## Attachment A

RFP 4032

ITS Project No. 42754

# **Technical Requirements**

**DMR Wetlands Permitting** 

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## A. How to Respond

- 1. Beginning with Section B, Item 8 of this attachment, label and respond to each outline point in this section as it is labeled below.
- 2. The Vendor must respond with "ACKNOWLEDGED," "WILL COMPLY" or "AGREED" to each point in this section. In addition, many items in this RFP require detailed and specific responses to provide the requested information. Failure to provide the information requested will result in the Vendor receiving a lower score for that item, or, at the State's sole discretion, being subject to disqualification.
- 3. "ACKNOWLEDGED" should be used when no vendor response or vendor compliance is required. "ACKNOWLEDGED" simply means the vendor is confirming to the State that he read the statement. This is commonly used in the RFP sections where the agency's current operating environment is described or where general information is being given about the project.
- 4. "WILL COMPLY" or "AGREED" are used interchangeably to indicate that the vendor will adhere to the requirement. These terms are used to respond to statements that specify that a vendor or vendor's proposed solution must comply with a specific item or must perform a certain task.
- 5. If the Vendor cannot respond with "ACKNOWLEDGED," "WILL COMPLY," or "AGREED," then the Vendor must respond with "EXCEPTION." (See Section V, for additional instructions regarding Vendor exceptions.)
- 6. Where an outline point asks a question or requests information, the Vendor must respond with the specific answer or information requested.
- 7. In addition to the above, Vendor must provide explicit details as to the manner and degree to which the proposal meets or exceeds each specification.

### B. General Overview and Background

- 8. The Mississippi Department of Marine Resources (DMR), the Department of Environmental Quality (DEQ), and the U. S. Army Corps of Engineers (USACE), must authorize any activity that will affect wetlands within the Mississippi Coastal Zone.
- 9. DMR is the designated point of contact for wetland permits. DMR receives and reviews applications for proposed activities to determine if they comply with the State's coastal zone management plan. DMR is the facilitating agency for the permitting process, which requires interaction with DEQ, USACE, and various other agencies.
- 10. For the year 2017, DMR facilitated 731 wetlands permitting actions, which were spread across the following major categories: permits, extensions, reviews, coastal zone consistency determinations, excluded activities/entities, and violations. For 2018, DMR is on track to facilitate around 800 permitting actions.
- 11. Upon startup of the selected solution, DMR expects approximately fifteen internal users from among the approving State agencies.

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## C. Scope

- 12. DMR is seeking a vendor-hosted, web-accessible solution to manage the process of issuing permits related to regulated activities that affect designated wetlands in the State of Mississippi.
- 13. DMR presently has a system in place for issuing wetlands permits, but it has become incapable of meeting current process management and tracking needs. DMR intends to select a vendor who can provide a proven solution that is already being used effectively in environments of similar size and complexity. DMR intends to select a vendor with a proven record of outstanding system design, customization, implementation, data migration, user training, customer support, and system maintenance.
- 14. DMR requires a solution that will manage and track the process from the initiation of a permit application throughout the entire life cycle of the permit, including interactions with other approving agencies.
- 15. DMR requires a solution that will offer a robust document management system that will make it easy for all users and regulators to generate, access, and archive a variety of transactional documents required by the permitting process.

### D. Vendor Qualifications

- 16. **MANDATORY**: Vendor must be in the business of providing vendor hosted, permitting solutions of similar size and scope. Vendor must have been in business of providing such solutions for at least three years.
- 17. Vendor must provide an introduction and general description of its company's background and years in business providing vendor hosted, COTS solutions for applications such as wetlands permitting.
- 18. Vendor must be in the business of providing vendor hosted permitting solutions that meet the technical specifications and associated services required by this RFP. Vendor must have been in business of providing such solutions for at least three years.
- 19. Vendor must provide the name and the state of incorporation of the organization, if incorporated.
- 20. Vendor must specify the location of the organization's principal office and the number of executive and professional personnel employed at this office.
- 21. Vendor must specify the organization's size in terms of the number of full-time employees, the number of contract personnel used at any one time, the number of offices and their locations, and structure (for example, state, national, or international organization).
- 22. Vendor must disclose any company restructurings, mergers, and acquisitions over the past three (3) years.
- 23. The Vendor must provide a copy of their company's most recent annual report, including consolidated balance sheets and related statements of income, stockholders' or partners' equity and changes in financial position, for each of the two (2) fiscal years preceding the end of the most recent fiscal year. The financial

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information listed above should be compiled, reviewed, and/or audited by a Certified Public Accountant or be the best available information. Information provided should include a Dunn and Bradstreet Report and a demonstration of adequate working capital and/or lines of credit.

## **E.** Vendor Implementation Team

- Vendor must demonstrate that all team members have the necessary experience for design, installation, implementation, training and support of the services required by this RFP.
  - a. Identify the primary, key staff who will be responsible for the execution of the various aspects of the project, including but not limited to: Project Manager, Development Team, Business Analyst(s) and Technical Architect(s).
  - b. Describe team member roles, functional responsibilities and experience with projects similar in size and scope to the services required by this RFP.
  - c. For each participating team member, provide a summary of qualifications, years of experience and length of employment with your company.
  - d. For each participating team member, provide contact information for three references who would be willing to verify qualifications, experience and performance.
  - e. Vendor must ensure that each team member assigned to this project has the ability to communicate clearly in the English language both verbally and in written form.

## F. Project Work Plan and Schedule

- 25. Vendor must propose a project work plan including, but not limited to tasks (all phases), estimated hours per task, major project milestones, quality assurance checkpoints, etc. Provide an estimated timetable detailing all phases of implementation from the point of contract execution through completion of go-live, final system acceptance, and user training.
- 26. Upon award, the Vendor and DMR will jointly modify the proposed plan as appropriate to meet implementation objectives. DMR expects the Vendor to work with the DMR Project Manager to ensure effective project management during all phases.
- 27. Vendor will be responsible for any integration, migration, or implementation issues that may arise during implementation.
- 28. As it relates to this procurement, state all Vendor assumptions or constraints regarding the proposed solution and overall project plan, timeline and project management.
- 29. Identify any potential risks, roadblocks and challenges you have encountered in similar implementations that could negatively affect a timely and successful completion of the project. Recommend a high-level strategy that DMR can take to mitigate these risks.
- 30. The implementation plan must include multiple environments, including Development, User Testing, Production and Training.

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31. In the user testing environment, all customizations, integrations, and interfaces must be tested and validated.

## **G.** General Technical Requirements

- 32. Solution must walk the public user through account setup, login and password setting.
- 33. Solution must make it obvious to the public user how to initiate a wetlands permitting application.
- 34. Solution must make available to the public users, a list of submittal requirements based on the permit type.
- 35. Solution must track required public user actions, so that at any time, the applicant can see a status of outstanding requirements.
- 36. Using a dropdown menu or similar method, the solution must allow the applicant to select whether the application is an original, modification, or other type as defined by DMR.
- 37. Solution must allow public users to easily modify an application while it is still in review status, then notify designated DMR Staff that changes have been submitted.
- 38. Solution must allow applicant to print a copy of the approved permit or other transactional documents.
- 39. Solution must prompt applicant to upload documents or complete certain fields to meet program specific requirements.
- 40. Solution must include a calendar function for scheduling applicable workflow actions, deliverables, due dates, notifications, etc.
- 41. Solution must allow public users to access selected data about their application(s), including but not limited to status, due dates, required documents, etc.
- 42. Solution must require from public users, a phone number or email address as a best method of contact.
- 43. Solution must allow an application in progress to be saved and finished at a later time.
- 44. Solution must allow users to access in-progress applications to view records, attach required documentation, determine status, and satisfy pending requirements, etc.
- 45. Solution must assign a unique identifier to every application, using DMR current numbering structure. The sequential permit numbering structure presently used by DMR is tied to the fiscal year in which the permit is initiated. For example, the first permit issued in FY 18 might be number 18001; the second one would be 18002.
- 46. For tracking and audit purposes, solution must assign unique identifiers to all users, including every plan reviewer, project coordinator, and inspector.
- 47. Solution must time stamp all actions taken by the applicant or DMR staff and reflect the activity in the audit trail.
- 48. Solution must provide real-time information to all modules so that data is immediately available for use in all functions, including reports.
- 49. DMR permitting authorizations and compliance deadlines vary among multiple types of authorities and permits. For example, DMR must take action within 90 days of

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certain application thresholds. Or, DMR must report compliance data or grant activity to a governing authority within specified time frames.

- a. For each type of actionable activity and each type of governing compliance requirement, solution must accommodate a known compliance schedule.
- b. For each type of actionable permit activity and each type of governing compliance requirement, solution must be capable of tracking, notifying and reporting as required by DMR.
- c. For each type of actionable permit activity and each type of governing compliance requirement, solution must maintain the history or audit trail of the actions taken, including, but not limited to date changes that were made during life cycle of the application/permit.
- d. Solution must allow authorized DMR staff to reset calendar functions that monitor various application requirements and deliverables, as determined by DMR.
- 50. Solution must allow comments or notes to be added to permit records and attachments.
  - a. Solution must ensure that notes or comments added to a record can only be edited or deleted by the originator or another authorized user.
- 51. Application records must accept attachments from users and/or DMR Staff.
- 52. Solution must provide data import and export capabilities.
- 53. Solution must accommodate context sensitive messaging, error messaging, help, and instructions to public users and/or DMR staff.
- 54. Solution must support typical Microsoft Office functions such as cut, copy, paste, etc.
- 55. Solution must allow the viewing of multiple projects and screens simultaneously, along with the ability to minimize and resize windows as needed.
- 56. Solution must comply with ADA Standards for Accessible Design released by DOJ in September 2010.
- 57. Solution must be customizable for data elements applicable to DMR application submittal and management actions.
- 58. Data elements must be accessible through dropdown menus, checkboxes, data pickers, etc. to ensure standardization of DMR processes and data collection formats.
- 59. Solution must have the ability to manage, verify, and apply digital signatures.
- 60. Solution must allow supplemental information to be added to applications without affecting existing information.
- 61. Solution must allow plan reviewers to reject, accept, or place holds on applications.
- 62. Solution must include standard email templates, correspondence templates and the ability to produce mailing labels based on user defined criteria.
- 63. Solution must be able to lock permits for editing once they have been issued.
- 64. Authorized DMR staff must be able to cancel inactive accounts.

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- 65. All permitting activities must be trackable and viewable by users for purposes of status and fulfillment.
- 66. Authorized DMR staff must be able to print and email application information as requested by the applicant.
- 67. Authorized DMR staff must be able to flag projects for configurable reasons, such as inactivity, receipt of documents, etc.
- 68. Solution must generate task logs for every inspector, plan reviewer, project manager, and all other task deliverables.
  - b. Task logs must reveal daily assigned tasks, task details, task due dates, task status, and all other details pertinent to task management.
- 69. Solution must be capable of creating and tracking expiration dates for permits.
  - a. Solution must alert designated DMR staff when permits are up for renewal.
  - b. Solution must be capable of notifying public users when permits are up for renewal.
- 70. Authorized DMR staff must be able to override automated or manual holds that have been placed on in-process applications.

#### H. Access

- 71. Solution must be web accessible to public users and DMR staff.
- 72. The public facing portal for the solution must be intuitive and easy to navigate by the users.
- 73. Solution must be fully compatible with mobile devices.
- 74. Solution must incorporate mobile plan viewing:
- 75. Solution must accommodate project management functions on mobile platforms.
- 76. Solution must include mobile applications for IOS and Android platforms for use in the field by DMR employees
  - a. Solution must be compatible with Microsoft tablet, Android tablet, IOS and related devices for the current and two immediately preceding versions.
- 77. Solution must accommodate mobile access for permit inspection functions, including but not limited to remote data entry, access to all property information, document viewing and workflow functionality.
- 78. Solution must be compatible with the current version and two preceding versions of common browsers including Chrome, Internet Explorer, Microsoft Edge, Firefox, and Safari.
- 79. Solution must allow field inspectors to update and save forms when working without internet access so that they can be uploaded when service is established.
- 80. Inspectors must be able to review plans via online and/or mobile access, and provide comments and annotations.
- 81. Solution must provide real-time data exchange with field devices having adequate access.

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- 82. Solution must be compatible with 32 and 64 Bit operating systems.
- 83. Vendor must specify any downloads, plug-ins or additional software (add-ons) (e.g. Java, Flash, etc.) required to access the proposed solution.
  - a. For any necessary downloads, plug-ins or add-ons, instructions for access and installation must be easily accessible to participants as a part of the proposed solution. Vendor must describe how the additional software is presented to the user and detail the process for download and installation of the software. Vendor should include a sample screen shot or sample instructions with Vendor's response to this requirement.
  - b. For any necessary downloads, plug-ins or add-ons, Vendor must describe the process for educating users on installation and maintenance, including new users as they are added.
  - c. Any costs associated with the use and maintenance of these downloads, plug-ins or additional software must be included in Section VII: Cost Information Submission.

#### I. Workflow

- 84. DMR regulatory processes follow prescribed steps, depending on the types of requests and the related wetlands conditions and requirements. The proposed solution must allow multiple, configurable workflows and approval processes in accordance with DMR established procedures.
- 85. Solution must provide flexible workflow routing to accommodate DMR processes, which involve multiple permit types with differing workflows.
- 86. Flexible workflow routing must be able to direct tasks to individual DMR users as assigned, as well as to task queues to be worked by groups of users.
- 87. Workflow routing must accommodate, track and report on due dates as defined by DMR.
- 88. Because State of Mississippi wetland permit approvals involve multiple entities, solution must route, track, and notify approving entities as appropriate throughout the process.
- 89. Solution must distribute project information and/or tasks to relevant parties simultaneously.
- 90. Solution must display workflows in simple, graphic formats which are easily understood by system users.
- 91. Workflow graphics must indicate current status of a work item in the workflow.
- 92. Solution must allow workflows to be saved as templates to be reused for other types of permits.
- 93. Solution must provide the ability to create and modify workflows using built-in administrative tools.
- 94. Workflows must be capable of routing functional responsibilities and applicant materials, etc. to specific staff member work queues.

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- 95. DMR will consider it an advantage if the solution allows workflows to be configured with drag-and-drop tools through a graphic user interface.
- 96. Solution must allow inspectors to approve or fail multiple types of inspections.
- 97. Solution must provide a method for revoking a permit that was issued in error.
- 98. Authorized DMR staff must be able to re-assign and/or override workflow tasks as necessary to manage workloads and processes.

#### J. Notifications

- 99. Solution must provide confirmation when an applicant has successfully submitted an application, plan, or individual document.
- 100. Solution must auto-generate emails or notifications based on conditions and thresholds set by DMR.
  - a. Solution must accommodate notifications or alerts to applicants and/or permit holders for issues including, but not limited to outstanding permit requirements, pending permit expirations, permit fees, or other conditions and thresholds as required by DMR.
  - b. Solution must provide email and/or correspondence templates for notification purposes.
- 101. Solution must alert plan reviewers of any changes that have been made to a plan under review.

#### K. Search Function

- 102. Solution must allow users to search by applicant name, address, parcel ID, user ID, permit number, fees paid, map, applicant name, or any other indexable attribute as required by DMR.
- 103. Solution must be able to search on all data elements and have full key word search capability.
- 104. Solution must be able to produce search results that represent the search term, as well as subtle variations of the search term.
- 105. Solution must allow public users to search for active and pending permit status, inspections, violations, and all other actionable statuses.

#### L. Archival

- 106. Solution must store all permit history information such as addresses, violations, emails, changes of status, fees, holds, etc.
- 107. Solution must maintain the historical versions of permits and be able to retrieve previous versions.
- 108. Solution must store complete history and status of requirements provided to applicant.
- 109. In accordance with DMR's retention schedule, solution must retain permitting documents, as designated by DMR, for a period of ten years.

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- 110. Solution must alert staff when retention period is about to expire and when it has expired.
- 111. Authorized DMR staff must have access to all approved plans, related documentation, and archived records for viewing and/or printing.
- 112. Authorized DMR staff must be able to view previously issued permits, previous inspection results and related documents, as well as permit and inspection data.

### M. Document Manager

- 113. Solution must offer a fully featured document management system to accept, maintain, and archive all documents related to the permitting process.
- 114. Solution must be able to upload documents in formats commonly accepted by the DMR Permitting processes. Common DMR permitting process document formats are: All Microsoft Office formats, .pdf, and all photo formats including JPEG, TIFF, GIF, and PNG.
- 115. Solution must accommodate printing and/or exporting of maintained and managed documents.
- 116. Solution must allow mobile users to upload and attach documents to targeted permit application records.
- 117. Stored documents must be searchable by key words, such as application, customer, parcel ID, address, and other indexed attributes.
- 118. Solution must allow plan reviewers to directly attach files associated with permit applications.
  - a. This function must accommodate mobile access.
- 119. Solution must allow permission-based review and editing of documents in the document manager.
- 120. Document management solution must accept the migration/import of documents and other digital assets presently used by DMR for permitting processes. Common DMR permitting process document formats include: All Microsoft Office formats, .pdf, and all photo formats including JPEG, TIFF, GIF, and PNG.
  - Solution must accept approximately 200GB of migrated documents as described above.

#### N. Reports and Dashboards

- 121. Vendor must provide a list of system defined reports inherent to the proposed solution. If it is not evident from the title of a report, give a brief description of its purpose. This list should include reports common to permitting applications of similar size and scope.
- 122. Solution must include standard reports that show statistics of permits, inspections and other variables as defined by DMR.
- 123. Solution must accommodate the creation and modification of standard reporting templates for each using and/or authorizing entity as defined by DMR.

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- 124. Solution must accommodate user defined reporting for the purpose of creating custom reports from any and all data elements for which DMR requires tracking and/or reporting.
- 125. User defined reporting tool must be intuitive and easy for the user to comprehend.
- 126. Solution must provide configurable reporting of all system activity, including but not limited to open applications, customer history, parcel history, neighboring parcels, applicant data elements, etc., as required by DMR.
- 127. Solution must be able to display certain types of reporting data on maps.
- 128. Solution must provide the ability to save user-generated reports under user profiles.
- 129. Solution must allow authorized DMR Staff to create their own reports using an online interface that does not require specialized knowledge of a third party tool such as Crystal Reports.
- 130. Solution must allow DMR Staff to create and save customized reports and queries.
- 131. Solution must be capable of exporting reports into several file formats including, but not limited to PDF, MS Excel, and MS Word.
- 132. Solution must be capable of tracking and reporting costs for all permit types.
- 133. Solution must be able distribute reports through the workflow as email attachments.
- 134. Solution must provide configurable dashboards on throughput performance measures and system activity, such as: active users, active inspections, etc.
- 135. Solution must provide configurable dashboards where all active projects can be viewed along with pertinent project information, such as: project number, project coordinator, project history summary, project status, and plan review comments, etc.
- 136. Solution must provide configurable dashboards for employees to manage open tasks.
- 137. Solution must provide configurable executive dashboards.

### O. Migration

- 138. Solution must successfully migrate all existing data housed by DMR's present permitting application database, which is housed in an on premise SQL database.
- 139. Vendor must acknowledge and agree that MDMR is the sole owner of any and all database content migrated from the current solution to the proposed solution, and any future database content created within the awarded vendor solution, with exclusive rights to use the database content without restriction.
- 140. Vendor must agree that, in the event it becomes necessary, such migrated database content and future created database content will be made accessible in a non-proprietary format that is acceptable to MDMR.
- 141. Solution must accommodate all document formats that will require migration with existing records. Document formats currently in use are: All Microsoft Office formats, .pdf formats, and all photo formats
- 142. Solution must efficiently receive and maintain functionality of the entire volume of DMR documents, which is estimated to approximately 200GB.

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- 143. Permit History: Some of the permitting history prior to implementation of the current solution resides in an excel spreadsheet. Because current permitting decisions can be affected by prior permitting history, it will be necessary to incorporate the historical data associated with prior permits.
  - a. Solution must incorporate historical permitting data from existing Excel spreadsheets, as well as from the current DMR permitting solution.
  - b. All such historical data must be searchable and reportable.
- 144. If migration costs are not included in the base quote for the solution, vendor must present such costs as separate line items in the Section VIII Cost Submission Summary.

## P. Ownership of Developed Software

145. Vendor must acknowledge and agree that MDMR is the sole owner of any and all software developed in response to this procurement, with exclusive rights to use, alter, or distribute the software without restriction. This requirement applies, but is not limited to, source code, object code, and documentation.

## Q. GIS Integration

- 146. Solution must fully integrate with ArcGIS Online for various internal/external functions and activities.
- 147. If integration costs are not included in the base quote for the solution, vendor must present such costs as separate line items in the Section VIII Cost Submission Summary.

### R. Other Integrations and Interfaces

- 148. Solution's calendar function must interface with Microsoft Outlook.
- 149. Solution must integrate with the State of Mississippi online payment application (MSI). See Fees and Payments Section for Details. Fees and Payments
- 150. Solution must interface with the DMR GIS application. See GIS Section for details. GIS Integration
- 151. Solution must provide secure API access using JSON.
- 152. If integration and interface costs are not included in the base quote for the solution, vendor must present such costs as separate line items in the Section VIII Cost Submission Summary.

### S. Product Updates

- 153. Describe your release management methodology and processes for updating your software for all types of releases, including (but not limited to):
  - a. Security Updates
  - b. System Maintenance
  - c. System Enhancements
  - d. Education and Training

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154. Enhancements and updates must be included with annual maintenance fees. Vendor must include the related cost in Section VIII, Cost Information Submission.

## T. Training and Documentation

- 155. Solution must provide thorough online tutorial/training geared toward infrequent users.
- 156. Vendor must provide training documentation and keep it updated as appropriate. Web-accessible format is acceptable to DMR.
- 157. Prior to go-live, Vendor must agree to adequately train DMR staff users, administrators, and inspectors in how to use the system to successfully perform their respective tasks and workflows.
- 158. Vendor must agree to train DMR staff users and administrators in the effective use of the document management system.
- 159. As stated in the project background, multiple authorizing entities that operate outside of DMR are involved in permitting approvals during the process of issuing a permit. Vendor must agree to adequately train users from authorizing entities outside DMR in all facets necessary for the completion of their responsibilities as well as in the use of the Document Manager.
- 160. Vendor must train the primary system administrators in all facets of system use, including but not limited to oversight, administering payments, reporting, security, workflow, archival and audit trail functions.
- 161. Solution must provide context sensitive help for users throughout the permitting process from origination to archival.

### U. Software Administration and Security

- 162. Solution must provide controlled access to features and functions by configurable, role-based permissions as defined by DMR.
- 163. Solution must prevent unauthorized access to the system.
- 164. Solution must allow the system administrator to set rights for access to data by individual or group.
- 165. Solution must accommodate administrator user rights to any and all workflows and tasks as determined by DMR.
- 166. Authorized DMR staff must be able to restrict specific user groups from being able to view or print certain types of documentation.
- 167. Solution must maintain an audit trail of data changes, including, but not limited to previous and new values, change dates, and the identity of the person making the change.
  - a. Audit trails must be accessible in real time by authorized DMR staff.
- 168. Solution must prevent users from permanently deleting records.
- 169. Authorized DMR staff must be able to change a record status to inactive.

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- 170. Authorized DMR staff must be able to hide a record and/or related documentation from general view.
- 171. Authorized DMR staff must be able to assign rules for data entry and validation rules for all entry points.
  - a. Authorized DMR staff must be able to add, edit, and delete rules as determined by DMR.
- 172. Roles, security, and access rights must be easily configurable without Contractor assistance.
- 173. Solution must provide vendor hosted, automatic data backup.
  - a. In addition to having vendor hosted data backup, DMR must be able to create and maintain an off-cloud backup at DMR's site, or Vendor must provide same to DMR on a specified, recurring basis.
- 174. Solution must adhere to all current, relevant security and privacy standards.

## V. Maintenance and Support

- 175. Vendor must commit to maintaining active support for all software components. This must include, but is not limited to assistance and ongoing support to all end users, including authorizing entities outside DMR for all problems and issues.
- 176. Vendor must have a help desk located in a professional call center in the continental United States to assist DMR users when questions or problems arise during regular business hours. DMR regular business hours are 8:00 am to 5:00 pm Central Time.
- 177. For critical issues, DMR must have direct access to a representative during regular business hours Monday-Friday from 8:00 am to 5:00 pm Central Time.
- 178. DMR requires resolution of trouble issues within four hours of intake by Vendor.
- 179. Describe how support issues are reported.
- 180. Detail your process for receiving, recording, tracking and resolving software issues identified by the users of the software.
- 181. Detail your escalation procedures.
- 182. Upon implementation, Vendor is required to provide complete documentation of all support processes and keep it updated at all times. Web-accessible format is acceptable to DMR.
- 183. Describe your policies and procedures for notifying users of scheduled maintenance, unscheduled maintenance, emergency maintenance, downtime, system errors, or degraded performance.
- 184. Solution must maintain a 99% availability rate, including scheduled maintenance.
- 185. Describe how new functions and features are released and how much control clients have over which new features are implemented.
- 186. Vendor must provide technical support for at least 100 hours for 12 months at no additional cost to the DMR.

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187. Vendor's Cost Submission Summary (Section VIII of this RFP) must specify costs to provide the proposed support on an annual basis for up to five (5) years.

## W. Fees and Payments

- 188. DMR presently accepts permit application payments in a variety of ways. Solution must accept on-line payments as well as manually entered payment information from various payment sources.
- 189. Solution must be configurable to accept the DMR application fee structures, calculate the fee based on the selections made by the applicant, and direct the applicant to the payment mode at the appropriate point in the workflow.
- 190. Awarded Vendor's solution must interface with the State of Mississippi's Payment Card Processor as outlined in Exhibit 1, which is attached hereto and incorporated herein by reference.
  - a. If integration costs are not included in the base quote for the solution, vendor must present such costs as separate line items in the Section VIII Cost Submission Summary.
- 191. Solution must accept and integrate on-line payment verification from MSI so that future actions awaiting payment verification can be advanced in the workflow.
- 192. Solution must automatically generate specific application fees and payment details.
- 193. Solution must provide configurable automated warnings and/or holds based on delinquent accounts.
- 194. Solution must provide the ability to add, remove, or modify fees.
- 195. Solution must be capable of tracking and reporting all fees, including but not limited to application fees, public notice fees, dredge fees, and fines.
- 196. Solution must allow for the viewing and printing of itemized receipts, billing history, and fees paid.
- 197. Solution must provide the ability to search by transaction number.
- 198. Solution must provide receipt of payment for fees gathered from the applicant.
- 199. Solution must provide ability to restrict a workflow from progressing until an associated fee is paid.
- 200. Solution must facilitate customer refunds or credits.
- 201. Solution must generate a downloadable copy of permits after they have been approved and paid.
- 202. Solution must assign a unique identifier to every financial transaction and activity.

### X. Warranty

203. The warranty period is a one-year period during which the Vendor must warrant, at no cost to MDMR, all work performed as stated in RFP 4032, Vendor's proposal, and any subsequent Statement(s) of Work. The warranty period must include the necessary vendor support to correct any deficiencies found and to provide any other consultation as needed.

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- 204. For any phased implementations or processes, the warranty period for each phase or process will begin only when Vendor has fully implemented the phase or process and MDMR has accepted the phase or process as functioning properly and in coordination with any previously implemented phase(s) or process(es).
- 205. The Vendor must agree to warrant all proposed application software to be free of errors for a minimum period of one year after acceptance. During this period, the Vendor must agree to correct, at his own expense, any discovered errors. If the system fails during warranty period due to a defect, the Vendor will offer a workaround solution within 24 hours and a full fix within five business days.
- 206. The Vendor must state and discuss the full warranty offered during the warranty period on all proposed software and services and indicate if it is longer than the minimum.
- 207. This warranty must cover all components for which services were provided, including all programs, forms, screens, reports, subroutines, utilities, file structures, documentation, interfaces, conversions, configurations, or other items provided by the Vendor.
- 208. The Vendor must agree that all corrections made during the warranty period are integral to work associated with this project, and will therefore be made at no additional charge.

## Y. Additional Requirements

- 209. ITS acknowledges that the specifications within this RFP are not exhaustive. Rather, they reflect the known requirements that must be met by the proposed solution. Vendors must specify, here, what additional components may be needed and are proposed in order to complete each configuration.
- 210. If any components necessary for the successful operation of the proposed solution are omitted from the Vendor's proposal, Vendor must be willing to provide the component(s) at no additional cost. This includes, but is not limited to all components necessary for vendor hosting, secure web portals, web application servers, web services, mobile and non-mobile access, mobile and hybrid applications, database/servers, networking, technologies, and support and maintenance of the proposed solution.

### Z. Change Order Process

211. After implementation and acceptance of the services procured by this RFP, MDMR may require additional services, such as enhancements or other system related needs. Vendor must include a fully loaded change order rate as a separate line in the Vendor's Cost Information Submission, Section VIII of this RFP.

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## Mississippi Interactive (MSI)

## Exhibit 1 – Mississippi Interactive (MSI)

Mississippi Interactive (MSI) will serve as the single point of entry for all e-commerce transactions. Awarded vendor will use Mississippi's official payment processor for any of the following services where payment is required.

- Web services
- IVR services
- Mobile services
- Over the counter payment processing services
- Kiosk services
- Lock Box services

The following payment methods accepted through MSI include: Visa, MasterCard, American Express, Discover, electronic check and subscription (monthly billed).

#### **DFA Administrative Rule**

The Department of Finance and Administration (DFA) established an administrative rule to be followed when agencies, in accordance with §27-104-33, Mississippi Code of 1972, Annotated, elect to accept payment by credit cards, charge cards, debit cards, electronic check (echeck) and other form of electronic payments for various services and fees collectible for agency purposes. See Attachment 1 for Final Rule.

## Payment Card Industry (PCI) Compliance

MSI will be responsible for Payment Card Industry (PCI) compliance on behalf of the State, though any future change in Federal PCI standards may require additional support from the State entity and awarded vendor. MSI's Transaction Processing Engine (TPE) is certified compliant with the PCI Data Security Standard (DSS) and compliant with the Payment Application Best Practices (PABP) standards. It is also listed as a Validated Payment Application by VISA. TPE is hosted at NIC's Central Data Center in Ashburn Virginia and complemented with a backup facility in Allen, Texas. NIC is certified by PCI-DSS as a Level 1 Service Provider for this environment.

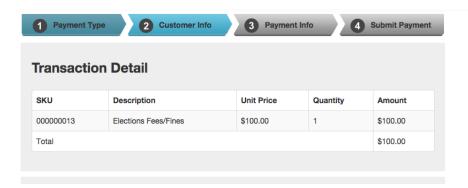
See Technical Requirements for notes to the PCI compliance responsibility of the awarded vendor.

Awarded vendor is prohibited from breaking out payment processing fees associated with any transaction. This includes all pages of the application and/or any receipt generated.

Acceptable fee break out can include a "subtotal" for services and a "Total ms.gov Price" or "ms.gov Order Total" which includes the eGov processing fee. See image below for example.

Exhibit 1: MSI Documentation Page 1 of 10

## Exhibit 1 Mississippi Interactive (MSI)





#### **Merchant of Record**

In order to act as the single point of contact between the State, MSI, the payment processor, the merchant acquiring bank, and end users of ms.gov services, MSI will be the "Merchant of Record" for this RFP. As the single point of contact for the State, MSI will work directly with the processor and the acquiring bank to request and set up merchant accounts and will be responsible for all areas of merchant services, including merchant fees.

#### **eGov Transaction Fees**

There will be standard payment processing fees associated with each payment transaction. Customer approval (electronic or otherwise) of MSI payment processing fees will be obtained prior to initiating payment.

#### **MAGIC**

MSI's payment solution processes is integrated with MAGIC, Mississippi's statewide accounting and procurement system of record. At least three (3) weeks prior to service launch Customer will be required to work with DFA to set up corresponding charges table entries. After appropriate edits are made to the charges table, Customer and awarded vendor will be required to work with MSI to insure adequate testing, confirming the application transactions are posting to MAGIC. A live transaction test must be completed no later than three (3) business days before service launch.

### Refunds, Chargebacks, Returns

As the merchant of record and official payment processor, MSI will handle all refunds, chargeback representments and returned echecks. However, MSI is not responsible for covering any monies that must be netted from the agency's account through refund, successful chargeback or returned echeck. Below are the processes for each.

#### Refunds

The refund process is initiated by either customer or agency request.

- Upon customer request MSI will contact the agency financial contact (established at project initiation) for approval prior to refund
- Agency contacts have access to and are encouraged to use the MSI refund tool for their refund requests. This ensures adequate logs of all requested refunds
- After agency request or approval MSI refunds the charge in TPE and notifies the requestor upon completion
- Through MAGIC refunds are netted from the next day's deposits or the next day funds are available to net from

## Mississippi Interactive (MSI)

### Chargebacks

A chargeback is a monetary dispute that is initiated by the Issuing Bank (issuer disputes the posting of the transaction) or the cardholder (a cardholder disputes a transaction).

- Customer or card issuing bank sees what appears to be a suspicious charge on their statement.
- The customer contacts the card company to dispute the charge and initiate the chargeback process. Note: depending on the company policies of the company that issued the card the company may initiate the chargeback without customer notification.
- MSI receives a chargeback email from our processor notifying us of the transaction details of the chargeback. Once this notification is received, the processor pulls the funds back from the Portal account until supporting documentation is obtained. (MSI's processor has 45 days from the time the customer disputes the charge to contact MSI for additional information.)
- Based on the information provided in the chargeback notification MSI researches the charge internally first.
  - If the disputed charge is a true duplicate charge (same customer information, amount, etc), MSI allows the chargeback to process and it is automatically marked in TPE.
  - For all non-duplicate charges MSI contacts the appropriate agency contact(s)
     (financial contact gathered at project initiation) by email to explain the
     chargeback, provide charge details and verify with the contact that it is a valid
     charge. If needed MSI requests the agency provides any additional information
     they may have to support the claim.
- If the charge is valid MSI will provide the sales drafts (chargeback receipt, TPE receipts, agency support etc) back to the processor to support the charge validity.
- After the charge is verified through receipt of sales drafts the chargeback will be reversed and the funds will be deposited back to the agency.

Note: The chargeback process could take up to 60 days to resolve.

#### Returns

Electronic checks (echeck)/ACH payments (where a user enters an account and routing number) may be returned unpaid for any reason, including non-sufficient funds (NSF), stop payment, online data entry error or closed account. A full list of return codes is listed below:

- R01 Insufficient Funds Available balance is not sufficient to cover the dollar value of the debit entry.
- R02 Account Closed Previously active account has been closed by customer or RDFI.
- R03 No Account/Unable to Locate Account Account number structure is valid and passes editing process, but does not correspond to individual or is not an open account.
- R04 Invalid Account Number Account number structure not valid; entry may fail check digit validation or may contain an incorrect number of digits.
- R05 Improper Debit to Consumer Account A CCD, CTX, or CBR debit entry was transmitted to a Consumer Account of the Receiver and was not authorized by the Receiver.
- R06 Returned per ODFI's Request ODFI has requested RDFI to return the ACH entry (optional to RDFI – ODFI indemnifies RDFI).
- R07 Authorization Revoked by Customer Consumer, who previously authorized ACH payment, has revoked authorization from Originator (must be returned no later than 60

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## Mississippi Interactive (MSI)

- days from settlement date and customer must sign affidavit).
- R08 Payment Stopped Receiver of a recurring debit transaction has stopped payment
  to a specific ACH debit. RDFI should verify the Receiver's intent when a request for stop
  payment is made to insure this is not intended to be a revocation of authorization.
- R09 Uncollected Funds Sufficient book or ledger balance exists to satisfy dollar value
  of the transaction, but the dollar value of transaction is in process of collection (i.e.,
  uncollected checks) or cash reserve balance below dollar value of the debit entry.
- R10 Customer Advises Not Authorized Consumer has advised RDFI that Originator of transaction is not authorized to debit account (must be returned no later than 60 days from settlement date of original entry and customer must sign affidavit).
- R11 Check Truncation Entry Returned used when returning a check safekeeping entry;
   RDFI should use appropriate field in addenda record to specify reason for return (i.e., "exceeds dollar limit," "stale date," etc.).
- R12 Branch Sold to Another DFI Financial institution receives entry destined for an account at a branch that has been sold to another financial institution.

## **Typical Return Process**

- User enters echeck information in the ms.gov common checkout page
- TPE captures the information and sends to payment service provider
- The service provider submits a request to the payer's bank to retrieve the funds
- Payer's bank reports back one of the aforementioned return codes to the services provider
- Service provider notifies MSI and the return is marked in TPE
- Funds are electronically pulled from the agency through the daily MAGIC payment interface file. MSI contacts the individual(s) responsible for agency funds (contact obtained during project initiation) by email to let them know of the return and reason.

#### **Hardware Acquisition**

Due to the payment key injections required for hardware to be compatible with MSI's PCI compliant payment processor, any hardware must be acquired through MSI's existing eGov contract. This includes, but is not limited to, kiosks, pin pad/card swipe, mobile devices etc.

## **Application Testing**

For all new services DFA requires a test transaction to be run for flow of funds and processor verification. After MSI receives confirmation the awarded vendor is satisfied with the integration, one test must be run through production TPE and confirmed by MSI.

It takes three (3) business days (excluding bank holidays) for the transaction to be confirmed by DFA. Awarded vendor should take this time frame into consideration when anticipating launch date.

#### Reporting

TPE provides reporting and auditing tools useful for streamlining and accommodating various back-office procedures. TPE's financial reporting is comprehensive, flexible, and robust. Within TPE all payment processing data is made available via a wide variety of reporting features. Reports are real-time, up-to-the-minute transaction reporting ranging from summary reports to detail reports showing line-item level data. A comprehensive users guide and applicable training will be provided to agency contacts during integration.

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## Mississippi Interactive (MSI)

### **Payment Support**

Mississippi Interactive will provide support for all user payment inquiries. MSI is located at 200 S. Lamar St., Suite 800, Jackson, MS 39201 and customer payment support is available during normal business hours (Monday – Friday 8am – 5pm CST). MSI's toll free support number (1-877-290-9487) is listed on the ms.gov Common Checkout page and is accessible to all users. For payment emergencies a technical support cellular number will be provided to the State contact.

MSI will work directly with the awarded vendor and/or the agencies to identify, report, track, monitor, escalate, and resolve any technical issues with TPE or CCP. It is MSI's policy to notify all awarded vendors and agencies of planned maintenance windows or system updates to avoid any payment issues.

State entities and/or awarded vendors will not be charged for MSI's efforts during payment implementation or any training/support.

### **Technical Requirements**

Mississippi's payment solution is designed to provide two methods of integration: CommonCheckout (where the user clicks on a "Pay Now" button and is transferred to a set of common checkout pages branded for ms.gov), and DirectConnect (where the application has self-contained checkout pages and will call TPE for verification and capture once all payment information has been entered). In both of these instances, the awarded vendor will utilize standard web services protocols.

The CommonCheckout integration is required by ITS and DFA. Should special circumstances arise where the CommonCheckout is not applicable and/or the DirectConnect option is required, approval from both State agencies is mandatory.

High level descriptions of the integration requirements are included in this section. For detailed documentation please contact Derrick Cole, Mississippi Interative's Director of Technology, at Derrick.Cole@egov.com.

## CommonCheckout (CCP)

When utilizing CommonCheckout, the calling application is not responsible for collecting the credit card or banking information. Instead, the application sends the transaction data to the CommonCheckout interface which collects and processes all payment information. The CommonCheckout interface will then return to the calling application all transaction status details and information related to the transaction.

CCP Option 1: Server-side Web Service Calls and Browser-side Redirect

The partner application is required to invoke Prepare Checkout Operation on the Common Checkout web service that is passing along the financial/customer/application information.

 The Web Service operation returns a token back in the SOAP response. The token is required as a hidden field on the form post to the Common Checkout web application or a redirect.

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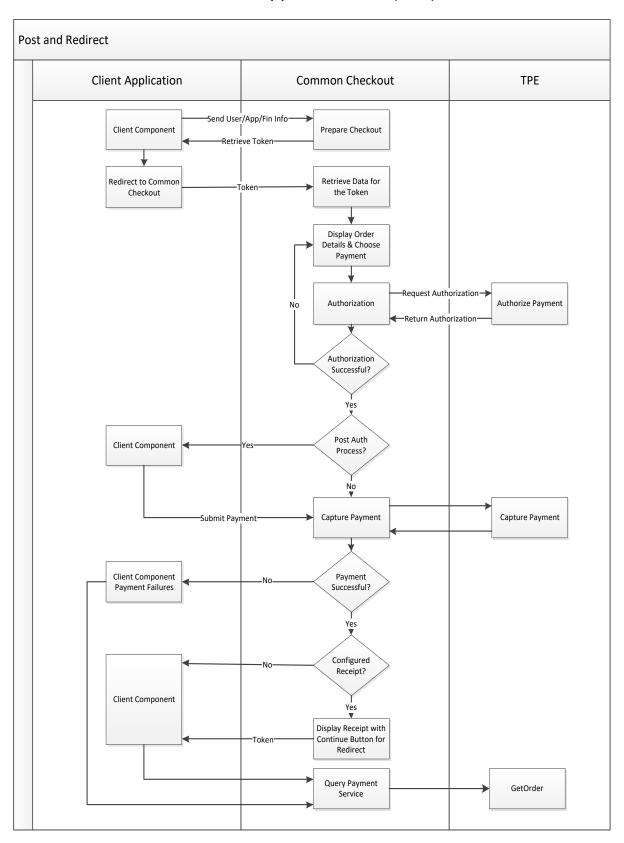
## Mississippi Interactive (MSI)

- The Prepare Checkout Service returns the token back. This token is required as a hidden field on the form post or query string to the Common Checkout web application.
- When the customer chooses to continue with the payment by clicking a form button on the partner screen, the browser redirects to the Common Checkout web application.
- The Common Checkout web application retrieves the customer/financial/application data associated with the token and displays it on the payment page.
- Upon submission of the payment, Common Checkout redirects to the partner application or displays a receipt page, based on the configuration. In the latter case, the redirect to the partner application happens when a customer clicks a button on the receipt screen.
- The partner application is required to do a call back to the Query payment web service by sending the token. The service will return the transaction information back in the SOAP response. This ensures authenticity of the payment.

The following figure outlines a typical process flow for a CommonCheckout transaction.

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Exhibit 1
Mississippi Interactive (MSI)



## Mississippi Interactive (MSI)

CCP Option 2: Server-side Name-Value-Pair HTTPS Posts and Browser-side Redirect

The partner application is required to send the financial/customer/application information as multiple name/value pairs using HTTPS POST to the Prepare Checkout Post URL.

- The Prepare Checkout Service returns a token-based transaction identifier, which is required as a hidden field on the form post or query string to the Common Checkout web application.
- When the customer chooses to continue with the payment by clicking a form button on the partner screen, the browser is redirected to Common Checkout web application.
- The Common Checkout web application retrieves the customer/financial/application data for the transaction identified by the associated token and displays it on the payment page.
- Upon submission of the payment, Common Checkout redirects to the partner application or displays a receipt page, based on the configuration. In the latter case, the redirect to the partner application happens once a customer clicks a button on the receipt screen.
- The partner application requires a call back to the Query payment HTTP service by sending the token. The service returns the payment detail back as name value pairs. This ensures authenticity of the payment.

#### DirectConnect

The second scenario is to use the Application Programming Interfaces ("API's") that are available to developers. In this scenario, agency or third party developers write applications that include the checkout pages. Customers fill out all payment information within the application, and once captured, the application communicates with TPE using a standard API. TPE processes the payment, based on payment type, and returns either a success or failure code back to the calling application. Based on the code, the calling application displays either a receipt back to the customer or the reason for the failure. TPE supports multiple API's including:

Java .NET Perl PHP

Note: If the DirectConnect method is approved by ITS and DFA the awarded vendor must provide MSI and the State proof of their software's (and any applicable hardware) PCI compliance.

#### DirectConnect Integration Outline

Before a payment can be processed inside of TPE, an *Order* must be established. An Order is the basic transaction container in TPE. It is a detailed request for certain goods or services and represents all the instructions and information needed from the customer for the merchant to collect money. An order contains information about the customer, items purchased, fees and taxes, payment information, billing address, shipping address, and so forth.

TPE uses the term *order*, along with the terms *payment* and *credit* to represent payment data

## Mississippi Interactive (MSI)

for all electronic payments. An order is created by the client application while the customer is placing an order for goods or services. Transactions flow between the merchant and the financial institution during the life cycle of the order. These transactions can be broken into two broad categories: *payments* (monies transferred to the merchant from the customer) and *credits* (monies returned to the customer, such as when goods or services are returned and payment is refunded). As order processing continues, payments and credits are created and modified.

The basic steps for creating an Order and processing a payment are as follows:

- 1. Submit a new Order Request to TPE. The client application will create a request that includes a Merchant Id, a Merchant Key, and a Service Code. These are pre-defined security parameters that are configured within TPE. If the request is successful, TPE will return an empty order container to the client application.
- 2. Inside of this container, the application will set the Payment Implement (Credit Card, ACH, Cash, etc.), customer payment information, billing information, transaction line items and amounts, and any other information necessary for processing the payment.
- 3. Submit the Order. Once the Order container has been filled by the calling application, it will be submitted for authorization. TPE will do preliminary validations on the Order before submitting it to the Merchant Service Provider for authorization. If there is an error with the Order, TPE will return that information back to client application, or it will return back that the authorization was successful.
- 4. Complete the Order. This call to TPE informs the system that the order is complete and ready to be invoiced.
- 5. Invoice the Order. This step is where money transfer (i.e., Capture) is initiated. The invoice takes the information from the Order, and is then submitted to the Merchant Service Provider for Capture/Settlement.

The following figure outlines a typical process flow for a Direct Connect transaction.

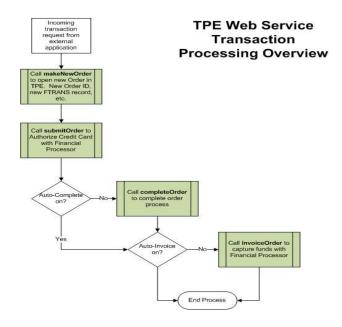


Exhibit 1: MSI Documentation

## Mississippi Interactive (MSI)

## **Charges Table Connection**

The Mississippi Department of Information Technology Services (ITS) has developed the Mississippi Charges Web Service to supply application programs with data from the charges table. This data is required by the Agency application to build a valid MSI electronic payment request. The item type, item description, and item cost, for each item sold, must be submitted in the transaction request for payment authorization.

#### Service Use

The primary purpose of the web service is to provide the charges data for a requested application. The method that performs this function is getCurrentCharges and requires a chargesInput object as the input parameter. A getCurrentChargesResponse object is returned.

getCurrentCharges(chargesInput)

DFA updates the charges table each night just before midnight. The agency application is responsible for obtaining and using the current charges information. Good practice is to obtain the charges data at least daily.

## Charges Use in MSI Common Checkout

The Chargeltem data will become the basis for a line item that is sent to the CCP in the Prepare Checkout call. The table below maps the line item fields referenced in the CCP interface to their related Chargeltem value. In the CCP Prepare Checkout service call, line items are sent in as an array of lineItems.

CCP Line Item	Field Description	Field used from Charges
element		Item
LineItem.SKU	Item identifier used in backend SAAS	ChargeItem.itemType
	funds distribution.	
LineItem.Description	Description of the item being	ChargeItem.description
	purchased.	
LineItem.Unit_Price	Cost of 1 of this item.	ChargeItem.amount
LineItem.Quantity	Quantity of the item being purchased.	Computed by the application.

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