

ROBIN Network Submission

This document sets out our plans for submitting data to be included in V2 of the ROBIN Network. It covers:

- Station Selection
- Data Submission
- Data Sharing
- Data Formats
- Metadata Requirements

Station selection

If there is an established Reference Hydrometric Network (RHN) in place in your country you are welcome to submit that as it is (with any required metadata), alongside any existing guidance documents, papers etc., although it would be useful if you can assess the network against the ROBIN Criteria before doing so (e.g. checking whether stations are in the Level 1 or Level 2 Network).

For countries without an established RHN, the ROBIN network criteria given below (and discussed in more detail in the Network Criteria Proposal document) should be used to identify catchments to be added to the ROBIN network.

If you have any questions about identifying possible ROBIN catchments and/or the data submission process, the ROBIN team will be happy to answer questions and queries at robin@ceh.ac.uk or via the ROBIN Network Teams site.

Data Submission

If your flow data and metadata is available to access openly, please let us know via email and we will endeavour to retrieve it ourselves (note we will need a list of catchments if this is part of a wider database of gauging stations).

If flow data is not openly available online, all data files and the completed metadata, will need to be sent to the ROBIN team.

If file sizes are too large to send via email, files can be transferred using the ROBIN Network Teams site or other file transfer options e.g. <u>WeTransfer</u> (for files under 2GB), Dropbox etc. Please send us an email when file transfer options have been used to let us know the data is on its way.

If adding data to the <u>ROBIN Network Teams site</u> please follow steps below:

- 1. Within the ROBIN Networks Files, create a new folder in the '<u>Data Submission</u>' folder and rename for your country,
- 2. Copy files to the new folder, and
- 3. Send an e-mail to robin@ceh.ac.uk to let us know that the files have been uploaded to the Teams site, where they will be collected and copied to the UKCEH Network.

Data Sharing

We recognise that data sharing and accessibility arrangements vary substantially between countries. For each country (or stations within, if data sharing rules are different for regions / organisations within countries):

- If flow data *can* be made available to be included in a published open dataset, it should be submitted to the ROBIN team as described above;
- If data can be shared for use within ROBIN but not published as an open dataset, it should also be submitted to the ROBIN team as described above with a clear note that it is for use within the project only; and we will ensure that the data is only used by ourselves and ROBIN partners.
- If it is not possible to share the flow data at all with the ROBIN team, we hope that it is possible to share derived indicators that will be used in the analysis phase of ROBIN. If this is the case, we can share tools (using open-source software) that can derive these indicators, so these can be shared with the ROBIN team. We would hope that we could publish these derived indicators, but let us know if that will not be possible. For any Partners where this is the case, we will share codes to do so.

Data Format

To help the data acquisition process, please export daily mean flow data in **.CSV format**. We can accommodate different types of format, in general, as long as they are comma separated columns. The data file should include the following (see example file):

- Station ID (in filename)
- Date (DD-MM-YYYY)
- Daily Mean Flow (m³/s)
- Quality Assurance (QA) flag* e.g., indicating missing, estimated, suspect data
 *only if QA flags are available. If using QA flags, please provide a table of definitions

Metadata submission

Metadata for each station is vitally important in order to provide context to the raw flow data. As a minimum for inclusion in the ROBIN Network the following metadata should be provided for each gauging station:

- · Agency (i.e. data collector) and country
- Station ID
- Station Name (in English)
- Latitude (decimal degrees)
- Longitude (decimal degrees)
- Shapefile of catchment boundary
- Catchment area (km²)
- Comments this freetext field can be used to notify that the station may only be suitable for one part of the flow regime, or that there are issues with weed growth, ice etc.

To help the metadata acquisition process, please provide one spreadsheet with all stations metadata. We can accommodate different types of format, in general, as long as they are comma separated columns. The data file should include the following (see example file):