Request for proposals: 3ie Development Evidence Portal maintenance, design and development services

Issue date: 14 April, 2020
Deadline for applications: 28 April, 2020

1. About 3ie

The International Initiative for Impact Evaluation (3ie) is an international NGO that promotes evidence-informed equitable, inclusive and sustainable development. We support the generation and effective use of high-quality evidence to inform decision-making and improve the lives of people living in poverty in low- and middle-income countries (L&MICs). We provide guidance and support to produce impact evaluations and associated formative evaluations; systematic reviews and syntheses, evidence gap maps and support for using that evidence in decision-making and capacity development. 3ie is registered as a non-governmental organisation in the United States. It has offices in New Delhi, London and Washington, DC.

2. Background

3ie’s Development Evidence Portal is a comprehensive repository of rigorous evidence on what works in international development, consisting of rigorous studies and synthesis of studies conducted in L&MIC. The portal is a gateway to high-quality impact evaluations, systematic reviews, and evidence gap maps, comprising the most comprehensive resource available for this kind of evidence.

Our vision is that researchers, policymakers and programme managers focused on development in L&MICs will use our portal regularly and will find that experience easy and rewarding. The portal also serves as one of the tools in our integrated approach to communicating with our main audiences.

3. Scope of work

3ie seeks a vendor to perform ongoing maintenance and development work for the Development Evidence Portal. The contract awarded will specify hourly rates for maintenance and development tasks of different complexities.

We are looking for a firm that has a strong aesthetic design sense, excellent web development skills and experience, reliable maintenance services and design and development capacity that will ensure quick response time and value for money to ensure the quality of our platform. The firm should also be competent in managing complex data structures and designing features to execute sophisticated searches in such data sets.
The evidence portal uses a structured data entry and management platform (the ‘admin panel’) based on Laravel Nova. The data managed through the admin panel have complex relationships with many dependencies among variables. The data entered in this platform are used to populate the publicly-accessible search interface, which queries the data using Elasticsearch. 3ie requires maintenance and development services for both the admin panel and the search interface.

4. Responsibilities

The vendor will be responsible for the activities outlined below. For additional details regarding the types of activities the contract will cover, please consult the appendix to this document.

4.1 Maintenance

- Maintenance of the software is in working order as delivered;
- Maintenance of production instance;
- Active server monitoring and notifications (using Automation);
- Periodic schedule of database table re-indexing;
- Updates to core components and feature extensions based on their new releases;
- Preventive and perfective maintenance such as performance reviews and recommendations for overall performance improvements;
- Making sure that the site is always live and being prepared to handle critical issues like site offline, Database or PHP error based on the defined service level agreement (SLA);
- Adaptive maintenance such as adjusting of visual elements and copy, updates of visual elements or copy within an existing page, testing legacy code with updated browsers, ensuring layout is consistent throughout the site as content is added or updated by 3ie (this includes design production for items such as buttons, icons, tools, or smaller updates);
- Help 3ie to set up a failover site in the near future;
- Hourly back-up sufficient for full recovery;
- Daily off-site back-up;
- Set up a yearly full disaster recovery test and share the test results with 3ie;
- 99.9 per cent uptime guaranteed based on the defined SLA;
- Provide support tools access to 3ie team like case management, text or voice chat on Skype, or via telephone;
- Software updates and security patches for the hosting platform based on the new version releases, and making sure that we are not using any out-of-support versions;
- Purging temporary or unused files, review and archiving log files and clearing them before they fill the disk;
- Response and recovery action plan against any security;
- Correcting any errors caused by incorrect configuration of the platform;
- Upgrading the software, processing and memory capacity based on any new development or customisation;
- Predict or diagnosis any problem that can arise due to any upgrades or development; and
- Repair of any damage to the Platform caused by any security breaches or how to recover from the same based on our SLA.
4.2 Platform design and development

The vendor will develop new features for both the data-entry interface (admin panel) and the public search interface. New features will include, but are not limited to:

- Upgrade the admin panel user interface to create an easy-to-use system for adding new fields to the data structure and defining the characteristics of these fields (e.g., type of input allowed and cascading relationships with other fields);
- Enhance the search capabilities of the admin panel to allow complex SQL or KQL (Kibana Query Language)-style queries;
- Create user-friendly systems for bulk editing records, directly within the admin panel and/or via Excel export or import;
- Allow users of the public search interface to export search results to RIS files;
- Create business rules for display of records on the public search interface based on characteristics of those records in the admin panel;
- Make aesthetic upgrades to the themes on the public search interface;
- Develop custom modules and deploy on production server;
- Introduce new plugins and integrate any new third party applications, when applicable;
- Update, redesign or restructure layout and navigation of the admin panel and public search interface;
- Create tools for users to create static or interactive infographics;
- Build functionality, including ones with multimedia content;
- Support open access requirements;
- Ensure platform is friendly for all users, including those with disabilities or using languages other than English;
- Fix defects in the existing product as and when they are discovered;
- Create documentation of site specifications and any changes made;
- Conduct user training on the new developed modules;
- Conduct testing and maintain test case documents; and
- Create help screens.

5. Platform technical information

The 3ie Development Evidence Portal uses Laravel 2.0.7 for its content management system. Applicants are expected to have significant experience with Laravel or similar systems. The relational database management system is MySQL 5.7. This platform uses these third-party systems: Mailgun, Elastic search (7.4.2), Redis Cache and Amazon to handle different requirements.

6. Eligibility and minimum qualifications

- Only registered companies or organisations, not individuals, are eligible to apply;
- The vendor must demonstrate capacity to be responsive to development requests within ten working days or fewer after a request is finalised. Providers should assign a design and development relationship manager responsible for understanding our site and needs in detail;
- The contracted vendor must be a reputable firm in the field of website design with a demonstrated record of relevant and successful projects; and
- Relevant experience in working with academic, research or NGO online database applications will be given preference.
7. How to apply

Interested companies or organisations should submit a proposal package that including:

Technical proposal (part A)

- A proposal (up to 15 pages) about how you will provide design, development, and maintenance services;
- The CVs (maximum 3 pages each) of the key team members that will be involved in the project, along with their key duties and where they are physically located;
- A brief profile (maximum two pages) of the company or organisation, focused on information relevant to this project;
- A list of similar projects successfully executed in the last three years;
- Statement of experience (1-3 pages) working with funding agencies, international development sector organisations, research producing institutions and with audiences similar to 3ie’s.
- Share your predefined SLAs, if available.

Financial proposal (part B)

- Indicative rates for all services provided which should include:
  o All taxes or other applicable charges you will levy.
  o Provide hourly rates for key types of work, e.g., design tasks, routine maintenance, quality assurance, development tasks requiring junior developers, tasks requiring senior developers, etc.
- A clear explanation of how work is charged.
- A brief statement about how the services offer good value for money.

3ie expects to shortlist up to four applications. These firms will be invited to present via an online panel meeting. 3ie expects to name a successful vendor within 10 days of the last interview. **3ie reserves the right not to invite anyone to present, the right to ask for further information and/or a further interview.**

All questions related to this request for proposals should be addressed to: web@3ieimpact.org no later than 21 April. 3ie will provide compiled responses to all applicants by 24 April. Thereafter, 3ie will respond to individual queries from registered parties as received.

3ie requests all eligible parties to submit their proposal to web@3ieimpact.org with ‘DEP maintenance proposal’ included in the subject line. **The deadline for submission of proposals is 28 April by 23:59 GMT.** Only complete submissions meeting the eligibility requirements will be considered.
## Appendix: Additional details of likely tasks

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<th>No.</th>
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<tbody>
<tr>
<td>1.</td>
<td><strong>ADMIN PANEL</strong> - Allow administrators to: add variables (1.1), create dependencies between them (1.2) and enable exporting them to Excel (1.4)</td>
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</table>
| 1.1 | Allow super administrators to add new fields                                   | While it is currently possible to add a new field in the form of a basic text or a hard-coded single select list, we would need to give admin users the functionality to:  
• add rich text to the above fields  
• specify whether a string or numeric only field should be created  
• specify whether the select list should be single-choice or multiple-choice select lists (super admin would be able to specify if they will be editable in the ‘attribute lists’ list)  
• specify if the new field created should be a ‘type-in’ select lists (When letters are entered, attribute lists values starting with the same letter(s) are showing up below in a pop-up dropdown list. However, if the user cannot find what they are looking for they can add a new value on the fly by typing it in).  
• specify whether a field is required (the data entry person will not be able to move ahead without filling it in) |
| 1.2 | Allow super administrators to create hierarchical relationships between new fields | Allow super administrators to:  
• create cascading relationships between fields, e.g.  
Super admins should be able to specify that under a particular field value (e.g. author name) there could be multiple sub-field values (e.g. 1 or more institutions associated with an author); each of them could have multiple sub-sub-fields (e.g. 1 or more departments associated with each institution)  
• the above cascading variables could have up to 5 levels each  
• there could be up to 5 variables per level |
<p>| 1.3 | Allow super administrators to edit field types and hierarchical relationships between already existing fields |                                                                                                                                          |
| 1.4 | Changes to the data structure (1.1 and 1.2) would be reflected in the already existing bulk export feature | The new variables added and nested relationships between them would be reflected in the exported spreadsheet when using the bulk export feature. |
| 1.5 | Changes to the data structure (1.1 and 1.2) would not be reflected in the front-end |                                                                                                                                          |</p>
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<tr>
<td>2.1</td>
<td>Designing where and how old and new fields should be displayed in the front-end</td>
<td>A web development effort will be needed each time by the vendor to design how new variables and/or changed relationships between existing variables should appear in the front-end.</td>
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<td>2.2</td>
<td>Add visualisation options for users</td>
<td>Allow end users to create visualisations of the meta-data (e.g. bar chart showing number of records by sector).</td>
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<td>2.3</td>
<td>Add toggle switch under Basic Search module to turn fuzziness on/off</td>
<td>It would give users more control over their search. Fuzziness could be set to &quot;on&quot; by default but users could easily disable it. A pop-up info box next to the toggle switch would explain the options.</td>
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<td>2.4</td>
<td>Allow export of search results to popular reference management software</td>
<td>List of academic reference management software would include Zotero, Mendeley, and EndNote.</td>
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<td>2.5</td>
<td>Create different display rules for filters depending on the record type chosen</td>
<td>Currently the same filters are appearing for all three record types: Impact evaluations (IE), Systematic Reviews (SR) and Evidence Gap Maps (EGM). The new vendor would create business rules to allow for different filters appearing depending on the type of record selected by the user.</td>
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<td>2.6</td>
<td>Add NOT operator in the Advanced Search module</td>
<td>Currently the Advanced Search module accepts AND, OR operators when querying through a field. The new vendor would allow users to add a NOT operator, which would exclude all records found with an unwanted value.</td>
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<td>2.7</td>
<td>In the admin panel, link IE records to SR and EGM records</td>
<td>There would be two-way links between specific IEs, SRs, and EGMs. That is, there would be a data field in an SR record for &quot;IEs linked to this record&quot;, which we would populate. The links to this SR would also be reflected in a similar data field for each of those IEs.</td>
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<td>2.8</td>
<td>In the front-end display links to IEs that are part of an SR or EGM record and vice versa</td>
<td>That might be a pop-up window with a list of record titles and hyperlinks to IEs that are linked to an SR or EGM record and vice versa.</td>
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| 3.1 | Enhance the search capabilities of the admin panel to allow complex SQL or KQL (Kibana Query Language)-style queries | A text field where users could type in text-based queries through all metadata. E.g. find:  
• all SR-type records with blanks in the Country field. |
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|     |                | *all records with the value 'Health' in the Sector field AND 'Journal' in the Publication type field*  
<p>|     |                | <em>all EGM-type OR SR-type records that have more than one value in the Project name field</em> |
| 3.2 | Allow bulk editing of records via admin panel | This would allow us to take all records with value X in field A and change it to value Y |
| 4.  | ADMIN PANEL - Bulk upload and bulk editing from an excel file | |
| 4.1 | Bulk upload | Currently an excel template, with a limited number of fields, is used to upload new records extracted outside of the admin panel. The new vendor could help us to expand it to encompass more variables and allow for nested relationships between them. |
| 4.2 | Bulk edit | A functionality which would allow the super admin to use an excel file template to bulk-edit a custom range of records |
| 4.3 | Dynamic data validation rules | Create dynamic data validation rules for the 'bulk upload/edit' excel sheet, so that they are up-to-date with portal's constantly evolving attribute lists |
| 4.4 | Create advanced rules for displaying upload/edit errors | Enable (super)admins to: a) decide whether all records/or only those without errors should be uploaded b) see what type of errors have appeared, in how many records, which records, which cells (e.g. cells with errors highlighted in colour) |
| 4.5 | Create advanced rules for identifying duplicates and linked publications | Currently, when new records are about to be uploaded, a fuzzy match on title (85% accuracy) flags records that are potential duplicates or linked publications. They are then manually checked. The new vendor could help us to explore more efficient ways, e.g. combinations of different fuzzy matching techniques to automate the process as much as possible. |
| 5.  | ADMIN PANEL - Data extraction environments for 3ie’s research synthesis products: Evidence Gap Maps (EGMs) and Systematic Reviews (SRs) | |
| 5.1 | Create &quot;Project view&quot; | This feature would allow users to &quot;tag&quot; records as being part of a particular project, allowing them to have a customised view of records with that project tag. Each project would have its own mini-database which would form the basis for a customized data entry environment. |</p>
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<tr>
<td>5.2</td>
<td>Allow Senior Content Producers to add new project-specific fields within their &quot;Project view&quot;</td>
<td>Same as 1.1</td>
</tr>
<tr>
<td>5.3</td>
<td>Allow Senior Content Producers to create hierarchical relationships within their &quot;Project view&quot;</td>
<td>Same as 1.2</td>
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<tr>
<td>5.4</td>
<td>Functionalities 5.2 and 5.3 would be reflected in the project-specific bulk export feature within their &quot;Project view&quot;</td>
<td>Same as 1.4</td>
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<tr>
<td>5.5</td>
<td>Ability to attach a pdf to a record</td>
<td>Add the functionality to upload/download a pdf to/from a record sub-page (in the admin panel only)</td>
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<tr>
<td>5.6</td>
<td>Create a new user type: Study Screener</td>
<td>After the extraction of records have been completed in the &quot;Project view&quot; the Senior Content Producer assigns them to the Study Screener who decides whether they meet the requirements of the main repository. If they do, she/he can assign them to the Editor who can then publish them in the main database of the portal.</td>
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