

# **BRS Electronic Reporting System - GENERIC ODATA Feeds**

## **Technical Documentation**

### **Introduction**

The oData protocol is the standard protocol for sharing and querying data at the BRS Secretariat. The present document provides the technical description of the oData interface developed for the purpose of querying the national reports through the Electronic Reporting System (ERS) in a generic way, i.e. using a single oData interface that can easily accommodate current and future changes in the data collection questionnaires, as defined by the parties to the conventions.

The generic oData feeds are divided in 5 groups:

- 1- **Generic Helper Feeds.** Provide general information, and can be used to complement other feeds for programmers and developers to use.  
These apply to:
  - Any survey questionnaires for the Basel and Stockholm Conventions (BC or SC)
  - Any question type (Questions)
  - Any answer type (Answers)
- 2- **Simple Questions:** Any question that has one group (n) of possible responses of any type, i.e. Selection Lists (single selection or multiple selection) or any other type of answer in the Feedback Server, be it original or custom developed
- 3- **Questions of type “Table”:** Similar to the simple questions, but with the difference that these have various rows that form the table.

#### 4- Questions of type “Simple Matrices”:

These have **n** rows and **m** columns. For each “**row**” there is a **sub-Question** with a unique ID.

These questions have one group (n) of possible answers of any type of answers (**Columns**)

#### 5- Questions of type “3D Matrices”:

These have **n** rows and **m** groups. For each key “**row-group**” there is one **sub-question** with a unique ID.

These sub-questions have one group (n) of possible answers of any type of answers.

Note: The answer types may be different for each group.

### ODATA Feed Methods

#### Notes:

Here we are describing the parameters and the fields that require a detailed description. Some additional fields are added for future use.

### GENERAL FEEDS methods

1- **vw\_GetERS\_Surveys**: Apply to all ERS surveys (basic data) and all questionnaires.

#### Fields:

**Countries**: Refers to all countries in the ERS

**Countries Reported**: Refers to countries that have sent the reports.

2- **vw\_GetERS\_Question\_Types**: Retrieves all question types (basic data) from the questionnaires.

**Fields:** all available fields

- 3- **vw\_vw\_GetERS\_Answer\_Types:** Retrieves all answers types (basic data) from the questionnaires.

**Fields:** all available fields

## **OPERATIONAL Feeds methods**

- 1- **Simple Questions: GetERS\_SimpleQuestion\_Design:** retrieves design time information from simple questions

### **Parameters:**

SurveyID ( Int) : An integer number representing the ID of the survey.

PageNumber (**optional**) ( Int): An integer number representing the page number in the survey questionnaire.

QuestionID (**optional**) (int) : An integer number representing the question ID.

### **Fields:**

[SurveyId]

[PageNumber]

[DisplayOrder]: logical order of the **question** within the page.

[QuestionId]

[QuestionType] : question type: see **vw\_GetERS\_Question\_Types**

[QuestionPipeAlias]: (String) Alias to identify similar questions accross different surveys (SC/BC) for personalized reports.

[ReportingAlias]: currently not in use.

[QuestionText] : text of the question

[BlockQuestionId] : Question block ID, example in BC for Q2 y Q3. It is only used to organize questions in blocks

[PanelID] : contains the ID of the Panel, only if the question is associated with a panel.

[AnswerId]

[AnswerType]: see **vw\_vw\_GetERS\_Answer\_Types**

[AnswerPipeAlias] : (String) Alias to identify similar questions accross different surveys (SC/BC) for personalized reports.

[AnswerText] : Text of the response by design.

**Fonctionning:** retrieves all information on the design of the questions and all its possible answers in the **Survey**, by page and question.

## 1- Simple Questions: GetERS\_SimpleQuestion\_CountryAnswers:

### Parameters:

**SurveyIDs** (varchar) : Array of SurveyID separated by coma : Example ( '64, 73')

**PageNumber** ( Int) (optional) : An integer number representing the page number in the Survey.

**QuestionIDs** ( varchar) (optional) , array of QuestionID separated by coma.

**CountryCode** (varchar) (optional) : only one country ISO Code

### Fields:

[SurveyId]

[Title]: Name/Title of the Survey

[ISOCODE]: Country ISO code.

[CountryName]

[PageNumber]

[QuestionId]

[QuestionPipeAlias] : see previous description.

[QuestionType] : see previous description.

[QuestionText]: see previous description.

[QuestionOrder] : logical order of the **Question** in the page.

[AnswerID]

[AnswerType]: see previous description.

[AnswerTitle]: text of the answer by design.

[CountryAnswer]: what the country answered in the **Survey**. This could be different from the field "**AnswerTitle**" , depending on the answer type!

[date] : date in which the country entered the answer.

[username]: username of the user that responded.

**Fuctionning:** retrieves the country answers by Survey, page, question and Country.

### **Notes:**

At least the Survey ID is compulsory to be provided, for queries accross several surveys their IDs should be provided separated by commas ','.

**QuestionIDs:** It is not compulsory, but if it is provided the same format as in the Survey should be used, i.e. separating the list of QuestionIDs by commas ','

## **2- Simple Questions: GetERS\_TableQuestion\_Desing:**

### **Parameters:**

SurveyID ( Int) , An integer number.

PageNumber (**optional**) ( Int) , An integer number representing the page number in the Survey.

QuestionID (**optional**) (int) , An integer number representing the Question ID.

### **Fields:**

[SurveyId]

[PageNumber]

[DisplayOrder]: logical order of the questions in the page.

[QuestionId]

[QuestionType] : Type of the question: see **vw\_GetERS\_Question\_Types**

[QuestionPipeAlias]: (String) Alias to identify similar questions accross different surveys (SC/BC) for personalized reports.

[ReportingAlias]: currently not in use.

[QuestionText] : Text of the question

[BlockQuestionId] : Question block ID, example in BC for Q2 y Q3. It is only used to organize questions in blocks.

[PanelID] : used when the question is connected to a Panel

[ColNumber]: Column number in the table, i.e. the logical order of fields in the table.

[AnswerId]

[AnswerType] Type of the answer: ver **vw\_vw\_GetERS\_Answer\_Types**

[AnswerPipeAlias] : (String) Alias to identify similar questions accross different surveys (SC/BC) for personalized reports.

[AnswerText] : Text of the answer by design.

**Fuccionning:** Retrieves the question and all posible answers to the question in the **Survey**, by page and selected question.

## 2- Simple Questions: GetERS\_TableQuestion \_CountryAnswers:

### Parameters:

**SurveyIDs** (varchar) : Array of SurveyID separated by coma : Example ( '64, 73')

PageNumber ( Int) (**optional**), An integer number representing the page number in the Survey.

**QuestionIDs** ( varchar) (**optional**), array of QuestionID separated by coma.

CountryCode (varchar) (**optional**), only one country ISO Code

## Fields:

[SurveyId]

[Title]: Name/Title of the Survey

[ISOCODE]: ISO country code.

[CountryName]

[PageNumber]

[QuestionId]

[QuestionPipeAlias] : See previous description.

[QuestionType] : See previous description.

[QuestionText]: See previous description.

[QuestionOrder] : logical order of the question in the page.

[RowNumber]: row number in the table.

[ColNumber]: column number in the table, i.e. the logical order of the fields in the table.

[AnswerID]

[AnswerType]: See previous description.

[AnswerTitle]: Text of the answer by design.

[CountryAnswer]: Country answer in the **Survey**. This can be different than the field “**AnswerTitle**”, depending on the type of the answer.

[date] : Date when the country entered the answer.

[username]: The user that responded.

**Fuccionning:** retrieves the country answers in the **Surveys**, pages and questions being selected and only one Country.

**By row of the table :** **RowNumber** (row number in the table) y **ColNumber** ( column number and column name in the table in the table)

**Notes:**

It is compulsory to select at least one **Survey**. If we select several surveys their ID should be separated by commas ','

**QuestionIDs:** It is not compulsory, but if specified then the same rules as for the SurveyID applies.

The results are shown by Rows and Columns

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**Questions of type “Matrices”:**

In these cases the Feeds are different:

Firstly, they are unique for each type of Matrices in the ERS. The differences are subtle, here are the explanations:

We shall use 3 methods or feeds that are adequate for the more complicated Matrices in the ERS. See the introduction for better understanding.

**1- GetERS\_MatrixQuestions\_Design****Parameters:**

- **SurveyID** ( Int) , An integer number. **compulsory!**
- **PageNumber (optional)** ( Int) , An integer number representing the page number in the survey ( Optional )
- **QuestionID (optional)** (int) , An integer number representing the question ID (Optional)

**Fields:** (The Fields that do not contain comments were described before)

[SurveyId]

[PageNumber]

[QuestionId]

[DisplayOrder]

[RowNumber] : Row number in the Matrix ( first column)

[QuestionType]



[**QuestionClass**]: Question Class: It is used to identify the hierarchy of the questions that form the question of type “Matrix”.

1. **Matrix Main**: The main question.
2. **Matrix Group**: The sub-question Groups
3. **Matrix Row**: The sub-questions by rows.

[MatrixQuestionId]: The ID of the main question ( **Matrix Main**)

Note: This Will be **null** for the **Matrix Main**

[GroupQuestionId]: the ID for the sub-question group ( **Matrix Group**)

Nota: This is **null** for the **Matrix Main** and ( **Matrix Group**)

[GroupName]: the text of the sub-question group ( **Matrix Group**)

[QuestionPipeAlias]

[ReportingAlias]

[QuestionText]: The text of any class of question.

### Functionning:

It shows all questions of type “Matrices” in the **Survey**, given the optional parameters.

The order is as follows: **Main** Question, **Group** questions and **Row** Questions.

Note: The simple matrices do not have **Group** Questions.

## 2. GetERS\_MatrixQuestion\_AnswersDesign

**Parametros:**

**QuestionId** (int)

**Fields:** ( The Fields that do not contain comments were described before)

[SurveyId]

[PageNumber]

[MatrixQuestionId]: The ID of the main question ( **Matrix Main**)

[GroupQuestionID]: The ID of the sub-question group ( **Matrix Group**)

[GroupName]: The text of the sub-question group ( **Matrix Group**)

[RowNumber]: The row number in the Matrix (first column)

[RowQuestionId]

[QuestionPipeAlias]

[QuestionType]

[QuestionText]

[AnswerId]

[AnswerTypeId]

[AnswerOrder]

[AnswerText]

[AnswerPipeAlias]

### **Functionning:**

It shows all posible answers for question of type “Matrix”.

## **3. GetERS\_MatrixQuestions\_CountryAnswers**

### **Parametros:**

**SurveyIDs** (varchar) : Array of SurveyID separated by coma : Ej ( '64, 73')

PageNumber ( Int) (**optional**) : An integer number representing the page ID in the Survey.

**QuestionIDs** ( varchar) (**optional**), array of QuestionIDs separated by coma.

CountryCode (varchar) (**optional**), only one country ISO Code

### **Fields:** (The Fields that do not contain comments were described before)

[SurveyId]

[Title]

[ISOCODE]

[CountryName]

[PageNumber]

[MatrixQuestionId] : The ID of the main question ( **Matrix Main**)

[GroupQuestionID]: The ID of the sub-question group ( **Matrix Group**)

[GroupName]: The text of the sub-question de group ( **Matrix Group**)

[RowNumber] : Row number in the Matrix .

[RowQuestionId]:

[RowQuestionPipeAlias]

[RowQuestionType]

[RowQuestionText]

[AnswerID]

[AnswerType]

[AnswerTitle]

[CountryAnswer]

[date]

[username]

### **Fuctionning:**

It shows everything that has been reported within the questions of type “Matrices” as selected by the parameters.

### **FINAL CONSIDERATIONS**

1. The feeds about question’s design are oriented to one Surver in particular, because the design can change in both the Basel Convention questionnaires and the stockholm convention questionnnaires across the reporting cycles.

2. The feeds about data reported by countries permit the their use across different Surveys for Basel and/or Stockholm questionnaires, and it allows the comparison of the same questions across years.

**Notes:**

It is posible to retrieve all reported data across various Surveys, i.e. for multiple years in the Basel Convetion national reports and for multiple reporting cycles in the Stockholm Convention national reports, as long as we are retrieving the same compatible data across.

In order to compare the data reported under the same question accross different surveys we must use the same parameters as described in this document for each oData feed.

The programmer must take into account that in some questions there are design differences across surveys, which should be taken into account when visualizing the data.