

**Subject: Development of Apps for Dhis2**

**Reference number: DMP004**

The Norwegian Refugee Council (NRC) is a non-governmental, humanitarian organisation with 60 years of experience in helping to create a safer and more dignified life for refugees and internally displaced people. NRC advocates for the rights of displaced populations and offers assistance within the shelter, education, emergency food security, legal assistance, and water, sanitation and hygiene sectors.

The NRC has approximately 5000 committed and competent employees involved in projects across four continents. In addition, NRC runs one of the world’s largest standby rosters -NORCAP, with 650 professionals, ready to be deployed on 72 hours notice when a crisis occurs.

The NRC seeks quotations for the development of a number of applications to support our Dhis2 global instance. The underlying purpose of the requested applications is to facilitate on-going maintenance / configuration by local administrators.

1. **Manner of Submission:**

Please submit your quotation in accordance with the requirements detailed below by email to [Craig.Hollingsworth@nrc.no](mailto:Craig.Hollingsworth@nrc.no)

Deadline for submission of quotations is close of business on **Friday the 22nd of July 2016.**Companies who do not submit their quotation by this deadline will not be considered.

1. **Services Required**
   * 1. **HMTL5 form builder and dataset configuration application**

This application would replace the current ‘dataset’ application (in dhis2 version 2.23 and earlier).

Main functionality to include:

1. Basic list view functionality – (list (active/inactive), search, create new, edit, delete, multi-select and apply sharing settings / org units)
2. For create/edit dataset functionality a ‘wizard’ approach will be used with 4 screens and next/previous buttons at each stage. May require temp saving through API and then clearing on cancel. Tabs to be:
   * + - 1. basic dataset metadata: name, code, period etc.
         2. addition of data elements to form/dataset through drag and drop builder (see 3 below)
         3. assignment of dataset to org units
         4. sharing setup / assignment to user role
3. The data-entry form builder will serve two functions:
   * + - 1. to add/remove data elements/indicators to/from a dataset
         2. to create sections and order elements

The builder will have list view and search functionality to all data elements and indictors in a left-hand panel. Search to filter to required items which can then be dragged and dropped onto the form. Items (sections, and elements) on the form can be dragged to order them.

1. The output of the form-builder will be an ‘automatic form’. In settings there will also be an option for output to be a custom form in standard HTML.
   * 1. **Data Element / Indicator Configuration Application**

This application will facilitate easy creation and management of data elements and indicators. Depending on user-access rights it will serve both as a administration module (for local administrators) and as a basic object browser (for basic end-users). It will have the following functionality:

* + - 1. Basic list/search for data elements/indicators (list (active/inactive), search, create new, edit, delete, multi-select and apply sharing settings).

Search/list view to include:

* + - * 1. option to select and order which fields are shown
        2. description field with reduced font size
        3. option for popup description field
        4. multi-lingual (data elements presented in English original and local language). Front end to be available in English, Spanish, French and Arabic.
        5. specific NRC data element/indicator attributes to appear as separate columns in the table (4 items derived from data element and indicator group sets).
        6. paging (10, 20, 50, 100)
        7. loading progress bar
        8. depending on the column type, cumulative filtering (on free text search or multi- select drop downs)
        9. export to Excel (all, page, selected)
      1. Administrators (based on a single standard global role) to be given access to create/edit/clone and sharing functionality. Normal users just basic search /view functionality.
      2. For create/edit functionality a ‘wizard’ approach will be used with 3 screens and next/previous at each stage. May require temp saving through API and then clearing on cancel. Tabs to be:
         1. basic definition (name, code, type etc)
         2. application of sharing settings
         3. placement in relevant groups (some automatic, some manual)
    1. **Excel Data uploader**

An application is required to facilitate upload of aggregated data to dhis2. The main functionality to include:

* + - 1. download/creation of an Excel template by selection of an existing dhis2 dataset (download and present in excel as appears on screen).
      2. dataset level attributes would be available in the template by way of ‘header’ drop down menus. These would be filtered by the downloading users’ permissions.
      3. uploader that accepts data from a downloaded template
    1. **Easy data re-coding application**

An application to facilitate the easy re-coding of incorrectly entered data. It is likely that when data is entered incorrectly this will be due to it being entered against an incorrect org-unit or dataset attribute. The following functionality is required:

* + - 1. Presentation of current data by a dataset report:
         1. dataset
         2. period
         3. dataset attributes
      2. Ability to change the periods, org units and dataset attributes to ‘move’ incorrectly entered data en masse (most likely at dataset attribute level where apportioned to a different project code/donor).
      3. Audit logging of changes made through the app via a combination of log files and internal flags (follow up comments on changed fields. tbd).
    1. **Helpdesk support application**

An application to facilitate internal/external second –level support to end users. The purpose of the app is to facilitate transmission of system data to support personnel in cases of errors/bugs. The ‘helpdesk’ app would have the following basic functionality:

* + - * 1. text area for user to enter details/comments regarding the problem
        2. snapshot of key logs to be taken, zipped and attached
        3. option for screenshot to be captured and attached
        4. email of relevant package to pre-configured support email address
        5. admin area for sysadmins to specify config options (such as email and log files to be covered)
    1. **General Requirements and guidance**
       - 1. All code developed under this work would be provided with a GNU public licence.
         2. Should be developed for operation in Dhis2 version 224 with a versioned api.
         3. Front end design should align with new dhis2 interface layout (as per maintenance app in v223)

1. **Quotations should clearly indicate the following:**
   1. The validity of the offer
   2. Costing for the work included in section 2 (scope of work). **Costing should be on a per application basis** (as work may be divided among bidders). This should include a detailed breakdown of the number of personnel used, daily rates and estimates of other relevant costs.
   3. The currency of offer.
   4. Anticipated timeframe for implementation
   5. Details of previous experience in developing dhis2 apps
   6. Detailed specification on how the above functionality would be implemented including, where appropriate, visual mock-up using some form of wire-framing/mock-up tool. Note that there will be a secondary process specification requirement with the selected provider, including sign-off prior to project commencement.
2. **Conditions of quotation**
   1. NRC is not subject to VAT, therefore all offers should be exclusive of VAT costs.
   2. All suppliers doing business with NRC should maintain high standards on ethical issues, respect and apply basic human and social rights, ensure non-exploitation of child labour, and give fair working conditions to their staff. NRC reserves the right to reject quotations provided by suppliers not meeting these standards.
   3. NRC aims to purchase products and services that the minimum environmental impact. Environmental considerations form part of the NRC selection criteria, and NRC reserves the right to reject quotations provided by suppliers not meeting these standards.
   4. NRC reserves the right to accept or reject the whole or part of your quotation based on the information provided. Incomplete quotations which do not comply with our conditions, will not be considered.
3. **Queries**
   1. Any queries or clarification regarding the requirements or the quotation process should be directed to: [Craig.Hollingsworth@nrc.no](mailto:Craig.Hollingsworth@nrc.no)