organization and outline of recent experience. Experience on similar assignments both functional and technical will be of an added advantage. Copy of credential certificates must be enclosed.

5.2 Patent and Copyright

1. The SDV represents that the Solution or any product/component, supplied by the SDV does not infringe any patents and copyright. If, however, a third party claims that the Solution or any product/component thereunder, supplied by the SDV under this Contract, infringes a patent or copyright ("IPClaim"), the SDV will defend the NSB against the IP Claim at the SDV's expense and pay all costs, damages and legal fees that a court finally awards.

2. If the SDV determines that no alternative is reasonably available, and the NSB agrees to return the Product/Component/Solution to the SDV on the SDV's written request, an appropriate compensation has to be proposed and be acceptable to the NSB.
3. The SDV has and will have no obligation to the NSB regarding any "IP Claim" based on:

    a) The NSB's modification of a Product/Component under the Solution unilaterally;
    b) Use of the program in other than its specified operating environment;
    c) The combination, operation or use of a product/component under the Solution with any other product, program, data or apparatus, not furnished by the SDV, provided that the use of such product, program, data or apparatus has not been envisaged in this Contract and such product, program, data or apparatus is solely responsible for such infringement.

5.3 Quality of Work

The SDV must ensure quality while implementing the system at all times. This will be evaluated by the BSDS Technical Committee including NSB ICT in the long run and this will have bearing on awarding similar Government Projects that are in pipeline and also those projects that will be taken by the Government in the future.

5.4 Timely Completion

The entire work of dashboard development and testing should be completed within ***two MONTHS*** from the date of receipt of the letter of award of work.

The time period of *two months* for the SDV is only for collecting requirements, designing, development and testing of the system. Training for NSFD admin should be provided only after testing and acceptance of the dashboard by the NSB. The training should be provided within a week.

5.5 Confidentiality of offer

The details of the offer proposed by the SDV or its acceptance thereof with or without modifications by NSB shall not be passed in part or full to any third party without prior written approval of the parties involved. This applies to both NSB as well as the SDV.

5.6 Time Frame for completion

The NSFD for the work described in "Scope of Work" should be developed, tested and submitted for final implementation within the project timeline. The SDV should submit their detailed work plan for development and implementation of the system.

6. MINIMUM REQUIREMENTS FOR THE BIDDER

The bidder desirous of quoting for the work should satisfy the following minimum requirements:

1. The SDV should have the valid trade license and certificate of incorporation for performing the consultancy service in the system development work in Bhutan.
2. The bidder should have adequate technical manpower to carry out the project and complete it on time. All the professionals should be employed on full time basis and their responsibilities delegated based on the standard system development team

3. The SDV should have **minimum** of following key team composition:

    a) Team Leader: 1 full time national Project Manager with at least 5 years' experience preferably with technical knowledge and managerial skills.
    b) Database designer (at least 3 to 4 projects working experience)
    c) Programmer (at least 3 to 4 projects working experience)
    d) GIS Expert (at least 2 to 3 web GIS Developed)

6. The proposed key personals must be involved in the project full time and shouldn't leave until the project is accepted by the NSB, unless under unavoidable circumstances whereby permission to replace a particular resource may be sought in written form, from NSB on a condition that there would not be a major impact on the project. Thus, it is advisable for the bidder to have a bond signed with the personnel involved in the project at least for the period of the execution of the project.

7. The bidder must submit the original CV with a photograph for all the team members for this project. This will be later verified by the NSB during evaluation as well as during the execution of the project.

The proposals which do not meet above conditions will be disqualified. The verification of these minimum requirements may involve visits of the NSB officials to the SDV's premises.

7. SCOPE OF WORK

The NSB invites quotations for development, training and maintenance of the National Sampling Frame Dashboard in the Bhutan Statistical Database System from reputed National System Development SDVs (SDV). The scope of the work is as under:

i. Study the existing procedure of the various dataflows in the *BSDS* and document it with AS-IS workflow diagrams and get acceptance of the NSB.
ii. Apply process re-engineering wherever possible and propose TO-BE workflow diagrams. Obtain a user acceptance on the TO-BE workflow diagrams from the NSB.
iii. Prepare Software Requirement Specifications (SRS) or Functional Specifications (FS) document and Software Design document (SDD) for the computerized web-based system and submit the same along with workflow diagrams and shall get approved from NSB.
iv. SDV shall conduct thorough need analysis and requirement gathering by consulting respective divisions/users of NSB.
v. On acceptance of the non-functional prototype by NSB, design and develop an appropriate system that is in line with the requirements indicated.
vi. Provide comprehensive training to the administrators (ICT officials and focal persons) in the operation of the system, backup, configuration, etc.
vii. Provide complete source code along with system drivers and other system files needed for installation and execution of the package.
viii. Provide detailed installation and operations/user manual which will facilitate the users in successfully using the system package.
ix. Provide detailed technical manual incorporating the System Design and other technical features incorporated in the software package.
x. The SDV, after initial training of master trainers, must provide assistance to master trainers for a period of at least one year so that the master trainers gain necessary expertise and confidence in deploying the software developed by SDV.
xi. Provide free support for a period of one year from the time of acceptance of the system by NSB and carry out revisions, if any, arising out of bugs or minor changes during the said one-year period (Warranty support).
xii. Provide services for Change Request on demand of the NSB whenever major changes are required in the system under CRC.
xiii. Implement and provide the software with all the standard security features inbuilt to ensure integrity of data. The SDV will be responsible for the recovery of the

data that is tempered because of lack of standard security features. The software package must have user access roles and acl through which can assign or revoke rights of a user to a function or data.

xiv. Provide the Plan for recovery, if the system package or the database fails, which includes managing backups of the database and the package itself. Perform necessary recovery of the system when needed.

xv. The Dashboard should have a data dissemination platform/dashboard for public viewing.

xvi. SDV should submit all project deliverables.

Annexure I - Change Request Contract (CRC)

1) If there is a major change(s) in the requirements of the dashboard, the SDV must provide post implementation support under a Change Request Contract within the approved duration of the change implementation**.**

2) Change Request Charge will be estimated in terms of the man-day rate. In the financial proposal, the SDV must submit the man-day rate for each person who will be involved in the change management. The rates should be valid for **1 year**. The total cost for the change will be worked out from the quoted rates and the total man days needed to address the changes.

3) The format for quoting man-day rates is provided in the Annexure II.

4) The Change Request is completely need based and payments are made only based on the major changes agreed between the parties.

5) The SDV must use all reasonable efforts to study the requirements of the system thoroughly during the initial implementation period.

6) Whenever there are major new requirements due to change in the procedures/guidelines of the NSB, the NSB will ask for additional requirements through a Change Request Document. The work involved in the change request and the cost will be worked out by both NSB and SDV and a cost will be agreed within the framework of the Change Request Contract (CRC).

7) The CRC will be initiated, if the change is considered major, bringing in a major impact on the database or adding more input screens.

8) The minor modifications of fields within an existing screen or changes having minor or no impact on the database will be handled as specified in the Warranty Support. The minor changes will not be handled by the Change Management Contract.

9) The CRC will also be initiated, if the NSB decides to introduce any new technologies in replacement of the Solution or along with the Solution, due to advancement of the technologies, as may deem necessary for the system by the SDV. Such CRC will occur, provided that the above work scope is not being covered under the license agreement.

Annexure II - Man-Day Rates for the Change Management for the 1st Year

Sl.No.	Personnel involved in the Project	Rate per Man-Day (in Nu.)

Note: The Amount quoted should be inclusive of all taxes/duties.

Annexure III - Checklist of Project Deliverables

Timeline	Key Activities & Deliverables	Output
Week 1 - 2	Planning & Foundation	Approved SRS & Workflow Documents.
	Kick-off meeting with NSB.	
	Detailed requirement gathering & analysis.	
	Finalize Software Requirement Specification (SRS) document.	
	Finalize AS-IS and TO-BE workflow diagrams.	
Week 3 - 4	Core Framework & Authentication	Deliverable: Demo of Login & User Management Module (Staging).
	Develop and containerize the base application.	
	Implement user authentication/authorization module.	
	Implement Role-Based Access Control (RBAC).	
	Develop Admin module for user management.	
Week 5 - 6	Data Core & Map Integration	Demo of EA Data Management & Basic Map View (Staging). 20-30% Payment
	Design and implement the central PostgreSQL database.	
	Develop backend APIs for EA data (CRUD operations).	
	Develop module for batch upload of data (CSV, XLSX).	
	Integrate basic interactive map (e.g., Leaflet/OpenLayers).	
Week 7 - 8	Visualization, Reporting & UAT Prep	Feature-Complete System on Staging Environment.
	Finalize interactive map features (click for metadata).	
	Develop standard report templates.	
	Develop Query Builder for ad-hoc reports.	
	Implement export functionality (Excel, PDF, SHP).	
	Prepare UAT documentation and test cases.	
End of Week 8	User Acceptance Testing (UAT) & Deployment	Fully Implemented System in Production.
	UAT Phase: NSB tests the system with real-world scenarios.	

	SDV's Role: Fix all critical bugs identified during UAT within 24-48 hours.	Final Payment (100%)
	Deliverable: UAT Sign-off Certificate from NSB.	
	Final Deployment: Deploy the approved system to the GDC production environment.	
	Submit all project documentation (Source Code, Manuals).	

Annexure IV– NON-DISCLOSURE AGREEMENT

This agreement is entered into this ___ day of _____, 20__ by and between _____ (hereinafter "Recipient"), with offices at _____, and _____, with offices at _____ (hereinafter "Disclosure").

WHEREAS Disclosure possesses certain ideas and information relating to _____ that is confidential and proprietary to the Disclosure (hereinafter "Confidential Information"); and WHEREAS the Recipient is willing to receive disclosure of the Confidential Information pursuant to the terms of this agreement for the purpose of _____; NOW THEREFORE, in consideration for the mutual undertakings of the Disclosure and the Recipient under this agreement, the parties agree to the below terms as follows:

1. Disclosure. The Disclosure agrees to disclose, and the Receiver agrees to receive the Confidential Information.

2. Confidentiality.

2.1 No Use. The Recipient agrees not to use the Confidential Information in any way or manufacture or test any product embodying Confidential Information, except for the purpose authorized by the Disclosure.

2.2 No Disclosure. The Recipient agrees to use its best efforts to prevent and protect the Confidential Information, or any part thereof, from disclosure to any person other than the Recipient's employees that have a need for disclosure in connection with the Recipient's authorized use of the Confidential Information.

2.3 Protection of Secrecy. The Recipient agrees to take all steps reasonably necessary to protect the secrecy of the Confidential Information and to prevent the Confidential Information from falling into the public domain or into the possession of unauthorized persons.

3. Limits on Confidential Information. Confidential Information shall not be deemed proprietary, and the Recipient shall have no obligation with respect to such information where the information:

(a) Was known to the Recipient prior to receiving any of the Confidential Information from the Disclosure;

(b) Has become publicly known through no wrongful act of the Recipient;

(c) Was received by the Recipient without breach of this agreement from a third party without restriction as to the use and disclosure of the information;

(d) Was independently developed by the Recipient without use of the Confidential Information; or

(e) Was ordered to be publicly released by the requirement of a government agency.

4. Ownership of Confidential Information. The Recipient agrees that all Confidential Information shall remain the property of Discloser and that the Discloser may use such Confidential Information for any purpose without obligation to the Recipient. Nothing contained herein shall be construed as granting or implying to the Recipient any transfer of rights, any patents, or any other intellectual property pertaining to the Confidential Information.

5. Term and Termination. The obligations of this agreement shall be continuing until the Confidential Information disclosed to the Recipient is no longer confidential.

6. Survival of Rights and Obligations. This agreement shall be binding upon, inure to the benefit of, and be enforceable by (a) the Discloser, its successors and assigns; and (b) the Recipient, its successors and assignees.

IN WITNESS WHEREOF, the parties have executed this agreement effective as of the date first written above.

Discloser (Name of the Discloser) **Recipient (Name of the Recipient)**

Signed _____. **Signed** _____.

Print Name _____. **Print Name** _____.

Title _____. **Title** _____.

Date________________________________. **Date________________________________.**