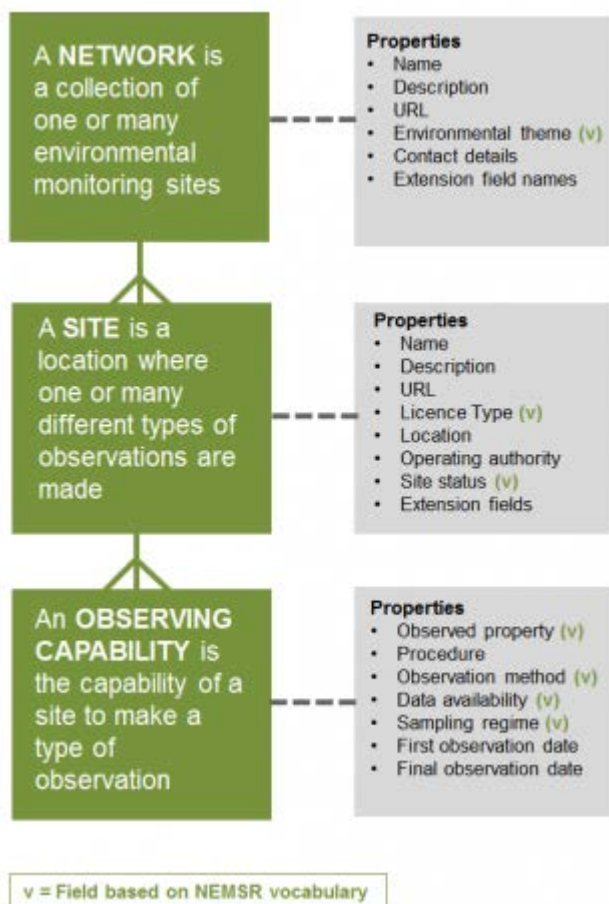


Quick guide:

Contributing to the National Environmental Monitoring Sites Register

Step 1: See what the National Environmental Monitoring Sites Register (NEMSR) is [about](#), explore the [information model](#) which shows the information required for each network, site, and observing capability respectively, and [use the NEMSR](#) yourself.

NEMSR information model



Step 2: Consider whether your environmental monitoring network is suitable for NEMSR. The size and coverage may vary but networks should meet the following criteria:

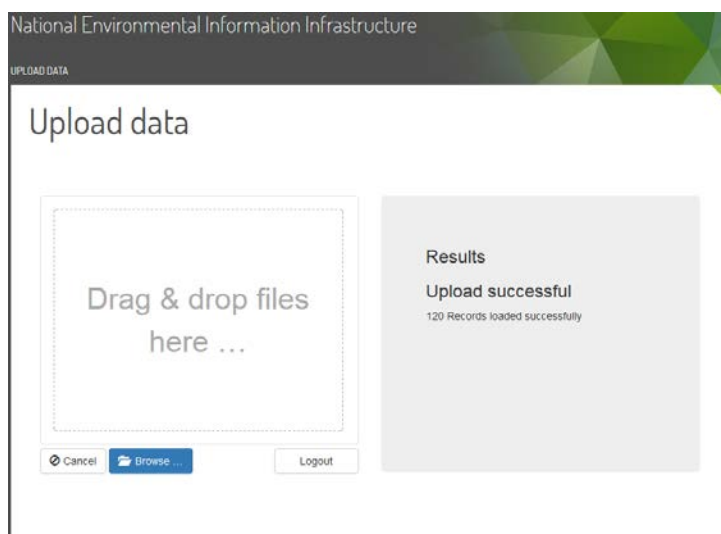
- the network is part of an operational programme
- observational data are publicly accessible online; and
- monitoring methods and protocols are well described to enable re-use of data.

Step 3: Use the information model, vocabularies, validation rules and help docs provided at: <http://neii.gov.au/nemsr/data-providers> to create a valid GeoJSON file. There are two ways to do this—create a GeoJSON file from scratch OR populate a CSV file and then convert into GeoJSON format using the [CSV-JSON Converter Tool](#). For guidance in this process, contact the NEII team.

Some fields must use terms from the [NEMSR vocabularies](#) (e.g. observed property, sampling regime) while others are user-defined (e.g. descriptions, URLs). Importantly each site must have a defined geographic location (latitude and longitude). It is important to not alter the CSV template other than populating fields – do not delete or rearrange columns.

Step 4: Email your file to the NEMSR team (environment@bom.gov.au). It will be reviewed and returned to you with any edits. Once you are happy with the file, the NEMSR team will provide you with a username, password and [uploading instructions](#). Before uploading to the live NEMSR, please visually review your file by drag/drop onto the NEII Viewer.

Step 5: Login and upload your JSON file by dragging and dropping the file as instructed. If marked as successful, your file has been uploaded to the NEMSR database.



Step 6: Check your network on the [NEII Viewer](#) (note: there is a 60-second delay after upload). Click on your sites to check the information is complete and accurate.



Your network can also be accessed programmatically for use in other applications, an example NEMSR endpoint is:

http://neii.bom.gov.au/cgi-bin/nemsr/get_geojson.py?network_id=4

Step 7: To update your file, edit the file and repeat the upload process. The new file will overwrite (fully replace) the existing one so ensure all data fields are correct and complete. We recommend this is done whenever there are changes or updates to a network, such as the addition of new sites, decommissioning of sites, or changes in site location or observations.

If you have any questions please contact the NEII team at: environment@bom.gov.au

Summary of data fields in NEMSR

This document provides a summary of data fields and a worked example for the National Environmental Monitoring Sites Register (NEMSR). The full version of the NEMSR information model, including vocabularies and validation rules, can be found at: www.neii.gov.au/nemsr/documentation.

Also refer to the various help tips and information in the [Data Providers area](#) of the NEII website.

For guidance, contact the NEII team: environment@bom.gov.au

Network information

Field name	Description	Mandatory?	Vocabulary?	Example
dataProvider	Name of data custodian	Y	N	Bureau of Meteorology
id	The unique identifier of the network (created by the NEMSR team), not the site ID	Y	<u>Y</u>	14
name	The name of the network	Y	N	Rainfall radars (BOM)
networkDescription	The description of the network	Y	N	The Bureau of Meteorology operates a nationwide network of around 60 radars which are used for the detection of rainfall.
networkURL	A URL containing a resource with information about the network.	Y	N	www.bom.gov.au/australia/radar/
environmentalTheme	The primary environmental theme of the network. Optional to include a further two themes.	Y	<u>Y</u>	air
contactDetails/name	The contact for the network	N	N	Data Coordinator
contactDetails/phone	The phone number of the contact for the network	N	N	(03) 9669 4000
contactDetails/address	The address details of the contact of the network	N	N	GPO Box 1289, Melbourne VIC 3001
contactDetails/onlineResource	The contact email address or a URL containing contact details	N	N	environment@bom.gov.au
extensionFieldName1	The name/label of the extension field	N	N	Original Height
extensionFieldName2	The name/label of the extension field	N	N	Receiver Type
extensionFieldName3	The name/label of the extension field	N	N	Band
extensionFieldName4	The name/label of the extension field	N	N	Polarisation
extensionFieldName5	The name/label of the extension field	N	N	

For extension fields, ensure the label (described above) matches the value (described below).

Site information

Field name	Description	Mandatory?	Vocabulary?	Example
id	A unique identifier for the site (provided by the data provider – this is not the network id)	Y	N	70341
name	The name of the site	Y	N	Captains Flat Cowangerong
siteDescription	A short description of the site	N	N	The primary weather radar for the ACT region.
siteURL	A URL for the data or further information	N	N	www.bom.gov.au/products/IDR403.loop.shtml#skip
siteLicence	The type of licence for the site metadata	Y	<u>Y</u>	open-agencySpecific
srsName	The EPSG code of the spatial referencing system used to locate the entity	Y	<u>Y</u>	http://www.opengis.net/def/crs/EPSSG/0/4326
longitude	The longitude of the site	Y	N	149.5122
latitude	The latitude of the site	Y	N	-35.6614
Elevation (ahd)	The elevation of the site (Australian Height Datum)	N	N	1364.548
operatingAuthority/name	The organisation that is the operating authority for the site	Y	N	Bureau of Meteorology
operatingAuthority/url	A URL for a webpage or resource with information about the operating authority	N	N	www.bom.gov.au
siteStatus	The operating status of the site	Y	<u>Y</u>	active
extensionFieldValue1	The value for Extension field 1	N	N	1383.86 m
extensionFieldValue2	The value for Extension field 2	N	N	Digital receiver type
extensionFieldValue3	The value for Extension field 3	N	N	S band
extensionFieldValue4	The value for Extension field 4	N	N	Single polarisation
extensionFieldValue5	The value for Extension field 5	N	N	

Observing capability information

Field name	Description	Mandatory?	Vocabulary?	Example
observedProperty	The environmental phenomenon (property) being measured at a site	Y	<u>Y</u>	atmosphere-Precipitation
procedure	An external link to the procedure used to make the site observations	N	N	www.bom.gov.au/australia/radar/about/index.shtml
observationMethod	The method used to make observations	Y	<u>Y</u>	inSituLandBasedPlatforms
dataAvailabilityStatus	The availability of the observation data	Y	<u>Y</u>	available-online
samplingRegime	The frequency of site observations	Y	<u>Y</u>	oneMinuteToOneHour
firstObservationDate	The date of the first observation at the site	N	N	2002-12-01
finalObservationDate	The date of the last observation at the site.	N	N	If still active, leave blank

If there are multiple Observing Properties for the site, these need to be captured correctly in the CSV template, please contact the NEII team for guidance.