

# **TERMS OF REFERENCE**

## **PROCUREMENT OF WEBSITE CONTENT MANAGEMENT SYSTEM FOR PROCUREMENT SERVICE - PHILIPPINE GOVERNMENT ELECTRONIC PROCUREMENT SYSTEM**

## A. BACKGROUND

The **Procurement Service - Department of Budget and Management (PS-DBM)** is responsible for operating a government-wide procurement system that ensures the efficient sourcing, purchasing, and distribution of supplies, materials, and equipment for the Philippine government. As part of its mandate, PS-DBM continuously evaluates, develops, and enhances its procurement systems and processes to streamline operations and improve service delivery.

The **Philippine Government Electronic Procurement System (PhilGEPS)**, managed by PS-DBM, serves as the central portal for government procurement, providing transparency and accessibility to procurement opportunities and resources. However, as the volume of information and transactions continues to grow, the current website operates on an outdated Content Management System (CMS) which faces challenges in keeping up with the demands for efficiency, usability, scalability, and comprehensive cybersecurity measures.

To accommodate the increasing number of system users, the **PS-DBM** plans to upgrade its existing CMS to ensure efficient system performance and enhanced functionality. Additionally, migrating to a modern platform will address current limitations, providing improved scalability, security, and user experience to meet the organization's growing needs.

## B. OBJECTIVES

### 1. Streamline Content Management

Facilitate the creation, organization, and publication of content to ensure accurate and timely updates on procurement policies, announcements, and resources.

### 2. Enhance User Experience

Provide an intuitive and user-friendly interface for government agencies, suppliers, and stakeholders accessing procurement information.

Ensure responsive design for optimal performance across all devices (desktop, tablet, and mobile).

### 3. Enable Real-Time Updates

Implement features for real-time content updates to keep the website dynamic and relevant.

**4. Improve Operational Efficiency**

Automate manual website management tasks to reduce administrative workload and human error.

Integrate tools for seamless collaboration among content contributors and administrators.

**5. Support Advanced Functionalities**

Provide secure user authentication and role-based access for authorized personnel.

Integrate analytics tools for tracking user engagement and monitoring website performance.

**6. Ensure Scalability and Flexibility**

Develop a system capable of handling increasing content volume and user traffic as PS-DBM's operations expand.

**7. Integrate with Existing Systems**

Allow for seamless integration with PhilGEPS and other related systems to unify procurement-related processes.

**8. Enhance Security**

Protect sensitive procurement data and user information through security measures.

**9. Generate Accurate Reports**

Provide reporting tools to analyze content performance and user behavior for informed decision-making.

**10. Comply with Standards and Accessibility**

Ensure the CMS adheres to WCAG 2.1 standards for accessibility and relevant data privacy regulations.

**11. Enable Real-Time Notifications and Alerts**

Allow automated alerts for stakeholders regarding updates, procurement deadlines, and other critical information.

## C. TECHNICAL SPECIFICATIONS

The bidder shall provide the supply, delivery, installation, testing, and commissioning of the following minimum technical specifications:

| Category                    | Requirement  |
|-----------------------------|--|
| <b>General Requirements</b> | <ol style="list-style-type: none"><li>1. The system must transition the website (<a href="http://ps-philgeps.gov.ph">ps-philgeps.gov.ph</a>) from Joomla to a new CMS with no data loss.</li><li>2. Maintain existing functionality, content integrity, and SEO performance post-migration.</li></ol>  |
| <b>Hosting Environment</b>  | <ul style="list-style-type: none"><li>- Web Server: Apache 2.4 or Nginx 1.20+</li><li>- PHP Version: 8.0 or higher</li><li>- Database: MySQL 5.7+ or MariaDB 10.3+</li><li>- Operating System: Linux-based server (e.g., Ubuntu 20.04)</li><li>- SSL: Mandatory HTTPS via SSL.</li></ul><br><ul style="list-style-type: none"><li>- <b>Web Server:</b> IIS 10 (Internet Information Services)</li><li>- <b>Operating System:</b> Windows Server 2019 or later</li><li>- <b>PHP Version:</b> 8.0 or higher (Windows-compatible)</li><li>- <b>Database:</b> MySQL 5.7+, MariaDB 10.3+, or Microsoft SQL Server (if compatible with WordPress)</li><li>- <b>SSL:</b> Mandatory HTTPS with SSL certificates.</li></ul><br><b>Operating System:</b> <ul style="list-style-type: none"><li>- Linux or Windows (compatible)</li></ul> <b>Web server:</b> <ul style="list-style-type: none"><li>- Apache with mod_rewrite enabled, Nginx</li></ul> <b>Database:</b> <ul style="list-style-type: none"><li>- MySQL 5.6 or higher, or MariaDB 10.0 or higher (compatible with SQL-based CMS platforms)</li></ul> <b>PHP Version:</b> <ul style="list-style-type: none"><li>- PHP 7.4 or higher (for optimal performance and security)</li></ul> <b>PHP Modules:</b> <ul style="list-style-type: none"><li>- mod_rewrite</li></ul> <b>PHP extensions:</b> <ul style="list-style-type: none"><li>- <b>GD</b> or <b>ImageMagick</b> (for image manipulation and media handling)</li><li>- <b>cURL</b> (for external communications and API requests)</li><li>- <b>MBString</b> (for handling multi-byte character encodings)</li><li>- <b>JSON</b> (for REST API functionality)</li></ul> |

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|                                 | <ul style="list-style-type: none"> <li>- <b>OPcache</b> (for better performance)</li> <li>- <b>OpenSSL</b> (for secure connections)</li> </ul>   |
| <b>Caching Support</b>          | <ul style="list-style-type: none"> <li>- <b>Page Caching:</b> Use plugins like W3 Total Cache or WP Super Cache for better performance.</li> <li>- <b>Object Caching:</b> Recommended for larger sites or high-traffic environments.</li> <li>- <b>Browser Caching:</b> Leverage browser caching through plugins or server settings for better page load speed.</li> </ul> |
| <b>Platform</b>                 | <ul style="list-style-type: none"> <li>- Version: latest stable release</li> <li>- Permalinks: Clean URL structure</li> <li>- Theme: <b>PHP 7.4+</b> and <b>WP-CLI</b> (command line tool) compatibility are essential for advanced management and automation tasks.</li> </ul>  |
| <b>Data Migration</b>           | <ol style="list-style-type: none"> <li>1. Migrate all content types, including pages, posts, media, categories, tags, menus, and metadata.</li> <li>2. Use secure tools like FG Joomla for new CMS or equivalent migration solutions.</li> <li>3. Ensure database integrity post-migration.</li> </ol>   |
| <b>User Management</b>          | <ol style="list-style-type: none"> <li>1. Migrate all user accounts, roles, and permissions securely.</li> <li>2. Implement secure authentication, including support for strong passwords and optional two-factor authentication.</li> </ol>   |
| <b>Functional Requirements</b>  | <ol style="list-style-type: none"> <li>1. Replicate or rebuild existing forms and ensure functionality using WPForms or equivalent.</li> <li>2. Ensure search functionality using plugins like Relevanssi.</li> <li>3. Integrate Google Analytics/GA4 and other tracking tools.</li> </ol>   |
| <b>Design Requirements</b>      | <ul style="list-style-type: none"> <li>- The website must have a fully responsive design compatible with desktop, tablet, and mobile devices.</li> <li>- Adhere to WCAG 2.1 accessibility standards.</li> <li>- Maintain or modernize the existing design aesthetic.</li> </ul>  |
| <b>Performance Optimization</b> | <ol style="list-style-type: none"> <li>1. Implement caching using WP Rocket or equivalent.</li> <li>2. Optimize images using tools like Smush or ShortPixel.</li> <li>3. Configure Content Delivery Network (CDN) services (e.g., Cloudflare) to reduce latency.</li> </ol>  |
| <b>SEO Requirements</b>         | <ol style="list-style-type: none"> <li>1. Preserve all existing SEO metadata, including titles, descriptions, and alt tags.</li> <li>3. Use an SEO plugin like Yoast SEO to manage metadata and sitemaps.</li> </ol>   |
| <b>Security</b>                 | <ol style="list-style-type: none"> <li>1. Enforce HTTPS for all pages.</li> </ol>  |

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| <b>Requirements</b>             | <ul style="list-style-type: none"> <li>2. Configure file permissions and secure server settings.</li> <li>3. Install security plugins to protect against threats.</li> </ul>  |
| <b>Third-Party Integrations</b> | <ul style="list-style-type: none"> <li>1. Rebuild or reconfigure API integrations for external services.</li> </ul>   |
| <b>Testing and QA</b>           | <ul style="list-style-type: none"> <li>- Perform cross-browser compatibility testing (Chrome, Edge, Firefox, Safari).</li> <li>- Test on multiple devices (desktop, tablet, mobile).</li> <li>- Validate migrated data and functionality through automated and manual testing.</li> </ul> |
| <b>Backup and Recovery</b>      | <ul style="list-style-type: none"> <li>1. Create a complete backup of the Joomla website before migration.</li> <li>2. Set up regular automated backups for the environment post-migration.</li> </ul>  |
| <b>Training and Handover</b>    | <ul style="list-style-type: none"> <li>1. Provide training for administrators on usage, content management, and troubleshooting.</li> <li>2. Deliver comprehensive system documentation, including system architecture, plugin details, and backup/recovery procedures.</li> </ul>        |
| <b>Post-Migration Support</b>   | <ul style="list-style-type: none"> <li>1. Provide technical support for 1-3 months post-launch to resolve issues.</li> <li>2. Regularly update core, themes, and plugins.</li> </ul>  |
| <b>Compliance Standards</b>     | <ul style="list-style-type: none"> <li>- Accessibility: WCAG 2.1</li> <li>- Security: OWASP guidelines</li> <li>- Data Protection: GDPR/Philippine Data Privacy Act (if applicable).</li> </ul>   |

## A. SCOPE OF WORK:

### 1. Transition and Migration

- Migrate the existing website ([ps-philgeps.gov.ph](https://ps-philgeps.gov.ph)) from the current Joomla-based CMS to a new CMS, ensuring a seamless transition with no data loss.
- Transfer all existing content, including pages, posts, multimedia, metadata, and user accounts, to the new platform.

### 2. Development and Integration

- Customize or develop a responsive theme that aligns with the current design or introduces a modernized layout, ensuring compatibility across devices.
- Integrate essential functionalities, including forms, search features, analytics tools, and any existing APIs or third-party services (e.g., PhilGEPS integration).

### **3. Testing and Validation**

- Conduct thorough testing to ensure the website functions as intended, including compatibility testing across browsers and devices.
- Validate all migrated data for accuracy and integrity.

### **4. Training and Documentation**

- Provide training for PS-DBM personnel on managing and maintaining the WordPress CMS.
- Deliver comprehensive documentation, including system architecture, user manuals, and troubleshooting guides.

### **5. Support and Maintenance**

- Provide one (1) year of technical support, including regular updates to WordPress core, themes, and plugins.
- Conduct quarterly preventive maintenance and monitoring during the support period, with written service reports for each session.

## **B. TRAINING AND TECHNOLOGY TRANSFER:**

1. Conduct knowledge transfer sessions for at least ten (10) PS-DBM personnel on CMS operations, content management, and system troubleshooting.
2. Provide training materials, such as operation and user manuals, to all participants.
3. Ensure training is completed before the issuance of the Certificate of Turnover and Acceptance.
4. Issue Certificates of Training to all participants.

## **C. WARRANTY AND SUPPORT:**

1. Provide a one-year warranty covering technical support, troubleshooting, and system maintenance.
2. Conduct quarterly preventive maintenance and submit written reports for each session.

## **D. BIDDER'S ELIGIBILITY REQUIREMENT**

1. Bidders must have at least five (5) years of experience in website development and CMS migration projects.
2. Submit supporting documents, including portfolio, client references, and

proof of previous successful migrations.

#### **E. SCHEDULE OF REQUIREMENTS**

1. The project must be completed within **Forty-Five (45) Calendar Days** from the issuance of the Notice to Proceed (NTP).
2. Certificate of Completion will be issued by the IT Services Division (ITSD) upon project acceptance.

#### **F. PAYMENT TERMS**

| Milestone | Scope of Work<br>Deliverables   | Payment<br>Milestone |
|-----------|---|----------------------|
| 1         | Delivery of development environment, initial audit, and project plan.                       | 20 %                 |
| 2         | Completion of data migration, website customization, and integration of essential features. | 50 %                 |
| 3         | Final testing, training sessions, and issuance of Certificates of Turnover and Acceptance.  | 30 %                 |