

Annexure-I: Scope & Technical Requirements

Introduction & Background:

The National Agri-trade and Food Safety Authority (NAFSA) is established under the NAFSA Act 2026 as a body corporate with the mandate to develop, apply, and achieve compliance with Sanitary and Phytosanitary (SPS) measures in relation to import, export, and inter-regional trade of goods. NAFSA consolidates regulatory functions previously distributed across multiple federal ministries and departments, including plant quarantine, animal health, food safety, and fisheries inspection, into a single, unified authority.

As a newly formed federal authority with broad regulatory duties, NAFSA requires a sophisticated and tailored digital platform to effectively fulfill its mandate. This platform must enable clear communication of its services, engage a wide range of stakeholders, and ensure transparency in its operations. The absence of a dedicated website would significantly impede NAFSA's ability to meet its legal responsibilities, interact with the international SPS community, and strengthen public confidence in Pakistan's agricultural trade regulations. In today's digital-centric world, having a dedicated website is crucial; not only for effective communication but also for maintaining regulatory authority, ensuring easy access for stakeholders, and building institutional trust. For an authority that plays a vital role in securing market access for Pakistan's agricultural exports, a strong online presence is necessary for the timely dissemination of SPS alerts, regulatory updates, and compliance requirements to business operators, trading partners, and international organizations. Recognizing this, **NAFSA** through **Pakistan Single Window (PSW)** has initiated this project to design and develop a dedicated website for NAFSA. The procurement activity is being handled by the PSW on behalf of NAFSA under Rule 45(A) of the Public Procurement Rules, 2004. On completion of procurement process, the award of contract and contract execution shall be undertaken by NAFSA.

The website will be designed to:

- Ensure the timely provision of accurate, easily accessible information regarding SPS measures, import/export regulations, market access conditions, and compliance requirements to all relevant national and international stakeholders. This includes business operators, exporters, importers, chambers of commerce, trade associations, provincial agriculture/livestock departments, and international organizations. Additionally, foster continuous engagement with stakeholders through regular updates, targeted outreach, and interactive channels to promote transparency, enhance awareness, and facilitate smoother trade and regulatory processes. Enhance efficiency, transparency, and user experience in line with international best practices and SPS-related obligations under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures. This will drive improved regulatory processes, boost stakeholder confidence, and support seamless international trade.
- Ensure clear communication of SPS regulations, procedures, and standards to internal and external stakeholders through a centralized platform and repository for agri-trade regulations, pest/disease alerts, laboratory accreditation information, market access updates, and digital services.
- Strengthen the image of NAFSA as a modern, science-based, and responsive regulatory

authority by disseminating technical publications, research findings, and institutional achievements.

- Provide accessible information on accredited laboratories, testing parameters, and accreditation status in compliance with ISO standards and PNAC/ILAC requirements.
- Publish and maintain market access updates including country-specific SPS requirements, bilateral agreements, pest risk analyses, and trade facilitation measures.
- Disseminate pest and disease alerts, phytosanitary and animal health advisories, and emergency notifications to business operators and relevant stakeholders in a timely manner.
- Enhance and communicate awareness campaigns, conferences, workshops, seminars, and capacity building programs for NAFSA stakeholders, leveraging multiple communication channels to promote awareness, engage stakeholders, and effectively communicate key updates. This will help amplify NAFSA's message, foster public understanding, and support the authority's on-going efforts in regulatory improvements and reforms.
- Lead perception management initiatives to convey the institutional mandate and achievements of NAFSA through surveys, public reviews, stakeholder feedback monitoring, and sentiment analysis.
- Publish regular updates of newsletters, quarterly/annual reviews, legal instruments, regulatory amendments, procedure updates, reports, and analytics.
- Ensure timely display and dissemination of information about ongoing operations, enforcement actions, and institutional achievements.
- Maintain and update notifications, SPS alerts, regulatory announcements, and public notices.
- Having contact details for relevant sections, departments, officials to enable stakeholders or general public to contact in case of any complaints or information required.
- Act as a central repository for NAFSA's regulatory instruments, standard operating procedures, technical guidelines, training materials, and institutional documentation.
- Ensure dissemination of technical publications and standards from entities such as WTO, IPPC, WOA (formerly OIE), Codex Alimentarius Commission, FAO, and others to relevant stakeholders.
- Maintain and update a digital register of internal and external stakeholders including business operators registered under the NAFSA Act.
- Key organizational decisions and developments to be shared internally through an employees' portal embedded in the website.
- Effectively maintain a web-based notice board and intranet, expanded to include activities of NAFSA's regional offices and field formations, notifications, office memorandums, guidelines, office orders, leave decisions, transfer orders, tour approvals, and training schedules.
- Ensure the website architecture supports future extensibility for business operator registration and SPS certificate verification modules as NAFSA's digital services mature.

This Scope of Work defines the technical, managerial, and operational framework for engaging an experienced vendor to deliver this strategic initiative. The vendor is expected to bring not only technical expertise but also empathy for users, creativity in design, and commitment to excellence, ensuring the final product reflects the institutional stature and regulatory mandate of NAFSA.

Objectives

The overall objectives of the NAFSA Website are:

1. Enhance Public Access to SPS Information

To provide timely, accurate, structured, and regularly updated information regarding NAFSA's regulatory framework, Sanitary and Phytosanitary (SPS) measures, market access conditions, programs, services, notifications, and official announcements. The website shall function as the primary authoritative digital source for SPS-related information for domestic and international stakeholders.

2. Improve User Experience

To design and deploy an intuitive, accessible, and fully responsive user interface that caters to diverse user groups, including businesses, government entities, international trading partners, mobile users, and persons with disabilities. The platform shall follow recognized accessibility standards (e.g., WCAG guidelines) to ensure inclusivity and ease of navigation.

3. Facilitate E-Government Services

To enable structured integration with existing and planned e-government systems in order to support digital service delivery, minimize reliance on manual processes, and allow future extensibility for functionalities such as business operator registration, SPS certificate verification, and other automated regulatory services.

4. Promote Transparency and Accountability

To strengthen public trust by ensuring open and structured access to regulatory instruments, statistical data, laboratory accreditation information, market access updates, pest and disease alerts, policies, enforcement updates, and other key institutional documents in a searchable and organized manner.

5. Ensure Security and Compliance

To implement robust cybersecurity controls and adhere to applicable national and international standards for data protection, privacy, and secure digital operations. The system shall incorporate secure coding practices, encrypted communication, role-based access control, and audit mechanisms to safeguard institutional integrity.

6. Establish a Centralized Regulatory Repository

To provide a centralized digital platform enabling NAFSA Headquarters and regional formations to publish regulatory updates, enforcement actions, laboratory results, market access achievements, institutional milestones, and other official communications in a standardized format. The repository may host, including but not limited to, the following:

- Visibility of record of registered/de-registered/black listed business operator(s) and product
- Compliance level measurement, of business operator(s) with track & trace or marking and grade designation requirements of goods

- Record of registered and regulated formulation plants
- Registration record of pesticides/MRLs, Agrochemical, codex Alimentarius etc.
- Quarantine facilities available at points of entry and points of exit with regard to import and export of goods
- Coordination section with provincial governments to implement SPS measures for the production, transportation, storage, and marketing of goods intended for export from Pakistan
- Visibility of national crisis management plans for the control of risks regarding the application of SPS measures
- List of accredited labs – their de-registration
- Biosecurity measures management applied to zones and compartments for the purposes of export certification
- Bilateral regional and international agreements and their updation
- Scheduled Training programmes, national and international conferences, policy seminars, symposia, or awareness workshops and their outcome
- Conduct studies, surveys, experiments and analysis of data
- Board of Governors and its committees' introduction
- Dissemination of awareness through other websites/joint ventures e.g. Bakhbar Kissan, CABI, FAO etc.
- Links of other Government or private sector entities' websites
- Capability for NAFSA employees to login to emails etc. from website
- Internal Stakeholders' requirement gathering e.g. notice board, Notifications, Deployment of staff at exit/Entry points, helpline
- HS Code visibility with IPO/EPO requirements related to import/export of Plant, animals, fish etc.
- Visibility of IPPC and Animal Husbandary Commission offices, contacts and its activities

7. Perception Building and Institutional Branding

To ensure professional digital branding and institutional representation aligned with Government of Pakistan standards, supporting perception building among the general public, international trading partners, development partners, and internal stakeholders. This includes standardized visual identity elements such as logos, templates, and official communication formats.

8. Strengthen Institutional Communication

To facilitate structured and secure internal communication across NAFSA's organizational hierarchy by enabling intranet functionality that supports coordinated information exchange between Headquarters, regional offices, and field formations, ensuring 360-degree institutional connectivity.

9. Complaint Redressal and Feedback Mechanism

Having contact details for relevant sections, departments, officials to enable stakeholders or general public to contact in case of any complaints or information required.

Scope of Work

The selected Vendor shall be responsible for the end-to-end design, development, deployment, integration, security hardening, training, and maintenance of the NAFSA Website in accordance with the approved objectives and applicable national and international standards.

The scope includes, but is not limited to, the following components:

1. Discovery and Requirements Gathering:

- Conduct structured stakeholder consultations with NAFSA, PSW, and other relevant stakeholders to capture detailed business requirements, technical specifications, content needs, and user expectations.
- Perform benchmarking of the proposed website architecture, security posture, accessibility compliance, and functional design against internationally recognized standards, including but not limited to:
 - WCAG 2.1 (Web Content Accessibility Guidelines)
 - ISO/IEC 27001 and NIST Cybersecurity Framework OWASP Top 10
 - IPPC, WOH, and Codex Alimentarius Commission guidelines for SPS authority portals
 - Review of peer SPS authority portals (e.g., USDA APHIS, New Zealand MPI, Australia DAFF, EU DG SANTE) for functional benchmarking
- Prepare and submit a comprehensive **Requirement Specification Document (RSD)** for formal review and approval prior to commencement of development.
- Clearly define functional requirements, non-functional requirements, integration dependencies, data architecture, performance expectations, and compliance obligations within the RSD.

2. Website Architecture and Design:

- Develop a comprehensive site map, user journey flows, navigation hierarchy, and detailed wireframes.
- Design a modern, intuitive, and fully responsive UI/UX compliant with WCAG 2.1 or equivalent accessibility standards.
- Ensure complete alignment with NAFSA's branding and institutional identity guidelines.
- Develop a structured top navigation menu including links to:
 - Connected organizations
 - International SPS bodies (IPPC, WOH, Codex)
 - Relevant government departments
 - Trading partners and authorized external portals
- Provide provisioning and integration support for official email addresses for internal NAFSA staff through integration with domain management and enterprise email services (e.g., Microsoft 365, Google Workspace, or equivalent).

3. Content Management and Development:

- Conduct a structured content audit of legacy SPS-related materials, including

instruments under:

- Plant Quarantine Act 1976
 - Animal Quarantine Ordinance 1979
 - Agricultural Pesticides Ordinance, 1971
 - Agricultural Pesticides Rules, 1973
 - Pakistan Plant Quarantine Rules, 2019 SRO 1463(I)/2019
- Develop a comprehensive content strategy addressing NAFSA's regulatory domains:
 - Plant health
 - Animal health
 - Food safety
 - Fisheries inspection
- Migrate relevant content from approved government sources, e.g. PSW Trade Portal, where applicable.
- Develop standardized content templates optimized for:
 - Readability
 - SEO
 - Bilingual support (Urdu and English)
- Finalize and optimize key content for mobile, web, and social media discoverability.
- Information on key office holders including IPCC's and WOA's Pakistan Focal Point.
- Review, edit, and structure content for regulatory accuracy, clarity, and consistency.
- Availability of legal documents, provided by NAFSA, pertaining to international agri-trade and food safety including notified disease lists.
- Statistics of imports and exports of agri-trade and food safety related products.
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4. Development and Integration:

- Develop secure, scalable front-end and back-end architecture using industry-standard technologies.
- Implement a Content Management System (CMS).
- Ensure database design and API architecture support modular extensibility.
- Integrate with relevant federal and provincial government systems including Pakistan Single Window (PSW), covering at minimum hyperlinked cross-navigation between the NAFSA Website and the PSW trade portal.
- Deploy on cloud infrastructure provided by NAFSA with:
 - Redundancy
 - High availability

- Disaster recovery mechanisms
- Develop and deploy NAFSA-specific modules including:
 - Laboratory accreditation listings with testing parameters and status
 - Market access updates with country-specific SPS requirements
 - Pest/disease alert system for phytosanitary and animal health advisories
- Ensure architecture supports future integration of:
 - Business operator registration
 - SPS certificate verification

5. Testing and Quality Assurance:

The Vendor shall implement a structured Quality Assurance framework including:

Functional Testing

- 100% of core modules must pass defined test cases prior to UAT.

Performance Testing

- minimum 5,000 concurrent users with the ability to scale to 10,000 concurrent users without service degradation.
- Page load time not exceeding 3 seconds under standard load conditions.

Security Testing

- Compliance with OWASP Top 10.
- Conduct Vulnerability Assessment (VA) and Penetration Testing (PT) and submit report to NAFSA.
- No Critical or High vulnerabilities outstanding at go-live.

White Box Testing

- Source code review
- Configuration audits
- Internal penetration testing
- Submission of reports to NAFSA, no Critical or High vulnerabilities outstanding at go-live.

Black Box Testing

- External penetration testing simulating real-world attacks.
- Submission of reports to NAFSA, no Critical or High vulnerabilities outstanding at go-live.

Reporting Requirements

Vendor must submit:

- Security Test Report (including CVSS scoring and remediation evidence)
- Compliance Report demonstrating adherence to ISO/IEC 27001, NIST, OWASP
- Re-testing certification confirming closure of vulnerabilities.

Final production deployment shall occur only after formal UAT sign-off by NAFSA.

6. Deployment and Training:

- Configure hosting environment on NAFSA infrastructure.
- Deploy the website in both staging and production environments.
- Provide comprehensive documentation for administrators and end-users.
- Conduct on-site training sessions for NAFSA staff on CMS operations, content management, and basic troubleshooting.
 - Location: Islamabad, NAFSA HQ.
 - Method: Onsite / online
 - Number of Sessions: Minimum 03 full-day sessions.
 - Participants: Up to 20 participants per session.
 - Training Materials: Vendor must provide digital training manuals, quick reference guides, and recorded video tutorials for future use.
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- Implement multi-factor authentication (MFA) for CMS and supporting environments.
- Ensure Security-by-Design and Privacy-by-Design approaches in all phases of development and integration, in compliance with the following standards/frameworks:
 - ISO/IEC 27001 and NIST Cybersecurity Framework for information security management.
 - OWASP Application Security Verification Standard (ASVS) for secure application development.
 - OWASP Top 10 for web application security risks.
 - ISO/IEC 27701 for Privacy Information Management.
 - Compliance with Pakistan's Personal Data Protection Bill (PDPA) and any other applicable national cybersecurity/data privacy regulations.
 - Implementation of Data Minimization, Role-Based Access Control (RBAC), and Multi-Factor Authentication (MFA) as core privacy/security principles.

7. Maintenance and Support (Post-Launch):

The Vendor shall provide a minimum of six (06) months of post-launch support, extendable for two additional six-month terms, if required, subject to satisfactory performance.

Support Scope Includes:

- End-to-end technical management
- Security patching and updates
- Performance optimization
- Content updates and integration management
- Dedicated helpdesk/ticketing mechanism

Content & Operational Updates Include:

- Newsletters, research, trade insights
- SPS compliance reports
- Pest/disease advisories
- Legal instruments (Act, rules, SOPs, circulars)
- Laboratory accreditation updates
- Market access updates
- Tenders and projects
- Contact details
- Admin notifications
- Complaint submission and Help Desk interface

8. Maintenance and Updation of Website:

During the maintenance and support period, the vendor is required to manage the website end-to-end, covering technical stability, content updates, integration management, and overall operational reliability. The vendor will undertake, inter alia, the following activities:

- Shall establish a dedicated help line, online support portal/ticketing system or email and support facilitation desk.
- Updation of newsletters, articles, research and analysis, trade insights, market access achievements, SPS compliance reports, pest/disease advisories, laboratory results, success stories, videos, and tutorials.
- Updation of legal resources including the NAFSA Act, rules, regulations, standard operating procedures, notifications, circulars, and guidelines.
- Updation of contact details of NAFSA headquarters, regional offices, and field formations.
- Updation of laboratory accreditation listings, testing parameters, and accreditation status changes.
- Updation of market access information, country-specific SPS requirements, and bilateral agreements.
- Updation of pest/disease alerts and phytosanitary/animal health advisories.
- Updation of admin board and admin notifications.
- Updation of tenders, projects, training schedules, and other related details.
- Setting up of a Contact Us page and query submission form wherefrom visitors can submit queries to NAFSA Help Desk, register complaints, and provide feedback.
- Vendor shall adhere to the following Service Level Agreements (SLAs) for post-launch support:
 - **System Uptime & Availability**
 - Minimum 99.5% uptime per calendar month (excluding planned maintenance).
 - Planned maintenance downtime must be notified to PSW at least 72

hours in advance and cannot exceed 4 hours per month.

○ **Incident Response & Resolution Times**

- Critical Issues (system down, security breach): Acknowledge within 30 minutes, resolve within 4 hours.
- High Severity Issues (major functionality broken, no workaround): Acknowledge within 1 hour, resolve within 24 hours.
- Medium Severity Issues (partial feature impact, workaround available): Acknowledge within 4 hours, resolve within 72 hours.
- Low Severity Issues (minor bugs, cosmetic issues): Acknowledge within 1 working day, resolve within 5 working days.

○ **Performance Benchmarks**

- Average page load time under standard load: ≤ 3 seconds.
- Concurrent users support: minimum 5,000 concurrent users with the ability to scale to 10,000 concurrent users without service degradation.

○ **Reporting & Monitoring**

- Monthly SLA compliance report to be submitted by the vendor.
- Repeated failure to meet SLA targets (≥3 instances in 6 months) may result in penalties or termination of contract.

9. Knowledge Transfer

The vendor shall ensure complete knowledge transfer to NAFSA staff/nominated resources on maintaining and operating the website, portal, intranet, CMS etc. through inter alia trainings, workshops, hand-holding, video tutorials, manuals and quick reference guides.

10. Deliverables & Timelines:

Phase	Deliverables	Duration
Inception	Requirement Analysis, Design and Prototype, Governance Model, Design Wireframes, Project Plan	8 weeks
Development	Complete Backend & Frontend Development, CMS Setup, NAFSA-specific Modules (Lab Accreditation, Market Access, Pest/Disease Alerts)	8 weeks
Testing	Complete Functional, Performance, UAT, Security Testing, Security & Compliance Reports	6 weeks
Deployment	Live launch of website with training & documentation	2-4 weeks
Support	Ongoing monthly maintenance with SLA adherence and knowledge transfer	6 months

Roles & Responsibilities

NAFSA:

- Provide oversight, project coordination, branding, and communication strategy and technical review, architecture validation, and security checks.

- Supply content (SPS regulations, regulatory instruments, laboratory accreditation data, market access information, pest/disease alerts, FAQs, trade statistics) in digital/hard form through the NAFSA Content Committee.
- Approve drafts, validate data, and ensure accuracy.
- Provide the official domain name (www.nafsa.gov.pk) for the NAFSA Website, which will be used for deployment.
- Provide hosting and infrastructure required to operate and maintain the website.

Selected Vendor:

- Submit detailed specifications, sizing and requirements related inter alia to IT infrastructure, licenses, systems, connectivity etc. to operate and maintain the website.
- Vendor will be responsible for data scrubbing and sanitization for website content management and development.
- Deliver end-to-end website design, development, deployment, trainings, knowledge transfer and support.
- Provide regular progress reports.
- Ensure compliance with security and performance benchmarks.
- All source code, documentation, and related artifacts must be maintained in NAFSA's official GitHub (or other NAFSA-controlled version control system) from project inception.
- At contract conclusion, return all source code, administrative credentials, and system documentation. Vendor shall not retain any such assets.

Technical Requirements:

- **Framework:** To be recommended by the vendor as per its proposed design and technical stack based on latest and cutting edge technology.
- **CMS:** To be recommended by the vendor as per its proposed design and technical stack].
- **Database:** To be recommended by the vendor as per its proposed design and technical stack based on latest and cutting edge technology.
- **Hosting:** Secure, cloud-based, scalable, NAFSA-provided.
- **SSL Certificate:** NAFSA shall provide the SSL certificate(s).
- **Domain Name:** The official domain name (www.nafsa.gov.pk) will be the responsibility of NAFSA, and it will be provided to the vendor for deployment.
- **Security:** SSL/HTTPS, OWASP compliance, penetration-tested, role-based access. Periodic security audits in compliance with ISO/IEC 27001 and NIST standards. MFA for administrative access.
- **Disaster Recovery:** Automated daily backups and recovery mechanism.
- **Compliance:** National data protection and cybersecurity laws.
- **Bilingual Support:** Full Urdu and English language support with RTL layout for Urdu.

Governance & Oversight:

- **Steering Committee:** Representatives from NAFSA.
- **NAFSA MarCom Department:** Lead coordination, ensures branding and communication consistency.
- **NAFSA IT Team:** Technical review, architecture validation, and security checks.
- **NAFSA Content Committee:** Ensure accuracy of SPS regulatory content, laboratory accreditation data, market access information, pest/disease alerts, and trade data. The NAFSA Content Committee shall be formally constituted by NAFSA prior to project commencement and shall comprise: (i) a designated Content Lead from each of the four regulatory departments (Plant Health, Animal Health, Food Safety, Fisheries); (ii) a representative from NAFSA's Legal and Regulatory Affairs division; and (iii) a representative from NAFSA's Communications or Public Affairs unit, if established. The Committee shall have authority to review, approve, and sign off on all content submitted for publication. A quorum of three members shall be sufficient for routine approvals. The Committee shall provide content feedback to the Vendor within ten (10) working days of submission. Decision-making timelines shall be formalized (e.g., approvals and feedback from NAFSA to be provided within 10 working days) to avoid bottlenecks. In the event of a disagreement on any project decision, the matter shall be escalated to the Project Steering Committee for resolution within five (5) working days.

Reporting & Communication

- Weekly project status reports to be shared with NAFSA project implementation committee.
- Weekly review meetings with NAFSA team.
- Online work progress tracking sheet.
- Final report and documentation upon project closure.
- Monthly project progress meeting with Steering Committee.

Intellectual Property Rights

- All intellectual property, source code, design, and content developed under this contract will remain the sole property of NAFSA.
- Vendor shall not retain source code, administrative credentials, or system documentation beyond contract completion.
- To ensure business continuity in case of vendor failure, all source code, related documentation, and development artifacts must be stored in NAFSA's official GitHub (or another NAFSA-controlled version control system) throughout the project lifecycle. NAFSAIT shall conduct a repository audit at the end of each phase to verify that all deliverables have been committed and are accessible. Failure to maintain the repository as required shall constitute a material breach and may result in withholding of the relevant milestone payment until compliance is confirmed.
- **Transition and Exit Plan:** The Vendor shall prepare and submit a formal Transition and Exit Plan no later than four (4) weeks before the conclusion of the initial support period, or upon notice of contract non-renewal or early termination. The Plan shall include: (i) a complete inventory of all system components, credentials, and documentation to be

handed over; (ii) a structured knowledge transfer schedule for NAFSA staff; (iii) a minimum four-week parallel support period to facilitate smooth transition to a successor vendor or in-house team; and (iv) written confirmation of deletion of all NAFSA/PSW data and system assets from Vendor systems upon handover completion.

Details on Vendor's Responsibilities for Design, Development & Maintenance of NAFSA

Website:

1. End-to-End Design, Development, Testing, and Operational Responsibility

The Vendor is expected to design, develop, test, run and support all modules of the Website that may include designing, development and testing. Provision and configuration of development or test instance of the Website would be responsibility of the Vendor.

2. Infrastructure Specification and Cloud Hosting Requirements

The Vendor will be responsible for specifying the Hardware & Network Infrastructure specifications necessary to host the Website on cloud.

3. Ongoing Maintenance, Updates, and System Administration

The Vendor shall be responsible for maintaining the Website including, but not limited to, applying patches, updates/upgrades, backup & recovery etc.

4. Requirements Specification Submission and Approval Process

The Requirements Specification Document(s) for all modules and reports shall first be submitted for comments of the NAFSA. NAFSA shall provide its comments and sign off no later than ten (10) working days from the date of receiving Requirements Specification Document(s). Development shall be commenced only after respective RSD is signed off by NAFSA.

5. Vendor shall be responsible for:

- Training and Change Management support for Users, Administrators etc. and provide relevant training material and documentation.
- Defining project management procedures and guidelines to be adopted for the Project.
- Putting together a structure and mechanism for ensuring that all the key functional areas and their users are consulted, feedback adopted and key differences identified, so as to facilitate standardization as well as user adoption.

6. Project Management Services

- NAFSA intends to complete the Website development project within six (06) months. The Vendor is required to organize the project to ensure these timelines.
- Deployment of a competent team of experts having expertise in the relevant fields.
- Scheduling the activities so as to complete the project within the agreed time frame.
- Deployment of resources to ensure that the project activities are carried out as per plan.
- Deployment of a project structure for effective monitoring, review and risk mitigation.
- The Vendor will institutionalize mechanisms to adopt the feedback and ensure quality of work, without affecting the project timelines.

7. Training and Documentation

- Training all the administrators/power users on train-the-trainer model.
- Preparation of user manuals, training manuals, quick reference guides and video tutorials.
- Documentation of processes.
- Training the key executives for monitoring performance and using reports effectively.

8. Support Services

- Facilitating user adoption.
- Operations of help desk and refresher training.

9. Training

The Vendor will be required to develop a Training Strategy to ensure that all identified users are thoroughly trained in the use and support of the Website. PSW requires the training material on electronic media. All training material provided by the Vendor will be reproduced and used as needed by NAFSA.

10. System Documentation and Manuals

Vendor shall provide user manuals and help/quick reference guides for use by NAFSA as part of the initial training and on-going operational support. Additionally, the Vendor is expected to provide technical documentation for user management, backups and system administration tasks.

11. Knowledge Transfer

Vendor shall ensure that a transfer of knowledge occurs back to NAFSA such that staff is capable of supporting and maintaining the Website in the most proficient manner once the Vendor engagement is complete.

12. Website Implementation Activities

The Core Implementation Activities: The methodology shall be well-defined and structured in approach. It should adhere to the globally accepted best practices for similar projects and should cover the following broad phases or work elements:

- Project Preparation
- Design Documentation
- Development
- Integration, Testing & Acceptance
- Data Migration
- User and Technical Training
- Cut over and making the Website “usage ready”
- Post implementation support

Project Preparation:

The project preparation will focus on creating the project charter, interfacing mechanisms, the training, the day to day action plan till the completion of the next immediate stage, familiarization of the Vendor team with NAFSA team with the action plan of Vendor.

Requirements Specification Document: The Vendor is expected to formulate the Requirements Specification Document (RSD), which will act as the key document for all the subsequent activities. The RSD will cover all the requirements of the new website listed in the Contract, and will entail detailing the capabilities listed in the Contract. This will be carried out through activities like requirements study, workshop with the users to understand the requirements / identify the needs - to agree on the process characteristics and to formulate the designs, detailing, gaps in relation to best practices etc. The RSD as approved by NAFSA only shall be implemented. Some of the critical outputs of the business design phase will be:

- The website map
- The users of the website, the activities, access rights
- The reporting requirements, the report formats
- The identification of interfaces, needs for integration and the scheme for integration
- The data input requirements and formats
- The outputs/formats required, if any
- The training and change management requirements
- The hardware sizing for hosting
- The best practices

Testing & Acceptance: The Vendor shall provide standard functionality test suites for testing the modules/website pages. The Vendor shall prepare the test plan and shall get it approved by NAFSA. Test Data for different scenarios (Test Cases) will be prepared in consultation with the users concerned. The pre-commissioning tests shall assess conformance to the functional requirements as specified in RSD.

Data Migration: Migration/population of data in the new website is responsibility of Vendor. NAFSA along with Vendor will jointly decide on what data will be migrated. NAFSA will take the responsibility of collecting and making the data available in digitized form as per the format suggested by the Vendor. Key activities include identification & development of data upload/download programs; providing data migration interfaces and templates; populating and migrating all legacy/raw/new data elements; training and facilitating the NAFSA teams on data migration; and assistance in checking data quality and integrity.

Key User Training: The vendor will be responsible to provide necessary training to Key Users based on Train-the-Trainer model. The purpose of this training is to ensure that all key users are adequately prepared and are able to train the end users as well so that all users are able to perform their job functions at “usage ready”.

Cut-Over Strategy: The Vendor is required to:

- (a) Set up central help desk for any queries;
- (b) Review the health, usage and performance of the website till it stabilizes;
- (c) Ensure resolution/documentation of all issues raised during post go-live support phase.

Declaration of “Usage Ready”: The website will be declared “Usage Ready” when the following are accomplished satisfactorily: acceptance testing, hosting, data migration, training, user creation/role identification, and help desk setup.

Acceptance of “Complete Deployment”: The Website is accepted as “Complete Deployment” only after successfully running for one month after “Usage Ready”.

User Adoption Support: The Vendor shall provide user adoption support between the period of “Usage Ready” and declaration of “Complete Deployment”, by deputing technical and functional resources preferably at the client site. During this period the Vendor will address: hand holding users, bug fixing, issue log resolution, providing support in maintaining back-ups, formulation of post-deployment support strategy, monitoring and fine tuning the website.

13. Feedback and Audit

User Feedback and Internal Review: The Vendor is expected to build adequate mechanisms to get feedback from different users of the Website during different stages of the project.

These users/stakeholders for giving feedback will be identified by NAFSA. The Vendor is expected to deploy expertise/experience of similar projects carried out by it earlier, and all key deliverables will go through a review with relevant experts of the Vendor.

Third Party Audit: NAFSA may appoint third party experts to review the developed website for the adequacy of security built into the system, keeping in mind the sensitivity of the operations and data of NAFSA. The Vendor is expected to provide full cooperation to the agency/auditors appointed by NAFSA.

Mechanism to Adopt Feedback/Audit Findings: All feedback will be discussed with NAFSA and based on their guidance will be incorporated into the project. Since feedback/audit findings for any rework is by nature correcting inadequacy of quality, NAFSA will not accept any change order requests for these reworks. Vendor has to build in adequate mechanisms to control risks of time overruns and indicate at the beginning of each phase how it plans to take feedback and incorporate it into project deliverables.

14. “Usage Ready” Definition

“Usage Ready” means commissioning and integrating all the components of the Website with each other and with other portals/websites, configured, customized and used successfully by all the intended users. The “Usage Ready” shall come into effect only on approval by NAFSA.

The Project Managers from NAFSA and Vendor will jointly initiate the notice for declaring “Complete Deployment” only after successful usage of the Website by NAFSA and other users for one month after “Usage Ready”. The “Complete Deployment” notice is submitted to the Steering Committee for action. Within fifteen days of receiving the notice, the Steering Committee will decide on the actions to be taken. The “Complete Deployment” event comes into effect only when the Steering Committee approves the notice.

15. Technical Support During Implementation

- The technical support for the Website is meant to ensure website performance, performance tuning etc. This support shall continue beyond “Complete Deployment”.
- Formulation of all policies and procedures related to technology, system administration, database management, archives, security, backup etc.
- Prepare a detailed administration manual, data administration manual, operational

manual, and user manual.

- Prepare requisite system configuration for disaster recovery management and fail over plan.
- Round the clock support for troubleshooting in functional and technical areas.

Project Plan:

1. **The Work Plan:** Other than the management of resources/deployment of experts and management of timeline, the project management will focus on the Work Plan containing a detailed set of phases, work packages, activities, and tasks.
2. **Issue Management:** An issue is a formally identified matter that may hinder progress on a project or program and about which no agreement has yet been reached. Those items that require documentation, formal investigation and approval should be managed as issues and this Issue Management methodology has to be proposed by the Vendor.
3. **Scope Management:** Scope of the project will be managed through a formal scope change management process. Change management documentation of project scope and approval procedures provide a visible decision-making process and a clear audit trail of scope changes and the corresponding cost benefit appraisal. Vendor shall develop a scope management plan to manage scope creep, cost & time overruns.
4. **Project Structure:** Vendor is required to propose a Project structure based on their own experience of successfully implementing similar projects.
5. **Project Steering Committee:** The steering committee would form the apex body on various issues relating to finalization of Requirements Definition and other policy issues. The committee will comprise of the senior executives of NAFSA.

The Steering Committee will carry out the following activities:

- Mobilize the resources necessary for Project Execution.
 - Only authority to approve deviations in Scope, Project Timelines and Budgets.
 - Meets monthly to review project progress & resolve issues, if any.
 - Meets on an urgent ad-hoc basis to address and resolve any issues requiring immediate attention and resolution.
6. **Project Manager:** The Project Manager assumes overall responsibility for the assignment and ensures that all resources required are made available and the engagement is carried out according to agreed plans. Both NAFSA & Vendor shall appoint a Project Manager, who shall function as the primary channel of communication.

Management of the Project Team Changes/Attrition:

- Since the continuity of the key members of the project team is essential for the success of the project, NAFSA shall expect the Vendor to follow diligent process for ensuring this. Key members include: Project Manager, Business Analysts, UI/UX Designers, Developers (Front End & Back End), QA resources, Database Administrator (DBA), DevOps, and Security.
- It is the responsibility of Vendor to deploy these resources for the activities they have been proposed to be deployed for during the entire duration of the Project.

- In the event that NAFSA identifies any personnel of Vendor as “Key Personnel”, then Vendor shall not remove or replace such personnel without the prior written consent of NAFSA, unless such removal is the result of an unavoidable circumstance.
- Under any circumstances when Key Personnel are to be replaced or removed, Vendor shall put forward profiles of personnel being proposed as replacements. These profiles should be either equivalent or better than the ones being replaced, as decided by NAFSA.
- In the event that any Key Personnel is to be replaced for reasons not attributed to NAFSA, the substitution shall be accomplished pursuant to a mutually agreed upon schedule but not later than seven (07) days prior to the date of exit of such personnel.
- In the event of a key personnel's resignation/replacement, Vendor shall ensure that proper handing-over/taking-over and knowledge transfer happens, involving at least one-week overlap period between the departing and new joining Key Person.

Support:

During post go-live support period, the Vendor shall provide Help Desk Services for reporting errors and malfunctions and for troubleshooting problems. Vendor's Help Desk Services shall be web-based and/or by telephone lines and/or via e-mail. Vendor's Help Desk Services shall include, but are not limited to, the following services:

- Assistance related to questions on the website.
- Assistance in identifying and determining the causes of suspected errors or malfunctions.
- Advice on detours or workarounds for identified errors or malfunctions, where reasonably available.
- Information on errors previously identified by NAFSA and reported to Vendor and detours to these where available.
- Help desk operations – Initial Response, Immediate telephonic response and support for usage related and other minor problems. Dial-in support for handling minor bug fixes.
- Onsite support – On-site support, if required and requested by NAFSA, for hand holding of the users, database recovery and data synchronization after crash, performance tuning, bug fix, update for all critical functions etc.
- Documentation – upgrade the technical documentation on any new releases and provide updates of technical and functional manuals.

Deliverables Acceptance Criteria

- The acceptance criteria for each phase is the submission and acceptance of all deliverables specified for that phase. The formal acceptance by NAFSA of the phase deliverables constitutes completion of the phase and approval to launch the next phase.
- Vendor should provide templates of proposed deliverables. At the onset of each phase, Vendor will meet with NAFSA Project Manager to review the applicable templates, tailored to accommodate the needs of the project, and agree on the

scope, format, and content of each of the major deliverables for that phase.

- NAFSA team will give approval to move from one project milestone to the other project milestone only after the deliverables of a particular project milestone are accepted by NAFSA. Hence, the protocol for submission, review, revision and acceptance will be established at the beginning of the project.

Project Success Criteria

- The completed Website development and implementation project meets planned scope and specifications.
- No issues pending at the end of support period.
- All required modules implemented and all integrations completed.
- The project is completed on time.
- UAT pass rate of 100% on all critical and high-priority test cases prior to go-live.
- No Critical or High security vulnerabilities outstanding at go-live; all Medium vulnerabilities remediated or formally accepted with documented risk mitigation.
- Minimum 95% of approved content (regulatory instruments, accreditation listings, market access data) successfully migrated and published at go-live.
- Website achieves 99.5% or higher uptime in the first month after go-live.
- Bilingual (Urdu and English) functionality fully operational across all public-facing pages at go-live.
- Transition and Exit Plan formally accepted by NAFSA prior to contract conclusion.