

Reporting Guidance for Marine Litter Watch Data Submission

Version: 1.0 (03/09/2024)



Versions of document and changes made

Version	Changes
1.0	The Guidance published with the opening of the Reportnet 3 data flow.

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1. Introduction

The Marine Litter Watch (MLW) initiative has been established in 2013 to support citizen science contributions on the topic of beach litter. As the initiative evolved, numerous communities, such as NGOs, have become involved in litter and data collection as well as the contribution to the MLW database. The communities typically organise a series of beach litter clean-up or monitoring events and eventually deliver a consolidated data set, consisting of several events instead of data entry item-by-item. For this purpose, bulk reporting is now available via <u>Reportnet 3</u> data submission platform. Reportnet 3 enables the upload of data in a single spreadsheet (Excel file); automatic validation of data quality and potential corrections on-the-fly; and official submission of the data set to be accepted to the central MLW database.

This Reporting Guidance is oriented towards the community reporters that collect, consolidate, quality-check, and submit the data to the MLW. It includes a brief overview of Reportnet 3 functionality, with further references to a more detailed help from the portal itself. Next, it explains the required structure of the data set, as well as the content of individual fields, to be fit for submission. Ultimately, it provides step-by-step guidance on data submission steps within Reportnet 3.

1.1 Definitions

Clean-up event: an event that may not take the MLW methodology fully into account, typified by a relatively simple protocol and a reduction in the levels of standardisation. To make use of as much reported data as possible, both 'monitoring' and 'clean-up' event data sets have been used in the EEA assessments. The latter compose 59% of all events reported to the MLW.

Data validation: the process of ensuring that the data submitted to Reportnet 3 adheres to predefined rules, standards, and formats. This includes conformity checks (e.g. format and structure, mandatory fields), completeness checks (e.g. all transects have corresponding events and items reported), and plausibility checks (e.g. value ranges and outliers). The data validation is done automatically in Reportnet 3 and provides the validation results in a form of messages next to each field, row, or table.

Fishing gear: means any item or piece of equipment that is used in fishing or aquaculture to target, capture or rear marine biological resources or that is floating on the sea surface, and is deployed with the objective of attracting and capturing or of rearing such marine biological resources.

Monitoring event: the event (and its data) collected at preferably seasonal intervals from the same beach by the experienced MLW communities, applying the recommended methodology for monitoring marine litter on beaches in the EU (EU MSFD TGML, 2013). The MLW 'monitoring' data set also includes data that is officially reported by some EU Member States under the MSFD obligations.

Reporting template: a predefined structure of tables in a file (Excel) or files (CSV) used to standardize the submission of environmental data by data providers to Reportnet 3.

The data are inserted into the reporting template by data reporters, to be uploaded to Reportnet 3. Once they are uploaded, the system inserts them to the database, runs the data validation process, and provides confirmation of the data submission.

2. Reportnet 3 overview

<u>Reportnet 3</u> is a new web platform for reporting environmental data to the European Environment Agency (EEA). It includes various data flows for environmental topics reported to the EU-level, making use of common principles, reporter tools, and underlying technologies to facilitate data consolidation, validation, and ultimate submission. The supporting documents on account creation, login, and reporter needs are available from the Reportnet 3 home page. Below you can find a detailed explanation of how to log in to Reportnet 3 and how to submit the Excel files that holds your cleanup/monitoring data.



Figure 1: Reportnet 3 home page, with 'login' and 'supporting documents' sections

2.1 Log in to Reportnet3

User authentication is carried out on the EU login platform; hence you need to **create an 'EU login' account** before you can be authenticated for Reportnet 3 access. This account can be created directly from Reportnet 3 homepage, by following the 'Login' button. For further information on how to log in, please see <u>this guide</u>.

2.2 User authentication in Reportnet 3

Once your 'EU login' account is created, the **authentication for MLW data reporting** can be done by the MLW Helpdesk. For this, you need to send your 'EU login' username/email and organisation name to <u>marinelitterwatch@eea.europa.eu</u>. Once you are authenticated, you will be able to see the corresponding data flow in Reportnet 3 (Figure 2).

3. Formatting the data set

The collected data should be reported in a single **Excel spreadsheet file – reporting template**, available from the MLW data flow in Reportnet 3. The data can be automatically processed only if uploaded in the prescribed structure described below. Alternatively, CSV file of the same structure can be used, but must be delivered in three separate files representing the three sheets in the Excel reporting template.

The template is written in English. Using English language also to populate it with content will facilitate the work in the assessment of these data.

The reporting template has 3 different sheets:

- *Beach transect* spatial and attribute data on the beach transect used for collecting litter and data;
- Event data on the event of litter and data collection, held by distinct community;
- *Item* data on counts of items found, by litter category.

In the **beach transect** sheet you will find the parameters listed below (Table 1).

Table 1: Data Dictionary for table beachTransect

Field name	Guidance	Data type	Examples
BeachTransectLocalIdentifier	Unique identifier of beach transect, assigned by the community. The identifier must start with country code (ISO 3166-1 alpha-2). The identifier can have a maximum of 42 characters, use only upper case letters [A to Z] and digits [0 to 9]. The underscore ('_') or the hyphen ('-') can be used (but not immediately after the country code, and not at the end). For each BeachTransectLocalIdentifier, at least one event must be reported to Event table.	Text [42 characters]	• AT12345 • BEBLUEFLAG001 • LTCW_12345A
BeachName	Name of the beach where the event takes place.	Text	 Hellerup strand Debeli rtič 2 Nuevo Portil, Huelva
BeachDescription	Additional information on the beach, e.g. details of a transect.	Text	 The beach is subject to infrastructural engineering works. The beach is close to illegal waste dump sites.
WaterBodyCategory	Category of water body. Codelist: 'Sea', 'River', 'Lake'	Codelist	
CountryCode	Identify the country of the beach. Two- letter ISO code of the country (ISO 3166 alpha-2), except for Greece and the United Kingdom, for which the abbreviations EL and UK must be used. Codelist: see <u>UN ISO 3166 country</u> <u>codes</u>	Codelist	

RegionalSea	Name of the European regional sea.	Codelist	
	Codelist: 'North-east Atlantic Ocean', 'Black Sea', 'Mediterranean Sea', 'Baltic Sea'. If the site is inland or outside Europe, select 'Other'.		
StartLatitude	Latitude/Y geographical coordinate of the transect start. Reported as a decimal value in WGS84 (EPSG: 4326).	Decimal [5 decimals]	• 46.25113
StartLongitude	Longitude/X geographical coordinate of the transect start. Reported as a decimal value in WGS84 (EPSG: 4326).	Decimal [5 decimals]	• 16.52491
EndLatitude	Latitude/Y geographical coordinate of the transect end. Reported as a decimal value in WGS84 (EPSG: 4326).	Decimal [5 decimals]	• 46.26072
EndLongitude	Longitude/X geographical coordinate of the transect end. Reported as a decimal value in WGS84 (EPSG: 4326).	Decimal [5 decimals]	• 16.53124
Length_m	Length of transect in meters.	Integer	• 100
Width_m	Width of transect in meters.	Integer	• 10
Remarks	Remarks on the beach transect itself, the corresponding record, or field value.	Text	 This transect was reported in previous years, with wrong coordinates that are now corrected. The transect length are width are approximate.

Under **Event** segment you will find parameters listed below (Table 2).

Table 2: Data Dictionary for table Event

Field name	Guidance	Data type	Examples
EventLocalIdentifier	Unique identifier of event, assigned by the community.	Text	 AT12345_20240715 JTEDP BE 2024 HUELVA
	The identifier can have a maximum of 42 characters, use only upper case letters [A to Z] and digits [0 to 9]. The underscore ('_') or the hyphen ('-') can be used (but not and not at the start or end end of the string). For each EventLocalIdentifier, at		• DF_2024_HUELVA
	least one item must be reported to Item table.		
BeachTransectLocalIdentifier	Unique identifier of beach transect, assigned by the community.	Text	See Table 1.
LitterReferenceList	Reference list used in defining litter item categories: either 'J' (Joint List of Litter Categories Manual, published by TG ML in 2021) or 'G' (Master/General List of Categories of Litter Items, published by TSG ML in 2013). Please note that use of J-list is more favoured. Codelist: 'J', 'G'	Codelist	
EventDate	Date of event. Reported in format YYYY-MM-DD.	Date	• 2024-07-15

EventMethodology	Methodology of litter and data collection: either 'Monitoring' (when following MSFD standards) or 'Cleanup' (when organised by citizen initiative and not following MSFD standards). Codelist: 'Cleanup', 'Monitoring'	Codelist	
Remarks	Remarks on the event itself, the corresponding record, or field value.	Text	 The event took place over a week. The last day is reported under EventDate. The event was preceded by three events in the same year.

Under **Item** segment you will find parameters listed below (Table 3).

Table 3: Data Dictionary for table Item

Field name	Guidance	Data type	Examples
EventLocalIdentifier	Unique identifier of event, assigned by	Text	See Table 2.
	the community.		
LitterCategoryCode	Identifier of litter category from the	Codelist	• J1
	defined reference list (e.g. 'J137' or		• J137
	'G137').		• G137
LitterCount	Count of items in the specified litter	Integer	• 1
	item category.		• 12
			• 186
Remarks	Remarks on the item category itself,	Text	• The high number of
	the corresponding record, or field		items is confirmed.
	value.		• This category includes
			only pieces larger than
			1 mm.

4. Data submission

We'd like to thank our MLW Community members for volunteering to test the new platform. In this section you will find information regarding how to test Reportnet 3 and how to submit your data.

Once you have logged in to Reportnet 3 and received authorisation for the reporting from MLW Helpdesk, you will see a section on the opening page like this:



Figure 2: Opening page

After you enter the Marine Litter Watch data flow, you will see a new window as shown in Figure 3.



Figure 3: Homepage of Marine Litter Watch data flow

Click on MarineLitter Monitoring to see the page shown in Figure 4 that will enable you to upload your reporting template. After clicking "Import dataset data", a new window will pop-up for you to select the file. Alternatively, you can simply drag and drop it. After selecting the file, click "Upload".

 ☆ ♀ ○ △ 	Marine Litter Monitoring <i>Pending</i> Marine LitterWatch - TestName				
ø	▲ Import dataset	: data 🛃 Export da	ataset data 🛛 🛱 Delete dataset data		
Q	BeachTransect	1) Event	m		
»	🏝 Import table	data 🕹 Export ta	ble data 🛚 🛱 Delete table data 🛛 🖋 Show/Hide columns	🗶 Validation filter	
	Actions	Validations	BeachTransectLocalIdentifier 🕄 🖨	BeachName 🕄 🖨	
	Rows per page	10 🗸			
	+ Add record				

Figure 4: Uploading data files

MLW Excel Import (.xlsx)	
+ Select or drag here a file	0
Replace data	
© Reset ↓ Upload ★ Cl	lose

Figure 5: Pop-up window

You will receive a notification after you upload your data, as shown in Figure 5. Do not forget to **Validate** the file you just uploaded as shown in Figure 6.

 ♠ ● ⑦ 	Marine	rineLitt e LitterWatch	er Monitoring Pend	ing	
¢ €	♣ Import dat	taset data 🔹 Ex	nort dataset data - 简 Delete dataset data ate A Show validations 幸 QC rules 네	Dashboards 🛯 🙆 Manage	copies 📿 Refresh
() እ	1 BeachTrans	ect 3 Event	1 Item		
	🏝 Import t	table data 🔹 Ex	port table data 🛛 🛱 Delete table data 🛛 🖋 Shi	w/Hide columns 🛛 🗶 Val	idation filter
	Actions	Validations	BeachTransectLocalIdentifier 🟮 🖨	BeachName 🟮 🖨	BeachDescription

Figure 6: Validate and check (show) validations

The following levels of QC issues can be detected (example in Figure 7):

- **Blocker:** indicates that the detected error will prevent data submission (data release is not possible).
- **Error:** indicates issues that clearly need corrective action by the data reporter. 'Error'-level records may be excluded from further use of the data set.
- **Warning:** indicates issues that may be an error. Data reporters are expected to double-check relevant records.
- **Info:** Informative message. Neutral or statistical feedback about the delivery, e.g. number of species reported.

Validations							
Type of QC V Table V Field V Level error V							
Entity	Table 🜲	Field 🖨	Code \$	Level error	Message 🗢	Number of records	
FIELD	BeachTranse ct	EndLongitud e	FC03_ ¹	BLOCKER	The value is outside the valid range (-180 to 180).	1	
RECORD	BeachTranse ct		FC02 🕄	BLOCKER	No events for this transect are reported. At least one event must be reported for each transect.	24	
FIELD	ltem	LitterCount	FC13 🕄	WARNING	The number of items is very high (i.e. above 100). Double-check if the count is correct.	1	
RECORD	BeachTranse ct		FC08 🕄	ERROR	The transect width value is larger than transect length value.	1	
FIELD	BeachTranse ct	CountryCod e	FT60 🕄	ERROR	The value is not a valid member of the codelist	1	
RECORD	Event		FC09 🕄	BLOCKER	No items for this event are reported. If no items were found on the beach, indicate this by adding at least one LitterCategory, with LitterCount=0.	13	
FIELD	BeachTranse ct	StartLatitud e	FC03 🕄	BLOCKER	The value is outside the valid range (-90 to 90).	1	
FIELD	BeachTranse ct	Length_m	FC07 🕄	ERROR	The value is outside the valid range (90 to 850 m).	1	
TABLE	Event		TU65 🕄	ERROR	Uniqueness and multiplicity constraints - The fields EventLocalIdentifier and BeachTransectLocalIdentifier are uniques within table	1	

Figure 7: List of data validation issues detected by Reportnet 3

If any such issues are shown, you can see the details by clicking each validation issue – this also selects the affected records. You may address the issues in the reporting template, re-import the data set, and re-run the validation.

When the data set is validated, you can submit the envelope by clicking "Release to data collection (Figure 8). A window will pop up asking if you are sure to release the dataset as shown in Figure 8.



Figure 8: Releasing your data

After this, your files will be successfully submitted for our technical acceptance, and you will be able to download a confirmation receipt of your delivery.

5. Support and contact

If you have questions regarding the **reporting process**, including the data sets and their structure, please contact the helpdesk **marinelitterwatch@eea.europa.eu**.

If you have any questions regarding the **Reportnet 3 functionality**, please contact the Reportnet helpdesk **reportnet@eea.europa.eu**.